West Bengal State Electricity Distribution Company Limited (A Government of West Bengal Enterprise) (IT & Communication Cell)

Vidyut Bhavan, 3rd Floor, C&D Block, Bidhan Nagar, Block-DJ, Sec-II, Kolkata-700091 Website: www.wbsedcl.in, e-mail: itcell@wbsedcl.in, ceit@wbsedcl.in

Phone No:

CIN: U40109WB2007SGC113473



Request for Proposal for Implementation of Outage Management System (OMS) at WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED under Loss Reduction Part of

"Revamped Reforms-Linked Results-Based Distribution Sector Scheme" (RDSS)

(E-Tender No. WBSEDCL/IT&C/114.00(RDSS)/2384 Dated 09.01.2024)

Chief Engineer

IT&C Cell, WBSEDCL

Open E-Tender No. WBSEDCL/IT&C/114.00(RDSS)/2384 Dated 09.01.2024

#### (Single Stage Two-Envelope Bidding Process with e-Procurement)

# Request for Proposal for Implementation of Outage Management System (OMS) at

## WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED under Loss Reduction Part of

"Revamped Reforms-Linked Results-Base d Distribution Sector Scheme" (RDSS)

#### **Key Dates**

SI No.	Particulars	Description
1	Date of release of RFP/ NIT	11.01.2024 14:00 Hrs
2	Last Date and Time for the submission of Pre-Bid Queries	31.01.2024 14:00 Hrs
3	Date and Time of Pre-bid Meeting	07.02.2024 12:00 Hrs
4	Bid submission Start date	20.02.2024 15:00 Hrs
5	Bid submission last date	05.03.2024 11:00 Hrs
6	Date & Time of Opening of Technical Proposal	05.03.2024 15:00 Hrs
7	Earnest Money Deposit (EMD)@2%	64 Lakhs (Ex. GST)
8	Cost of Bid Document	NIL
9	Estimated Project Cost of Implementation of Outage Management System (OMS) Under 'Revamped Reforms-Linked Results-Based Distribution Sector Scheme (RDSS)'.	32 Crore INR (Ex. GST)

Regd. Office: Vidyut Bhawan, 3<sup>rd</sup>.Floor, Block-DJ, Sector-II, Bidhannagar, Kolkata-700091 CIN: - U40109WB2007SGC113473

Tel (O):-033- 2319 7445, 2319 7442

Website: www.wbsedcl.in, Email: ceit@wbsedcl.in /itcell@wbsedcl.in

#### **SUMMARY**

#### PART I – BIDDING PROCEDURES AND REQUIREMENTS

#### **Section 1: Request for Bids Notice /Notice Inviting Tender**

This Section includes Request for Bids (RFB)/ Notice Inviting Tender (NIT)

#### Section 2: Eligibility and Qualification Requirements

This Section contains information regarding specific eligibility and qualification requirements applicable for prospective bidders to be considered for further evaluation of their bids.

## Section 3: Instructions to Bidders (ITB) and Bid Data Sheet (BDS)

This Section consists of two parts: "Instructions to Bidders" and "Bid Data Sheet (BDS)". "Bid Data Sheet" contains information specific to procurement that corresponds to and/or supplements and/or modifies "Instructions to Bidders". This Section provides information to help prospective bidders prepare their bids. Information is also provided on the bidding process - Single Stage Two-Envelope Bidding Process with e-Procurement, submission, opening, and evaluation of bids, selection of successful bidder and on the award of contract.

#### **Section 4:** Bidding Forms - Technical Part of the Bid

This Section includes the forms for Technical Part of the bid, that are to be completed by the Bidders and submitted in accordance with the requirements of Section 3.

#### **Section 5:** Bidding Forms - Financial Part of the Bid

This Section includes the forms for Financial Part of the bid including Price Schedules, that are to be completed the Bidders and submitted in accordance with the requirements of Section 3.

#### PART 2 – EMPLOYER'S REQUIREMENTS

#### **Section 6:** Employer's Requirements

This Section specifies the Scope of Work, Specification, the Drawings, and supplementary information that describe the Plant and Installation Services to be procured.

## PART 3 – CONDITIONS OF CONTRACT AND CONTRACT FORMS

#### **Section 7: Conditions of Contract**

This Section consists of two parts: General Conditions of Contract (GCC) and Special Conditions of Contract (SCC). GCC includes general clauses to be applicable to the Contract and the contents of SCC modify or supplement GCC.

#### **Section 8 - Contract Forms**

This Section contains the Letter of Acceptance/ Notification of Award, forms which, once completed, will form part of the Contract. The forms for Performance Security and Advance Payment Security, when required, shall only be completed by the successful Bidder after contract award.

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#### PART 1

### BIDDING PROCEDURES AND REQUIREMENTS

#### **Section - 1: Request for Bids Notice/Notice Inviting Tender**

#### **West Bengal State Electricity Distribution Company Limited**

#### OPEN COMPETITIVE PROCUREMENT

Request for Bids (RFB)/ Notice Inviting Tender (NIT) (Single Stage Two-Envelope Bidding Process with e-Procurement)

Contract title: Implementation Of Outage Management System (OMS) Under 'Revamped Reforms-Linked Results-Based Distribution Sector Scheme" (RDSS) NIT/RFB No: WBSEDCL/IT&C/114.00(RDSS)/2384

Issued on: 09.01.2024

The Project shall be executed (in Turnkey mode), WBSEDCL invites sealed bids in two part (Part I: Techno-Commercial, Part II: Price) under the Domestic Competitive bidding:-

- 1. WBSEDCL (hereinafter also referred to as the **Employer** or the **Utility**) invites online Bids for **Implementation of Outage Management System (OMS)** under Revamped Reforms based and Results linked Distribution Sector Scheme. As described in different clauses and sub-clauses under different specific sections.
- 2. Bidding will be conducted through open competitive e-procurement.
- 3. The RFB document (hereinafter also referred to as bidding document) is available online free of cost, for downloading on <a href="www.wbtenders.gov.in">www.wbtenders.gov.in</a> from 11.01.2024 14:00 Hrs to 05.03.2024 11:00 Hrs. The bidder would be responsible for ensuring that any addenda/corrigendum/amendment etc. available on the website/portal is also downloaded and incorporated.
- 4. The bidding shall be conducted **under Single Stage Two-Envelope Bidding process** with **e-Procurement.**
- 5. Under the Single Stage Two-Envelope Bidding process, the Bidder shall not quote, disclose, or submit its price in the Technical Part (First Envelope) of its bid or in any other manner, whatsoever, except as part of the Financial Part (Second Envelope) of its bid. In case of any non-compliance in this regard, the bids shall be out-rightly /summarily rejected.
- 6. An incomplete and/or ambiguous and/or conditional bid and/or bid submitted late is liable to be ignored/ summarily rejected.
- 7. Bid must be submitted online through the e-Procurement/e-Tendering process. Any bid or modifications to bid received outside the e-Procurement system will not be considered, unless otherwise specified. The Utility shall not be held liable for any delay due to e-Procurement/e-Tendering system failure beyond its control. Even though the system will attempt to notify the bidders of any bid updates, the Utility shall not be liable for any information not received by the bidder. It is the bidders' responsibility to verify the

website for the latest information related to this RFB.

- 8. Salient details pertaining to this RFB Notice including submission and opening of bid, bid security, cost of documents/tender fee, if any, for downloading the bidding document, address for communication, etc, are given in the TABLE below.
- 9. All the notarized documents shall be furnished in the stamp paper of cost Rs.100/-.
- 10. If the Utility office happens to be closed on the specified date of opening of the bids, the bids will be opened on the next working day at the same time and venue or as may be notified by the Utility.
- 11. Other details can be seen in the RFB document.

## **TABLE**

RFB Notice/NIT No.	WBSEDCL/IT&C/114.00(RDSS)/2384 Dated 09.01.2024	
Contract Title for the Procurement	Implementation of Outage Management System (OMS) at WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LIMITED under Loss Reduction Part of "Revamped Reforms-Linked Results-Base d Distribution Sector Scheme" (RDSS)	
Brief description of Scope of Works	<ul> <li>The scope of work for System Integrator is to implement web - based Commercial Off the Shelf (COTS) Outage Management system (OMS) covering entire consumer base</li> <li>The scope of work includes supply, delivery, design, customization, integration, implementation, testing, commissioning of Hardware and software of the OMS with necessary Facility Management Services</li> <li>for System Integrator is to implement web - based Commercial Off the Shelf (COTS) Outage Management system (OMS) covering entire consumer base.</li> <li>The major modules/functions (envisaged) are mentioned below:</li> <li>Outage Scheduling Management</li> <li>Trouble call Management System</li> <li>Crew Dispatch@ Work Management Key Features</li> </ul>	
	<ul> <li>4. Outage Analytics and Reporting</li> <li>5. Web Clients &amp; Mobile Views</li> <li>6. Dispatcher Training Simulator (DTS)</li> <li>7. DTS Database and Displays</li> </ul>	
Mode of Procurement/Bidding	Singe Stage Two-Envelope Bidding Process with e-	
	Procurement/e-Tendering	
Date of Release of RFB Notice/NIT	11.01.2024 14:00 Hrs	
Date &Time of Pre-Bid Meeting	07.02.2024 12:00 Hrs	
Last date of Bid Submission	05.03.2024 11:00 Hrs	
Date of Opening of Technical Part (First Envelope) of the bid	05.03.2024 15:00 Hrs	
Date of submission of BG (To be physically handed over, scanned copy of the same will be uploaded electronically through e-tendering.	05.03.2024 15:00 Hrs	
Opening of Financial Part (Second Envelope) of the Bid	To be notified later. Financial Part of bids from only those bidders shall be opened who, upon evaluation of Technical Part of the bids, are found eligible and qualified, and whose bids are found responsive to Bidding documents.	

<b>Location of Submission/Opening of</b>	Chief Engineer, IT		
Bids, as applicable	WBSEDCL		
Zius, us uppriousio	Vidyut Bhawan, 3 <sup>rd</sup> Floor, D-Block,		
	Block-DJ, Sector-II, Bidhannagar, Kolkata-700091		
	Tel (O): 033-23197445		
	Website: www.wbsedcl.in, Email: ceit@wbsedcl.in		
Type of Procurement	Plant (Design, Supply, Installation and Support)		
EMD/ Bid Security	All bids must be accompanied by a bid security- 2%		
	of the estimated price i.e. 64 lakhs		
Performance Security	The Performance Security amount is 10% of		
	Contract Price excluding GST		
Bid Validity period	The bid validity period will be 180 days from date		
	of		
	Opening of Technical Part of the Bid.		
<b>Time for Completion</b>	The Time for Completion of the works is 12		
	(Twelve) Months from the Effective Date of the		
	Contract.		
Address for Correspondence	Chief Engineer, IT		
	WBSEDCL		
	Vidyut Bhawan, 3 <sup>rd</sup> Floor, D-Block,		
	Block-DJ, Sector-II, Bidhannagar, Kolkata-700091		
	Tel (O): 033-23197445		
	Website: www.wbsedcl.in, Email: ceit@wbsedcl.in		
<b>Contact Details of e- Procurement</b>	Chief Engineer, IT		
Portal Support Team:	WBSEDCL		
	Vidyut Bhawan, 3 <sup>rd</sup> Floor, D-Block,		
	Block-DJ, Sector-II, Bidhannagar, Kolkata-700091		
	Tel (O): 033-23197445 Websitet www.wbsedel.in. Empile coit@wbsedel.in		
	Website: <u>www.wbsedcl.in</u> , Email: <u>ceit@wbsedcl.in</u>		

#### Section – 2: Eligibility and Qualification Requirements

#### 1. Eligibility Requirements:

Technical Part of the Bid shall be evaluated, interalia, as per **Section 3** based on their responsiveness to and Bidder's compliance with the Eligibility Requirements specified herein below:

- 1.1.Only firm that is a private entity, a state-owned entity, or an institution, legally established in India and countries listed by ADB to undertake design, supply and installation of the works mentioned in the scope of works under this RFB Document/ bidding document are eligible to bid (submit their Bid in response to RFB Notice/ NIT). The Bidder (alternatively referred to as the Contractor/Bidder) may be a proprietorship concern or a partnership firm operating in India and countries listed by ADB, or a registered entity in India and countries listed by ADB under the Companies Act, 1956, 2013 or LLP Act.
- 1.2. Any combination of such entities eligible as per 1.1 above, is also eligible to bid in the form of a joint venture (JV) as defined in **Section 3**, under an existing agreement. In the case of a joint venture, the number of members of the JV shall not exceed 03 (Three) and all members shall be jointly and severally liable for the execution of the entire Contract in accordance with the Contract terms. The JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of all the members of the JV during the Bidding process and, in the event the JV is awarded the Contract, during contract execution.

In case of JV, the bidding JV (also referred to as the Bidder) shall submit a Joint Deed of Undertaking in Technical Part of its bid, as per the format enclosed in **Section 4** of the RFB/ bidding document. No change in the structure / constitution of the JV shall be permitted at any stage during bidding or execution of the Contract in the event of award.

- 1.3.As an exception to the foregoing Clause 1.1 & 1.2 above:
- a. **Sanctions**: Firms, which includes any of the JV members in case of bidding Joint Venture as per Clause 1. 2 above, blacklisted by the Employer/ CPSEs or any of their subsidiaries / Government of India/ Government of WEST BENGAL / any Regulatory Authority or any Government of the Foreign Countries listed by ADB, as on the date of submission of Bid, are not eligible to bid.
- b. **Suspension**: Firm, which includes any of the JV members in case of bidding Joint Venture as per Clause 1. 2 above, under suspension by the Employer as the result of the operation of a Bid–Securing Declaration or Proposal-Securing Declaration, shall not be eligible to bid.
- c. **Prohibitions**: Firms, which includes any of the JV members in case of bidding Joint Venture as per Clause 1. 2 above, and individuals of a country or goods/ works/

services manufactured/ produced in a country shall be ineligible, if as a matter of law or official regulations, the Government of India prohibits commercial relations with that country.

1.4. A Bidder, and all partners constituting the Bidder, shall have the nationality of India or an eligible countries as listed by ADB. A Bidder shall be deemed to have the nationality of a country if the Bidder is a citizen or is constituted, incorporated, or registered, and operates in conformity with the provisions of the laws of that country. This criterion shall also apply to the determination of the nationality of proposed subcontractors or suppliers for any part of the Contract including related services.

To be eligible to bid, the Bidders must ensure compliance to the following, failing which they shall not be eligible:

- *I*. Any bidder from India or a country listed by ADB will be eligible tobid only if the bidder is registered with the Competent Authority.
- II. "Bidder" (Seller / Service Provider) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
- III. "Bidder from India or a country which listed by ADB" for the purpose of this Order/ Rule means: -
- a. An entity incorporated, established, or registered in such a country; or
- b. A subsidiary of an entity incorporated, established, or registered in such a country; or
- c. An entity substantially controlled through entities incorporated, established, or registered in such a country; or
- d. An entity whose beneficial owner is situated in such a country; or
- e. An Indian (or other) agent of such an entity; or
- f. A natural person who is a citizen of such a country; or
- g. A consortium or joint venture where any member of the consortium or joint venturefalls under any of the above
- IV. The beneficial owner for the purpose of (iii) above will be as under:
- 1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means. Explanation—
- a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five percent of shares or capital or profits of the company;
- b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;
- 2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has

ownership of entitlement to more than fifteen percent of capital or profits of the partnership;

- 3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;
- 4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
- 5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
- V. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.
- 1.5. Employer reserves the right to request for any additional information and reserves the right to reject the Proposal of any Bidder, if in the opinion of Employer, the qualification data is incomplete, or the Bidder is found not qualified to satisfactorily perform the Contract.
- 1.6. For the purposes of these Bidding Documents, the words "facilities," "plant and equipment," "installation services," etc., shall be construed in accordance with the respective definitions given to them in the General Conditions of Contract.

#### 2. Qualification Requirements

#### 2.1. Technical Qualifications:

Sl.	Criteria	Description	Submission
No.		•	Requirements
1	General Experience	Sole Bidder/or in combination with the JV members (if any) should have successfully implemented Eligible Projects in any Indian/Global electricity distribution utility) during the last ten (10) financial years:  i. Aggregate project value not less than (50%) of the Estimated Project Cost  ii. With project value of one such Eligible Projects not less than (30%) of the Estimated Project Cost  OR  Two such Eligible Projects not less than (20%) of the Estimated Project Cost	Form 9
		Note: For calculation of project value of eligible projects, only project value of the portion of the project executed by the Sole/Lead Bidder shall be considered.	
2	Specific Experience	Sole Bidder/Any of the JV Members (if any) must have successfully implemented COTS based Outage management system /ADMS with all required hardware and software during the last ten (10) financial years for an aggregated consumer base of at least [50%] of estimated consumer base.  Also, one of the projects must be implemented in India and shall have minimum consumer base of (20%) of estimated consumer base.	Form 9
		Each of the projects shall be in operation for at least 1 (one) year as on date of bid	

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		submission.				
		The implementation should				
		cover at least five (5) modules				
		out of the below mentioned list				
		out of which Modules i-iv are				
		mandatory –  i. Outage Management				
		i. Outage Management System (Main &				
		Standby)				
		ii. Trouble Call				
		Management				
		iii. Crew Management, Field				
		Scheduling and Dispatch				
		iv. Outage Analysis &				
		Prediction				
		v. Mobile Crew				
		Management Client				
		vi. Web Portal for Outage				
		Management				
		vii. Interactive Voice				
		Response				
3	Integration	viii.OMS reporting tool	Form 9			
3	Integration Experience	Sole Bidder/Any of the JV Members (if any) must have	FORM 9			
	Experience	successfully integrated OMS				
		system with at least three (3) of				
		the following applications in a				
		single project in any				
		Indian/Global electricity				
		distribution utility during the last				
		ten (10) financial years:				
		i. GIS				
		ii. Meter Data Management				
		(MDM)				
		iii. SCADA/DMS/ADMS				
		iv. Workforce				
		Management/Crew Management system				
		v. Asset Management				
		System/ERP				
		vi. CRM				
4	Certifications	Sole Bidder/Any of the JV	Form 9			
		Members (if any) must have all				
		the following certificates which				
		should be valid on the date of				
		bid submission:				
		i. ISO 9001:2015				
		ii. ISO 27001:2013				
a) 1	Deferences along with	iii. CMMi Level 5	O)/Work Onder (WO)			
		requisite contract/ Purchase Order (F				
	The references should indicate client name, scope of work, Project start date – as per					

the format prescribed in Form 9;

- b) Documentary evidence of completion of the Project or completion of Go-live status (i.e., Go-live certificate, UAT testing certificate etc.) of the respective project as per the definition of Go-Live/UAT specified therein or other documentary evidence indicating completion (e.g., proof of payment received/ proof of asset capitalized in books of accounts (as applicable) and client certificate for supply of material or similar proofs) along with contact details of the client;
- c) Client certificate and other documentation for implementation performance/operation

#### 2.2. Financial Qualifications:

Sl.	Criteria	Description	Submission
No.	Positive Net-worth	Sole Bidder/All of the JV	Requirements Form 9
1	I oshive net-worth	Members (if any) must have	Politi 9
		positive net-worth in each of the	
		last three (3) financial years.	
		Net worth means the sum total	
		of the paid up capital and free	
		reserves (excluding reserves	
		created out of revaluation)	
		reduced by aggregate value of	
		accumulated loses (including	
		debit balance in profit and loss	
		account for current year) and	
2	Net-worth of	intangible assets  Net Worth of the Bidder shall	Form 9
	Bidder	be at least (40%) of the	FOIIII 9
	Diduci	estimated project cost in all of	
		the last three financial years.	
		For the purpose of complying	
		with the financial requirements,	
		the following shall apply –	
		In the event the Bidder is a JV	
		a. The financial requirements	
		stated above shall be met	
		cumulatively by the	
		members forming the JV. b. The Lead JV Partner shall	
		meet 51% of the above	
		financial requirement	
		criteria stated above.	
		c. The JV members shall meet	
		not less than 25% of	
		financial requirement	
		criteria stated above	

The Bidder shall attach copies of financial statements (balance sheets, including all related notes, and income statements) for the years required above complying with the

following conditions:

- i. Must reflect the financial situation of the Bidder or member to a JV, and not sister or parent companies;
- ii. Historic financial statements must be audited by a certified chartered accountant;
- iii. Historic financial statements must be complete, including all notes to the financial statements;
- iv. Historic financial statements must correspond to accounting periods already completed and audited (no statements for partial periods shall be requested or accepted)

#### 2.3 Assessing Capacity of Bidder:

The criteria for assessing capacity of bidder shall be as below:

**Requirement:** The bid capacity of the turnkey contractor, shall be equal to or more than the estimated cost of the tender. The same shall be assessed as per following formula:

#### Bidding capacity = $[A \times N \times 2] - B$

The value of A and B to be based on the entire business of the bidder.

• A: Maximum annual turnover in last 5 FYs (to be CA certified)

N: Years prescribed for work completion under tender, 2 years for this instant NIT.

- B: Value of existing commitments & ongoing works for which LOI, LOA have been issued (to be certified by the Company Secretary/ Whole-Time Director/ CEO of the bidder) plus commitments on account of any L1 declaration as part of the DISCOM tender opening.
- In case of JV, bid capacity of each JV partner will be considered in the ratio of their share in the JV agreement. The aggregate bid capacity of the JV will be sum of the proportionate bid capacities of individual partners. For example, if the share in JV agreement of three firms are 40%, 35% and 25% and the individual bid capacities are A, B and C respectively. Then the aggregate bid capacity of JV will be 40 % of A+ 35% of B+25% of C.
- Agreement entered into by the Joint Venture Partners shall be submitted with the bid indicating the share of each JV partner in the Joint Venture.

*Mechanism:* The following mechanism shall be adopted to open the financial bids of multiple packages at around the same time:

- 1. Completion of technical evaluation of the packages and notification of the financial bid opening date with at least 2 days advance notice to the bidders
- 2. Bidders to submit the updated details of the bidding capacity, as on/ up to 7 days before the opening of financial bid,

3.

- 4. Financial bids of only those bidders shall be opened, that have requisite bidding capacity corresponding to the estimated value of RFB/ tender,
- 5. Before opening every financial Bid, the Bid Capacity of all bidders shall be

assessed as per the defined bidding Capacity formula, and including the bid value of previous opened financial bid (if any) for which the bidder is L1.

6. The above process shall be repeated until opening of all the balance financial bids.

However, there might be cases wherein the bidder has bid capacity as per the estimated tender value, but LI quoted by the bidder takes. it beyond its estimated capacity. Then in such cases, as far as bid capacity clause is concerned, the bidder shall still be considered for award.

#### Section - 3: Instructions to Bidders and Bid Data Sheet

#### A. Instructions to Bidders General

## 1. Scope of Bid and Definitions

- 1.1 In connection with the Notice Inviting Tenders (NIT)/ Request for Bids (RFB) Notice specified in **Bid Data Sheet**, the Employer (named in the **Bid Data Sheet**) issues this RFB/ Bidding Document for the Design, Supply, and Installation of Plant (also referred to as the Scope of Work), as specified in **Section 6**, Employer's Requirement. The name and identification of the package for award of contract under this NIT/RFB is specified in **Bid Data Sheet**.
- 1.2 Throughout this bidding document:
  - (a) "Affiliate(s)" means an individual or an entity that directly or indirectly controls, is controlled by, or is under common control with the Bidder.
  - (b) "Applicable Law" means the laws and any other instruments having the force of law in India, as may be issued and in force from time to time.
  - (c) **'Employer'/ 'Utility'** means the entity, as briefly described in **Bid Data Sheet**, that has issued the Request for Bids for award of the Contract for the Design, Supply, and Installation of Plant (also referred to as the Scope of Work), as specified in **Section 6**, Employer's Requirement.
  - (d) "Bid" means the Technical Part (first Envelope) and the Financial Part (Second Envelope) of its bid submitted by the Bidder who participates in the bidding in response to Notice Inviting Tenders (NIT)/ Request for Bids (RFB) Notice. It is alternatively also referred to as the tender.
  - (e) "Bid Data Sheet (BDS)" means an integral part of the Instructions to Bidders (ITB)

- **Section 3**, that is used to reflect issues, details and conditions specific to the procurement, to supplement and/or modify the provisions of ITB.
- (f) "Bidder" means a legally established professional firm or an entity that may submit its Bid to the Employer in response to the RFB Notice/ NIT issued by the Employer, to provide/ provision the Plant to the Employer.
- "Contract" means a legally binding (g) written instrument entered between the Employer/ Utility and the successful Bidder, in the manner and in accordance with the RFB document/ bidding documents, for the Design, Supply and Installation of Plant (also referred to as the Scope of Work), and includes the Letter of Acceptance/ Notification of Award, the Contract Agreement, the General Conditions of Contract (GCC), the Special Conditions of Contract (SCC), and the Appendices and the documents attached thereto.
- (h) "Day" means a calendar day, unless otherwise specified as "Business Day". A Business Day is any day that is an official working day of Employer. It excludes Employer's official public holidays.
- (i) "Government" means the government of India or any country listed by ADB, State Government or Local Government of India or countries listed by ADB as applicable.
- (j) "in writing" means communicated in written form (e.g. by mail, e-mail, fax, including that distributed or received through the electronic-procurement system used by Employer).
- (k) "Plant", "Installation Services", "Facilities" (also referred hereinafter as "Works") used herein shall have the same meaning as ascribed to them in Section 7.
- (l) "ITB" (this Section 3 of the RFB/ Bidding Documents) means the Instructions to

- Bidders that, along with other Sections, provides the Bidders with all information needed to prepare and submit their Bids.
- "Joint Venture (JV)" (m) means association with or without a legal personality distinct from that of its members, of more than one entity/ firm where one member has the authority to conduct all business for and on behalf of any and all the members of the JV, and where the members of the JV are jointly and severally liable to Employer for the performance of the Contract. Whether or not bidding by Joint Venture is permitted, is specified in **BDS** and in **Section 2**.
- (n) "RFB" means the Request for Bids issuedby Employer for the selection of the successful Bidder from amongst the bids submitted by bidders(s) who bid against and in response to the Request for Bids Notice (alternatively referred to as Notice Inviting Tenders (NIT)) under Two Envelope Single Stage Bidding Process.
- (o) "Sub-contractor" means an entity to whom the Contractor subcontracts any part of the Works as per the applicable provisions of the Contract while the Contractor remains responsible to Employer for the whole and successful performance of the Contract.
- (p) Capitalized terms used herein but not defined specifically shall have the meaning as ascribed to them in Section 5 and Section 6, and elsewhere in RFB/bidding Document.
- (q) if the context so requires, "singular" means "plural" and vice versa.
- (r) "TPQMA" means a "Third Party Quality Monitoring Agency" that the Nodal Agency for RDSS (REC/PFC) engages to carry out Pre-Dispatch inspection of materials at manufacturing facilities of Contractor or Sub Contractor / Sub-Vendors of the Contractor and to carry out

the inspection in the field of the works carried out in the RDSS scheme.

#### 2. Fraud and Corruption

- 2.1 The Employer requires compliance with the Anti-Corruption Guidelines/ Laws in force of the relevant Government/ its instrumentalities/ Utility.
- 2.2 Bidders are also required to sign and furnish in the Bid, duly signed Integrity Pact if so specified in **ITB 10.2.8**.

## 3. Eligibility, Qualification Requirements

- 3.1 The eligibility and qualification requirements against the RFB are given in **Section 2**, for the Bidders and the Plant/ Installation Services/ Works . Bids, if any, from Bidders and/or offering Plant/ Installation Services/ Works not complying with the same shall be outrightly rejected and shall not be considered for evaluation
- 3.2 Bids submitted by the Bidders shall be evaluated to ascertain their compliance with Eligibility and Qualification Requirements, based on the details/information/ documentary evidence pertaining to the same to be submitted in the Technical Part, as specified in ITB. All Bidders shall provide in Section 4, Bidding Forms, requisite details, and documents in support of meeting the Eligibility and Qualification Requirements. A Bid shall be rejected if the Bidder submitting the Bid, fails to meet the Eligibility and Qualification Requirements. Bids submitted by those Bidders who meet the Eligibility and Qualification Requirements shall be shortlisted for further evaluation of their bids.
- 3.3 A Bidder shall provide such additional documentary evidence of eligibility and/or qualification satisfactory to the Employer, as the Employer shall reasonably request.

#### 4. Conflict of Interest

4.1 A Bidder shall not have a conflict of interest. Any Bidder found to have a conflict of interest shall be disqualified. A Bidder may be considered to have a conflict of interest for the purpose of this Bidding process, if the Bidder:

- (a) directly or indirectly controls, is controlled by or is under common control with another Bidder; or
- (b) receives or has received any direct or indirect subsidy from another Bidder; or
- (c) has the same legal representative as another Bidder; or
- (d) has a relationship with another Bidder, directly or through common third parties, that puts it in a position to influence the Bid of another Bidder, or influence the decisions of the Employer regarding this Bidding process; or
- (e) any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the works that are the subject of the Bid; or
- (f) any of its affiliates has been hired (or is proposed to be hired) by the Employer for the Contract implementation; or
- (g) has a close business or family relationship with a professional staff of the Utility (or of the project implementing agency) who: (i) are directly or indirectly involved in the preparation of the bidding document or specifications of the Contract, and/or the Bid evaluation process of such Contract; or (ii) would be involved in the implementation or supervision of such Contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to the Employer throughout the Bidding process and execution of the Contract.
- 4.2 A firm that is a Bidder (either individually or as a JV member) shall not participate as a Bidder or as JV member in more than one Bid. Such participation shall result in the disqualification of all Bids in which the firm is involved. However, this does not limit the participation of a Bidder as subcontractor in another Bid or of a firm as a subcontractor in more than one Bid.

#### **B.** Contents of Bidding Document

## 5. Sections of Bidding Document

5.1 The bidding document (also referred to as the RFB document) consist of Parts 1, 2, and 3, which include all the sections indicated below, and should be read in conjunction with any Addenda/ Corrigenda/ Amendments issued in accordance with ITB 7.

## PART 1 Bidding Procedures and Requirements

- Section 1 Request for Bids Notice
- Section 2 Eligibility and Qualification Requirements
- Section 3 Instructions to Bidders and Bid Data Sheet
- Section 4 Bidding Forms Technical Part of the Bid
- Section 5- Bidding Forms Financial Part of the Bid

#### PART 2 Employer's Requirements

• Section 6 – Employer's Requirement

## PART 3 Conditions of Contract and Contract Forms

- Section 7 Conditions of Contract
- Section 8 Contract Forms
- 5.2 The Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding document and to furnish with its Bid, all information or documentation as is required by the RFB/ bidding document.
- 6. Bidding Process
  Management,
  Clarification of the
  Bidding Document, Site
  Visit and Pre-Bid Meeting
- a) Electronic Procurement
- 6.1 Electronic- Bidding System (also referred to as e-Procurement or e- Tendering system) as specified in the **BDS** shall be used to manage the bidding

process. Only the Bids which are submitted and received through the specified system in conformity with the procedures and requirements specified of **ITB** and **BDS** shall be considered.

## b) Clarifications to Bidding Documents

6.2 The electronic-bidding system specified in the **ITB 6.1** provides for online clarifications. A Bidder requiring any clarification of the bidding document may notify the Employer online or through any other mode if so specified in **BDS**. Clarifications requested through any other mode shall not be considered by the Employer. The Employer will respond to any request for clarification, provided that such request is received prior to the deadline for submission of Bids within a period specified in the BDS. Description of clarification sought, and the response of the Employer shall be uploaded for information of all Bidders without identifying the source of request for clarification. Should the clarification result in changes to the essential elements of the bidding document, the Employer shall amend the bidding document following the procedure under **ITB 7** and **ITB 21.2**.

#### c) Site Visit

- 6.3 The Bidder is advised to visit and examine the Site where the Plant is to be installed/ Works are to be provided, and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the Bid and entering into a contract for provision of Plant and Installation Services/ construction of the Works. The costs of visiting the Site shall be at the Bidder's own expense.
- 6.4 The Bidder and any of its personnel or agents will be granted permission by the Employer to enter upon its premises and lands for the purpose of such visit, but only upon the express condition that the Bidder, its personnel, and agents will release and indemnify the Employer and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.
- 6.5 If so specified in the **BDS**, the Bidder's designated representative is invited to attend a pre-Bid meeting. The purpose of the meeting will be to clarify issues

#### d) Pre-Bid Meeting

- and to answer questions on any matter that may be raised at that stage.
- 6.6 The Bidder is requested to submit any questions in writing, to reach the Employer not later than one day before the meeting.
- 6.7 Minutes of the pre-Bid meeting, including the text of the questions raised without identifying the source, and the responses given, together with any responses prepared after the meeting, will be notified online through electronic-bidding system. Any modification to the bidding document that may become necessary as a result of the pre-Bid meeting shall be made by the Employer exclusively through the issue of an Addendum pursuant to **ITB 7** and not through the minutes of the pre-Bid meeting. Nonattendance at the pre-Bid meeting will not be a cause for disqualification of a Bidder.
- 7. Addenda/Corrigendum/ Amendmentof Bidding Document
- 7.1 At any time prior to the deadline for submission of Bids, the Employer may amend the bidding document by issuing addenda/ corrigendum/ amendment. The addendum/ corrigendum/ amendment will be in writing and appear on the e-procurement system and through email notification automatically sent to those bidders who have started working on the procurement, or as otherwise specified in **BDS**.
- 7.2 Any addendum/ corrigendum/ amendment issued shall be part of the bidding document and shall be deemed to have been communicated to all the bidders.
- 7.3 To give prospective Bidders reasonable time in which to take an addendum/ corrigendum/ amendment into account in preparing their Bids, the Employer may, at its discretion, extend the deadline for the submission of Bids, pursuant to **ITB 21.2**.

#### C. Preparation of Bids

#### 8. Cost of Bidding

8.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Employer shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

#### 9. Language of Bid

# 9.1 The Bid, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and the Employer, shall be written in English. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages into English, in which case, for purposes of interpretation of the Bid, such translation shall govern.

## 10. Documents comprising Bid

- 10.1 Under the Single Stage Two Envelope bidding process, the Bid shall comprise two Parts, namely the Technical Part and the Financial Part. These two Parts shall be submitted by the Bidder simultaneously.
- 10.2 The **Technical Part** shall contain the following:
- 10.2.1 **Letter of Bid Technical Part:** prepared in accordance with **ITB 11**:
- 10.2.2 **Bid Security** or **Bid-Securing Declaration**: in accordance with **ITB 18**, prepared using the relevant form furnished in **Section 4** Bidding Forms Technical Part of the Bid
- 10.2.3 **Authorization**: Document authorizing the signatory of the Bid to commit the Bidder, in accordance with **ITB 19.3 or ITB 19.4**, as may be applicable, prepared using the bidder's own format;
- 10.2.4 **Bidder's Eligibility**: documentary evidence in accordance with **ITB 16.1** establishing the Bidder's eligibility to Bid as per the requirements specified in Section2/ Section3;
- 10.2.5 **Qualifications**: documentary evidence in accordance with **ITB 16.2** establishing the Bidder's compliance to the Qualifications Requirements specified in Section 2/ Section 3, along with duly filled in form for compliance of Qualification Requirements, furnished in Section 4 Bidding Forms Technical Part of the Bid;
- 10.2.6 Eligibility of Goods/ Works/ Plant and Installation Services: documentary evidence in accordance with ITB 16.1, establishing the

- eligibility of the Works to be supplied by the Bidder;
- 10.2.7 Conformity: Undertaking on Compliance of terms & conditions of the Bidding Documents including Scope of Services and other related requirements, towards documentary evidence in accordance with ITB 15.1, prepared using the relevant form furnished in Section 4 Bidding Forms Technical Part of the Bid; and
- 10.2.8 any other document if required as per BDS.
- 10.2.9 In addition to the requirements as aforesaid, Bids submitted by a JV shall include a copy of the Joint Venture Agreement entered into by all members, a Joint Deed of Undertaking and Power of Attorney. The Joint Deed of Undertaking and the Power of Attorney shall be prepared using the relevant form furnished in Section 4 Bidding Forms Technical Part of the Bid
- 10.3 The **Financial Part** shall contain the following:
- **10.3.1** Deleted
- 10.3.2 **Price Schedules**: completed prepared in accordance with **ITB 11, ITB 13 and ITB 14**;
- **10.3.3** any other document if required in **BDS**.
- 10.4 The Technical Part shall not include any financial information related to the Bid price. Where material financial information related to the Bid price is contained in the Technical Part the Bid shall be declared non-responsive.

#### 11. Process of Bid Submission

- 11.1 The Letter of Bid Technical Part shall be prepared using the relevant forms furnished in Section 4 Bidding Forms Technical Part of the Bid. The priced Schedules for the Plant and Installation Services/ Works shall be prepared using the relevant forms furnished in Section 5 Bidding Forms Financial Part of the Bid. The forms must be completed without any alterations to the text, except as provided under ITB 19.3 for which the bidder can use its own format. All blank spaces shall be filled in with the information requested.
- 11.2 Entire Bid as per ITB 10 including the Letters of Bid and filled-up priced Schedules for the Plant and Installation Services/ Works, shall be submitted online on e-procurement system specified in ITB 6.1. Details and process of online submission of the Bid/ tender and relevant documents are given in ITB 6.1 and the concerned website referred therein.
- 11.3 **Submission of Original Documents:** The Bidders are also required to separately submit the hard copy of the documents, if any mentioned in **BDS**, at Employer's address specified in **BDS**, so as to reach the office before the opening of the Technical Part of the Bid, either by registered/speed post/courier or by hand, failing which the bids are liable to be declared non-responsive.
- 11.4 Hard copy of rest of the Bid or any document, other than those specified in **ITB 11.3** are not to be submitted. Employer may, however, seek submission of hard copy of any of the other documents forming part of the Bid or any other supporting/ related document from any of the bidders during the process of evaluation of the Bids, without permitting change in substance of the Bid.

#### 12. Alternative Bids

12.1 Alternative Bids are not permitted and shall not be considered.

#### 13. Bid prices and Discounts

13.1Unless otherwise specified **in the BDS**, Bidders shall quote for the entire Plant and Installation Services on a "single responsibility" basis. The total Bid price shall include all the Contractor's obligations mentioned in or to be reasonably inferred from the bidding document in respect of the design, engineering, manufacture, including procurement and

subcontracting (if any), delivery, construction, installation and completion of the Plant. This includes all requirements under the Contractor's responsibilities for testing, pre-commissioning and commissioning of the plant and, where so required by the bidding document, the acquisition of all permits, approvals and licenses, etc.; the operation, maintenance and training services and such other items and services as specified in the bidding document, all in accordance with the requirements of the bidding documents.

- 13.2 Bidders are required to quote the price for the commercial, contractual and technical obligations outlined in the bidding document.
- 13.3 Bidders shall give a breakdown of the prices in the manner and detail called for in the Price Schedules included in **Section 5**. Bidding Forms – Financial Part of the Bid.
- 13.4 Depending on the Scope of the Work and the Contract, the Price Schedules shall comprise the schedules listed below. Bidders shall note that the plant and equipment included in Schedule Nos. 1 exclude materials used for civil, building and other construction works. All such materials shall be included and priced under Schedule No. 2, Installation Services. The Schedules comprise:

**Schedule No. 1**: Schedule No.1: Plant and Equipment including Mandatory Spares to be supplied

**Schedule No. 2**: Supply of Installation Services

Schedule No. 3: Design Services

Schedule No. 4

Schedule No.5 Grand Summary

13.5In the Schedules, Bidders shall give the required details and a breakdown of their prices as follows:

13.5.1 Supply of Plant (Schedule No. 1):

 (i) The price of the plant shall be quoted on FOR (final place of destination (Site/ Project Site) as specified in BDS) basis, and shall be inclusive of all costs, expenses, duties, taxes, and

- other levies incidental thereto interalia including design, engineering, manufacture, testing, transportation, insurance etc. and other services, incidental thereto, as applicable, and taking into account any input tax credit except (ii) below;
- (ii) GST as percentage of the price as per (i) above, payable additionally by the Utility, applicable on the plant/ goods/ material, if the contract is awarded to the Bidder, is prespecified in Schedule No.1 and bidders are not required to quote the same separately anywhere in the bid. (Basis the same and the price quoted as per (i) above, the amount towards GST against each item shall get calculated accordingly); and
- (iii) The total price for the item i.e. (i) plus (ii) above.

## 13.5.2 Supply of Installation Services (Schedule No. 2):

The price of Installation Services {excluding the incidental services included in 13.5.1 (ii)} shall be quoted separately and shall be inclusive of all costs, expenses, duties, taxes, and other levies related, inter-alia, to unloading and handling of plant, all labor, contractor's equipment, temporary works, materials, consumables, design and preparation of layout, engineering drawings, and all matters and things of whatsoever nature, including testing, pre-commissioning and commissioning, operations and maintenance services, the provision of as-built drawings, operations and maintenance manuals, training, etc., applicable and necessary for the proper execution of the installation

and other services, at final destination (Site/ Project Site) as specified in the **BDS**, related to and incidental to successful installation of the Plant, except (ii) below;

- (ii) GST as percentage of the price as per (i) above, payable additionally by the Utility, applicable on the Installation Services, if the contract is awarded to the Bidder, is prespecified in Schedule No.2 and bidders are not required to quote the same separately anywhere in the bid (Basis the same and the price quoted as per (i) above, the amount towards GST against each item shall get calculated accordingly); and
- (iii) The total price for the item i.e. (i) plus (ii) above.

# 13.5.3 Grand Summary (Schedule No. 3):

The total amount of each of the components from each of Schedule No.1 and Schedule No. corresponding to the Plant and Installation Services, shall be summarized in the schedule titled Grand Summary, (Schedule Aggregate of the total amount as per ITB 13.5.1 (i) and ITB 13.5.2 (i), giving the total **Bid price**, excluding GST, is to be entered in the Letter of Bid. The total amount towards GST, that is aggregate of the total amount as per ITB 13.5.1 (ii) and ITB 13.5.2 (ii) is to be indicated separately in Schedule No. 3 and entered separately in the Letter of Bid.

## 13.5.4 Recommended Spare Parts (Schedule No. 4)

Recommended spare parts shall be quoted separately (Schedule 4) in the

- manner and as specified in subparagraph 13.5.1 above along with support service.
- 13.5.5 The terms CIP, CIF, EXW, FOR and other similar terms shall be governed by the rules prescribed in the current edition of Incoterms, published by the International Chamber of Commerce.
- 13.5.6 Items against which no rate or price is entered by the Bidder shall be deemed covered by the rates for other items in the Price Schedule and will not be paid for separately by the Employer. An item not listed in the price schedule shall be assumed to be not included in the Bid, and provided that the Bid is determined substantially responsive notwithstanding this omission, the price as specified in **ITB 28.3**, will be added to the Bid price and the equivalent total cost of the Bid so determined will be used for price comparison.
- **13.6** The prices shall be either fixed or adjustable as specified in the **BDS**.
- 13.7 In the case of **Fixed Price**, prices quoted by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to variation on any account. A Bid submitted with an adjustable price quotation will be treated as non-responsive and rejected.
- 13.8 In the case of **Adjustable Price**, prices quoted by the Bidder shall be subject to adjustment during performance of the contract to reflect changes in the cost elements such as labor, material, transport and Contractor/Bidder's equipment in accordance procedures specified in the corresponding Appendix to the Contract Agreement. A Bid submitted with a fixed price quotation will not be rejected, but the price adjustment will be treated as zero. If not already specified in Appendix to the Contract Agreement stated above, bidders are required to indicate the source of labor and material indices in the corresponding Form in **Section 4**. Bidding Forms – Technical Part of the Bid.
- 13.8.1 the Bidder shall be free to use transportation through carriers registered in India. Similarly,

- the Bidder may obtain insurance services from India.
- 13.9 Bidders wishing to offer any unconditional price reduction (discount) for the award of the package (Contract), shall specify in their Letter of Bid the price reduction applicable to such package, and the manner in which the price reductions will apply. Any conditional discount shall not be considered for evaluation, however, the Employer may consider the same in case of award of Contract on the Bidder.
- 13.10 The total amount as per ITB 13.5.1 (i) and ITB 13.5.2 (i), from each of Schedule No.1 and Schedule No.2, corresponding to the Plant and Installation Services, respectively, which shall be summarized in the schedule titled Grand Summary, (Schedule 3), and aggregated giving the total Bid price(s) of the Bidder, excluding GST and excluding any reduction/ discount offered, shall be brought/ carried forward and entered in the Letter of Bid. Considering reduction/ discount as per ITB 13.9 and ITB 13.10 (if applicable), if offered, it shall constitute the quoted Bid price of the Bidder, excluding GST.
- 13.11 The total amount towards GST, that is aggregate of the amount quoted separately by the bidder as per ITB 13.5.1 (ii) and ITB 13.5.2 (ii), shall be considered for evaluation and comparison of bids if so specified in ITB 32.1 (e), and it shall be payable/ reimbursable to the Bidder, in the event of award of contract, as specified in BDS.
- 14.1 The prices shall be quoted by the Bidder, and shall be paid for by the Employer, entirely in Indian Rupees.
- 15.1 To establish the conformity of the Plant and Installation Services/ Works to the bidding document, the Bidder shall furnish as part of its Bid an Undertaking on Compliance of terms & conditions of the Bidding Documents including Scope of Work, conformance of Plant and Installation Services/ Works to the technical specifications and standards specified in **Section 6**, Employer's Requirement as well as other related requirements, in the Technical
- 14. Currencies of Bid and Payment
- 15. Documents Establishing the Conformity of the Plant and Installation Services/ Works

- Part of the bid as specified in **ITB 10.2.7**, as per the format given in **Section 4** Bidding Forms Technical Part of the Bid.
- 15.2 Wherever and if specified in **Section 6** Employer's Requirement, the bidder shall also submit documentary evidence in the form of literature, drawings or data, and a detailed item by item description of the essential technical characteristics of the Plant and Installation Services/ Works, demonstrating substantial responsiveness of the Plant and Installation Services/ Works to the technical specification.
- 15.3 Wherever and if specified in **Section 6**, Employer's Requirement, the Bidder shall furnish in technical proposal a statement of work methods, equipment, personnel, schedule and any other information as stipulated in **Section 4**, Bidding Forms Technical Part of the Bid, in sufficient detail to demonstrate the adequacy of the Bidder's proposal to meet the Employer's Requirements and the Time for Completion of the Plant and Installation Services/ Works.
- 15.4 Standards for workmanship, process, material, and equipment, as well as references to brand names or catalogue numbers specified by the Employer in the Employer's Requirement, are intended to be descriptive only and not restrictive. The Bidder may offer other standards of quality, brand names, and/or catalogue numbers, provided that it demonstrates, to the Employer's satisfaction, that the substitutions ensure substantial equivalence or are superior to those specified in the **Section 6**, Employer's Requirement.
- 15.5 For major items of Plant and Installation Services if and as listed by the Employer in Section 2, Eligibility and Qualification Requirements and Section 6, Employer's Requirement, which the Bidder intends to purchase or subcontract, the Bidder shall give details of the name and nationality of the proposed Subcontractors, including manufacturers, for each of those items. In addition, the Bidder shall include in its Bid information establishing compliance with the requirements specified by the Employer for these items. Quoted rates and prices will be deemed to apply to

- whichever Subcontractor is appointed, and no adjustment of the rates and prices, on this account, will be permitted.
- 15.6 The Bidder shall be responsible for ensuring that any Subcontractor proposed complies with the requirements of **Section 2** and **Section 6**.
- 16. Documents Establishing the Eligibility and Qualifications of the Bidder and Eligibility of Plant and Installation Services
- 16.1 To establish Bidder's eligibility and eligibility of Plants and Installation Services/ Works in accordance with **ITB 3** and **Section 2**, Eligibility Requirements, Bidders shall complete the Letter of Bid Technical Part, and other forms included in **Section 4** Bidding Forms Technical Part of the Bid.
- 16.2 The documentary evidence of the Bidder's eligibility and qualifications, and eligibility of Plant and Installation Services, to be furnished as per **Section 4** Bidding Forms Technical Part of the Bid, for the Bidder to be considered for award of the Contract, shall establish to the Employer's satisfaction that the Bidder meets each of the Eligibility and Qualification Requirements and establishes eligibility of Plant and Installation Services/ Works, specified in **ITB 3 and Section 2**.

# 17. Period of Validity of Bids

- 17.1 Bids shall remain valid until the date specified in the **BDS** or any extended date if amended by the Employer in accordance with **ITB 7**. The Bid Validity period starts from the Bid submission deadline (as prescribed by the Employer in accordance with **ITB 21.1**). A Bid that is not valid until the date specified in the **BDS**, or any extended date if amended by the Employer in accordance with **ITB 7**, shall be rejected by the Employer as nonresponsive.
- 17.2 In exceptional circumstances, prior to the expiry of the Bid validity, the Employer may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. If a Bid Security is requested (in accordance with ITB 18), it shall also be extended for a corresponding period. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not

be required or permitted to modify its Bid, except as provided in this **ITB 17.2**.

# 18. Bid Security/ Bid Securing Declaration

- 18.1 Unless otherwise the provision for submission of Bid Securing Declaration is specified in the **BDS**, the Bidder shall furnish as part of the Technical part of its Bid, a Bid security in original form, and in the amount specified in the BDS.
- 18.2 If a Bid Security is specified pursuant to **ITB 18.1**, the Bid Security shall be a demand guarantee, and in any of the following forms at the Bidder's option:
  - (a) an unconditional guarantee issued by a nationalized/ scheduled commercial bank located in India;
  - (b) a cashier's or certified check or demand draft from a Nationalized/ Scheduled commercial bank located in India; or
  - (c) another form security, if specified in the BDS.

In the case of a bank guarantee, the Bid security shall be submitted using the Bid Security Form included in Section 4, Bidding Forms - Technical Part of the Bid. The form must include the complete name of the Bidder. The Bid Security shall be valid for ninety (90) days beyond the original validity period of the Bid, or beyond any period of extension if requested under **ITB 17.2**.

- 18.3 If a Bid Security is specified pursuant to **ITB 18.1**, any Bid not accompanied by a substantially responsive Bid Security shall be rejected by the Employer as non-responsive.
- 18.4 If a Bid Security is specified pursuant to **ITB**18.1, the Bid Security of unsuccessful Bidders shall be returned as promptly as possible upon the successful bidder's signing the contract and furnishing the Performance Security pursuant to **ITB** 43 and **ITB** 45.
- 18.5 The Bid Security of the successful bidder shall be returned as promptly as possible once the

successful bidder has signed the Contract and furnished the required Performance Security.

- 18.6 The Bid Security may be forfeited, or action may be taken as per the Bid Securing Declaration:
  - (a) if a Bidder withdraws/modifies/substitutes its Bid during the period of Bid validity specified by the Bidder in the Letter of Bid Technical Part, or any extension thereto provided by the Bidder; or if the Bidder does not accept the correction of its Bid Price pursuant to ITB 33; or
    - (b) if the successful Bidder fails to:
      - sign the Contract in accordance with **ITB 43**; or
      - (ii) furnish a performance security in accordance with **ITB 44**.
- 18.7 The Bid Security or the Bid-Securing Declaration of a JV shall be in the name of the JV that submits the Bid.
- **18.8** If a Bid Security is not specified pursuant to **ITB 18.1** and Bid Securing Declaration is specified: and
  - (a) if a Bidder withdraws its Bid during the period of Bid validity specified by the Bidder on the Letter of Bid Form, except as provided in **ITB 17.2**; or
  - (b) if the successful Bidder fails to:
    - (i) sign the Contract in accordance with **ITB 43**; or
    - (ii) furnish a Performance Security in accordance with **ITB 44**:

the Employer may, declare the Bidder disqualified to be awarded a contract by the Employer for a period of time as stated in the **BDS**.

## 19. Format and Signing of Bid

- **19.1** The Bidder shall prepare the Bid, in accordance with **ITB 10**.
- 19.2 Bidders shall mark as "CONFIDENTIAL" information in their Bids which is confidential to their business. This may include proprietary information, trade

- secrets, or commercial or financially sensitive information.
- 19.3 The Bid shall be signed by a person or persons duly authorized to sign on behalf of the Bidder. This authorization shall be in the form of the document as specified in **BDS** and shall be submitted/ uploaded along with the Bid as per **ITB 11**.
- 19.4 In the case that the Bidder is a JV, the Bid shall be signed by an authorized representative of the JV on behalf of the JV, and so as to be legally binding on all the members as evidenced by a power of attorney signed by their legally authorized representatives, which shall be submitted/ uploaded along with the Bid as per ITB 11.
- 19.5 Corrections, if any, can be carried out by editing the information before electronic submission on e-procurement portal.

#### D. Submission of Bids

#### 20. Submission of Bids

- 20.1 Bids, both Technical and Financial Parts, shall be submitted online on the e-procurement system specified in **ITB 6.1**. Detailed guidelines for viewing bids and submission of online bids are as per **ITB 6.1** and the website referred therein. A prospective bidder can submit its bid online only for which the bidder (in case of JV, the authorised representative of the JV as per **ITB 19.4**) is required to have enrolment/registration and should have valid Digital Signature Certificate (DSC) as specified in ITB **6.1** in BDS. The Bidder should go through them carefully and submit its bid, along with the specified documents failing which the bid is liable to be rejected.
- 20.2 The completed Bid comprising of documents indicated in **ITB 10**, should be uploaded on the e-procurement portal along with scanned copies of requisite certificates/ documents as are mentioned in different sections in the bidding document. Further, if so specified in **ITB 11.3**, the Bidders shall ensure submission of hard copy of documents as mentioned therein.

- 20.3 All the uploaded documents are required to be signed digitally by the bidder.
- 20.4 Physical, e-mail, Telex, Cable or Facsimile bids will be rejected as non-responsive.

# 21. Deadline for Submission of Bids

- 21.1 Bids must be uploaded online, and if so specified in **ITB 11.3**, the hard copy of specified documents must be delivered at the address mentioned therein, no later than the deadline for submission of Bids i.e. the date and time specified in the **BDS**.
- 21.2The Employer may, at its discretion, extend the deadline for the submission of Bids by amending the bidding document in accordance with **ITB 7**, in which case all rights and obligations of the Employer and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

22. Late Bids

22.1 The electronic bidding system would not allow any late submission of bids after due date & time as per server time.

# 23. Withdrawal, Substitution, and Modification of Bids

- 23.1 Bidders may modify their bids by using the appropriate option for bid modification on eprocurement portal before the deadline for submission of bids. For this the bidder need not make any additional payment towards the cost of bid document, if applicable. For bid modification and consequential re-submission, the bidder is not required to withdraw his bid submitted earlier. The last modified bid submitted by the bidder within the bid submission time shall be considered as the Bid. For this purpose, modification/withdrawal by other means will not be accepted. In online system of bid submission, the modification and consequential re-submission of bids is allowed any number of times. A bidder may withdraw his bid by using the appropriate option for bid withdrawal, before the deadline for submission of bids, however, if the bid is withdrawn, re-submission of the bid is allowed only upto the deadline for submission of bids as specified in ITB 21.
- 23.2 Bids requested to be withdrawn in accordance with **ITB 23.1** shall not be opened.

23.3 No Bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of Bids and the expiration of the period of Bid validity specified by the Bidder on the Letter of Bid (Technical Part), or any extension thereof. This will result in the forfeiture of the Bid Security or be sufficient ground for action by Employer against the bidder under the Bid Securing Declaration, as may be applicable pursuant to **ITB 18**.

## E. Public Opening of Technical Parts of Bids

# 24. Public Opening of Technical Parts of Bids

- 24.1 The Employer shall, at the Bid opening, publicly open online the Technical Parts of all Bids, except as in the cases specified in **ITB 22** and **ITB 23.2**, received by the deadline of bid submissions as specified in **ITB 21**, at the date, time and place specified in the **BDS** in the presence of Bidders' designated representatives who choose to attend, and this could also be viewed by the bidders online. The Financial Parts of the bids shall remain unopened in the e-procurement system, until the subsequent public opening, following the evaluation of the Technical Parts of the Bids. Bidder's names, and such other details as the Employer may consider appropriate will be notified by the Employer at the time of bid opening.
- 24.2 Only Technical Parts of Bids that are opened at Bid opening of Technical Parts shall be considered further for evaluation.
- 24.3 At the Bid opening the Employer shall neither discuss the merits of any Bid nor reject any Bid (except the cases, in accordance with **ITB 22** and **ITB 23.2**).
- 24.4The Employer shall prepare a record of the Bid opening, that shall include, as a minimum:
  - (a) the name of the Bidder; and
  - (b) the presence or absence of a Bid Security or a Bid-Securing Declaration.
- 24.5 The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders.

## F. Evaluation of Bids - General Provisions

## 25. Confidentiality

- 25.1 Information relating to the evaluation of Bids and recommendation of contract award, shall not be disclosed to Bidders, or any other persons not officially concerned with the Bidding process.
- 25.2 Any effort by a Bidder to influence the Employer in the evaluation or contract award decisions may result in the rejection of its Bid.
- 25.3 Notwithstanding **ITB 25.1**, from the time of Bid opening to the time of Contract Award, if any Bidder wishes to contact the Employer on any matter related to the Bidding process, it should do so in writing.

## 26. Clarification of Bids

- 26.1 To assist in the examination, evaluation, comparison of the Bids, and eligibility or qualification of the Bidders, the Employer may, at its discretion, ask any Bidder for a clarification of its Bid and/or seek information related to historical data/ documents pertaining to credentials of the Bidders and the Bids, that the Employer may require. Any clarification submitted by a Bidder in respect to its Bid and that is not in response to a request by the Employer shall not be considered. The Employer's request for clarification and the response shall be in writing. No change, including any voluntary increase or decrease, in the prices or substance of the Bid shall be sought, offered, or permitted.
- 26.2If a Bidder does not provide clarifications of its Bid or data/ documents sought, by the date and time set in the Employer's request for clarification/ data/ document, its Bid may be rejected.

# 27. Deviations, Reservations, and Omissions

- 27.1 During the evaluation of Bids, the following definitions apply:
  - (a) "Deviation" is a departure from the requirements specified in the bidding document:
  - (b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the bidding document; and

- (c) "Omission" is the failure to submit part, or all of the information or documentation required in the bidding document.
- 28. Nonmaterial Nonconformities, Errors and Omissions
- 28.1 Provided that a Bid is substantially responsive, the Employer may waive any nonconformities in the Bid, which do not constitute a material deviation, reservation or omission.
- 28.2 Provided that a Bid is substantially responsive, the Employer may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the Bid related to documentation requirements. Requesting information or documentation on such nonconformities and/or omissions shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.
- 28.3 Provided that a Bid is substantially responsive, the Employer shall rectify quantifiable nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component in the manner specified in **BDS**.

## G. Evaluation of Technical Parts of Bids

# 29. Evaluation of Technical Parts

- **29.1** In evaluating the Technical Parts of each Bid, the Employer shall use the requirements, criteria and methodologies mentioned and specified in **Section 2**, **Section 3** and **Section 6**.
- 29.2 The Employer shall, interalia, carry out the Technical Evaluation as per **ITB 29.3**, and determine to its satisfaction:
  - (a) whether the Bidders comply with the Eligibility Requirements, have offered eligible Plant and Installation Services in their Bids, as specified in ITB 3 and Section 2:
  - (b) whether the Bidders meet the Qualification Requirement as specified in ITB 3 and Section
    2. (The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder,

- pursuant to **ITB 16** read in conjunction with **ITB 26**. The determination shall not take into consideration the qualifications of other firms such as the Bidder's subsidiaries, parent entities, affiliates, subcontractor/Bidders (other than specialized subcontractor/Bidders if permitted in the bidding document), or any other firm different from the Bidder that submitted the Bid except if provided in the specified Qualification Requirement itself and
- (c) whether the Bids submitted by the Bidders complying with the requirements specified in (a), and (b) above have been determined to be substantially responsive to the RFB/bidding document, as per ITB 30.
- 29.3 **Technical Evaluation**. The Employer will carry out a detailed technical evaluation of the Bids not previously rejected to determine whether the technical aspects are in compliance with the bidding document. The Bid that does not meet minimum acceptable standards of completeness, consistency and detail, and the specified minimum (or maximum, as the case may be) requirements for specified functional guarantees, will be rejected for non-responsiveness. In order to reach its determination, the Employer will examine and compare the technical aspects of the Bids on the basis of the information supplied by the Bidders, taking into account the following:
  - (a) overall completeness and compliance with the Employer's Requirements; conformity of the Plant and Installation Services offered with specified performance criteria, including conformity with the specified minimum (or maximum, as the case may be) requirement corresponding to each functional guarantee, as indicated in **Section 2** and/ or **Section 6**; suitability of the Plant and Installation Services offered in relation to the environmental and climatic conditions prevailing at the site; and quality, function and operation of any process control concept included in the Bid;

- (b) type, quantity and long-term availability of mandatory and recommended spare parts and maintenance services; and
- (c) other relevant factors, if any, listed in the RFB/ bidding document.
- 29.4 At this stage, a Bid shall be rejected if the determination on any one of the aspects listed in ITB 29.2 (a), (b) and (c) above, is not in the affirmative. All other Bids shall be considered for further evaluation.

# 30. Determination of Responsiveness

- 30.1 The Employer's determination of a Bid's responsiveness is to be based on the contents of the Bid itself, as defined in **ITB 10** read in conjunction with **ITB 26** and submitted as per **ITB 11**.
- 30.2 A substantially responsive Bid is one that meets the requirements of the bidding document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that:
  - (a) if accepted, would:
    - (i) affect in any substantial way the scope, quality, or performance of the Works specified in the Contract; or
    - (ii) limit in any substantial way, inconsistent with the bidding document, the Employer's rights or the Bidder's obligations under the Contract; or
  - (b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive Bids.
- 30.3 The Employer shall examine the technical aspects of the Bids, in particular, to confirm that all requirements of **Section 6**, Employer's Requirement have been met without any material deviation or reservation, or omission.
- 30.4 If a Bid is not substantially responsive to the requirements of bidding document, it shall be rejected by the Employer and may not subsequently be made responsive by correction

of the material deviation, reservation, or omission.

## H. Public Opening of Financial Parts of Bids

# 31. Public Opening of Financial Parts

- 31.1 Following the completion of the evaluation of the Technical Parts of the Bids, the Employer shall notify in writing those Bidders whose Bids were considered non-responsive to the bidding document / RFB Document or failed to meet the Eligibility Requirements or Qualification Requirement or any other specified requirement, advising them of the following information:
  - (a) the grounds on which their Technical Part of Bid failed to meet the requirements of the bidding document; and
  - (b) Financial Part of their Bid will not be opened.
- 31.2 The Employer shall, simultaneously, notify in writing those Bidders whose Technical Parts have been evaluated as substantially responsive to the bidding document and met the Eligibility Requirement, Qualification Requirement and other specified requirement, advising them of the following information:
  - (a) their Bid has been evaluated as substantially responsive to the requirements of bidding document and the specified requirements;
  - (b) Financial Part of their Bid will be opened online at the public opening of the Financial Parts; and
  - (c) notify them of the date, time and location of the second public opening of the Financial Parts of bid, and the address thereof. In the event of the specified date of bid opening being declared a holiday for the Employer, the bids will be opened at the appointed time and location on the next working day.
- 31.3 All efforts may be made to have the opening date that should allow Bidders sufficient time to make arrangements for attending the opening if they so choose, however as the opening is in online mode and bidder's get due notification of bid opening and can witness the opening online, the date of opening may be set accordingly based on

Employer's requirements. The Financial Part of the Bids shall be opened publicly in the presence of Bidders' designated representatives who chooses to attend, and this could also be viewed by the bidders online. The bidder's names, the Bid prices, the total amount of each bid, and such other details as the Employer may consider appropriate, will be announced by the Employer at the time of bid opening.

- 31.4 The Employer shall prepare a record of the Bid opening, that shall include, as a minimum:
  - (c) the name of the Bidder; and
  - (d) the Bid price, including any discounts
- 31.5Only Financial Parts of Bids that are opened at Bid opening shall be considered for further evaluation.

## I. Evaluation of Financial Parts of Bids

# **32. Evaluation of Financial Parts**

- 32.1 To evaluate the Financial Part of each Bid, the Employer shall consider the following:
  - (a) Bid price, as quoted in accordance with ITB 13.5;
  - (b) price adjustment for correction of arithmetic errors in accordance with **ITB** 33;
  - (c) price adjustment due to discounts offered in accordance with **ITB 13.9**;
  - (d) price adjustment due to quantifiable nonmaterial nonconformities in accordance with **ITB 28.3**;
  - (e) GST, quoted separately as per ITB 13.12, adjusted for correction of arithmetic errors in accordance with ITB 33, shall be considered for arriving at the evaluated Bid cost/ price and comparison of Bids, except if otherwise specified in BDS.

- (f) the additional evaluation factors if specified in **BDS** and/ or **Section 6**.
- 32.2 If price adjustment is allowed in accordance with **ITB 13.6**, the estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in Bid evaluation.
- 32.3 The Employer's evaluation of a Bid may require the consideration of other factors if specified in BDS, in addition to the Bid price quoted, in accordance with **ITB 33.1** (e).

# 33. Correction of Arithmetical Errors

- 33.1 The e-procurement system automatically calculates the total amount from unit rates and quantities, and the system also automatically populates the amount in words from the amount in figures, and therefore there is no scope of discrepancy and need for arithmetic correction. However there would be a manual recalculation and in the case of discrepancy between system generated and manual prices, the manually calculated prices shall prevail.
- 33.2 Any bid which is found to have tampered or modified the electronic logic of the e- procurement system for calculating the total amount from unit rates and quantities, and/ or in populating the amount in words from the amount in figures, is liable to be rejected and the case shall be dealt against the bidder under the Integrity Pact and conditions of the RFB/ bidding documents including those regarding fraud etc..

# 34. Comparison of Financial Parts

34.1 The Employer shall compare the evaluated price/costs of all substantially responsive Bids, to determine the Bid that has the lowest evaluated cost/ price.

#### 35. Preference

35.1 Purchase Preference shall not apply for award of contract if not so specified in the **BDS**, as per the guidelines, instruction and methodology indicated therein.

# 36. Abnormally Low Bids

36.1An Abnormally Low Bid is one where the Bid price, in combination with other elements of the Bid, appears so low that it raises material concerns

- with the Employer as to the capability of the Bidder to perform the Contract for the offered Bid Price.
- 36.2 In the event of identification of a potentially Abnormally Low Bid, the Employer, unless otherwise specified in **BDS**, may seek written clarification from the Bidder, including a detailed price analyses of its Bid price in relation to the subject matter of the contract, scope, delivery schedule, allocation of risks and responsibilities and any other requirements of the bidding document.
- 36.3After evaluation of the price analyses, in the event that the Employer determines that the Bidder has failed to demonstrate its capability to perform the contract for the offered Bid price, the Employer shall reject the Bid.

# 37. Unbalanced or Front Loaded Bids

37.1 The Bid that is evaluated as the lowest evaluated cost/price, shall be considered by the Employer as unbalanced or front loaded, if the quoted price of supply portion exceeds the percentage specified in **BDS** of the total quoted **Bid price**, after evaluation and excluding GST. In such a case, The bidder shall be required to furnish an additional performance security pursuant to **ITB 44**.1 as contract.

#### 38. Most Advantageous Bid

- 38.1 Having compared the evaluated cost/price of Bids as per ITB 34, and applying the provisions of ITB 35, the Employer shall determine the Most Advantageous Bid (alternatively referred to as L1 Bid). The Most Advantageous Bid is the Bid of the Bidder (also referred to as the successful bidder) who meets the specified requirements as per Section 2 and Section 3, and whose Bid has been determined to have the lowest evaluated price/cost subject to ITB 35.
- 38.2The capabilities of the manufacturers and subcontractors proposed in its Bid to be used by the Bidder with the Most Advantageous Bid for identified major items of supply or services may also be evaluated for acceptability in accordance with **Section 2** / **Section 6**. Their participation should be confirmed with a letter of intent between

the parties, as needed. Should a manufacturer or subcontractor be determined to be unacceptable, the Bid will not be rejected, but the Bidder will be required to substitute an acceptable manufacturer or subcontractor without any change to the Bid price. Prior to signing the Contract. **Appendix** corresponding to the Contract Agreement shall be completed, listing the approved manufacturers or subcontractors for each item concerned.

- 38.3**Price Negotiation** Usually, there shall be no price negotiations. However, in case the Employer identifies exceptional reasons due to which negotiation is required, the Employer reserves its right to negotiate with the lowest acceptable bidder (L-1).
- 39. Employer's Right to Accept Any Bid, and to Reject Any or All Bids
- 39.1 The Employer reserves the right to accept or reject any Bid, and to annul the Bidding process and reject all Bids at any time prior to Contract Award, without thereby incurring any liability to Bidders. In case of annulment, all Bids submitted and specifically, Bid securities, if applicable as per ITB 18 and submitted, shall be promptly returned to the Bidders.

#### J. Award of Contract

#### 40. Award Criteria

- 40.1 The Employer shall award the Contract to the successful Bidder. This is the Bidder whose Bid has been determined to be the Most Advantageous Bid as specified in **ITB 38**.
- 40.2 The mode of contracting with the successful bidder will be as indicated below:
- 40.2.1 The award shall be made as follows:
  - (i) Contract Part I: for Supply of Plant on FOR (final place of destination Site/ Project Site) basis.
  - (ii) Contract Part II: for Supply of Installation Services {excluding the incidental services included in (i) above}
- 40.3 Both the parts of the Contract will contain a cross fall breach clause specifying that breach of one will constitute breach of the other.

# 41. Employer's Right to make minor adjustments at the time of Award

# 41.1 At the time the Contract is awarded, the Employer reserves the right to invite the Bidder whose Bid is determined to be the Most Advantageous Bid as per ITB 38, for discussions if any minor adjustments in the Contract are required, without any substantial change in the terms and conditions of the bidding document.

#### 42. Notification of Award

- 42.1 Prior to the date of expiry of the Bid validity, the Employer shall notify the successful Bidder, in writing, that its Bid has been accepted. The Notification of Award (hereinafter and in the Contract Forms also called the "Letter of Acceptance") shall specify the sum that the Employer will pay the Contractor in consideration of the execution of the Contract (hereinafter and in the Conditions of Contract and Contract Forms called "the Contract Price").
- 42.2 Until a formal Contract is prepared and executed, the Letter of Acceptance/ Notification of Award shall constitute formation of a binding Contract.

# 43. Signing of Contract

- 43.1 Promptly upon issue of Letter of Acceptance/ Notification of Award, the Employer shall prepare the Contract Agreement, and keep it ready in the office of the Employer for the signature of the Employer and the successful Bidder, within twenty-one (21) days following the date of Letter of Acceptance. The Contract Agreement shall incorporate all agreements including L2 schedule between the Employer and the successful Bidder. L-2 schedule should be submitted, discussed, amended (if so required) within overall L-1 schedule and accepted by owner before signing of contract agreement. Also, CPG should be submitted, verified from issuing bank legally vetted and approved before signing of contract agreement.
- 43.2 Within twenty-eight (28) days of receipt of Letter of Acceptance, the successful Bidder shall (a) furnish the performance security in accordance with **ITB Clause 44**; and (b) shall sign, date and return the Agreement to the Employer along withthe documents stated at (a) above.

## H. Performance Security & Funds

## **44. Performance Security**

- 44.1 Within twenty-eight (28) days of the receipt of the Letter of Acceptance/ Notification of Award from the Employer, the successful Bidder shall furnish the Performance Security & Additional performance security (if applicable), in Indian Rupees, in accordance with the GCC and in the amount, form and details specified in the BDS, further subject to ITB 37.
- 44.2 Failure of the successful Bidder to submit the above-mentioned Performance Security & Additional performance security applicable) or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security or be sufficient ground for action by the Employer against the bidder under the Bid Securing Declaration, as may be applicable as per ITB 18.

#### 45. Source of Funds

45.1The Employer named in the Bidding Documents intends to use the loan funds from ADB.

# **46. Dedicated bank account of Contractor**

46.1 If required by the Employer, the Contractor may be required to create a dedicated bank account for usage of the funds under the project, the Contractor may be required to provide the details of the transactions under this account to the Employer at the time of key milestones as defined by the employer. **Deleted.** 

# I. Bid Data Sheet (BDS)

The following specific data for the Plant and Installation Services/ Works to be procured shall complement, supplement, and/or amend the provisions in the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions herein shall prevail over those in ITB.

ITB Reference	A. General			
ITB 1.1	The reference number of the Notice Inviting Tenders (NIT/Request forBids (RFB) is: WBSEDCL/IT&C/114.00(RDSS)/2384			
	Dated: 09.01.2024			
	The Employer is: West Bengal State Electricity Distribution Company Limited.			
ITB 1.2	(s) Eligible Projects shall mean any Turnkey IT System Integration (TSI) projects (SCADA/GIS/ADMS/OMS) including supply of Hardware/cloud services, Software/ licenses along with installation, configuration, customization, implementation/ Go-Live along with providing FMS / AMC services / System Operation services in electricity distribution utility.			
ITB 1.2 (c)	The Government of West Bengal unbundled the erstwhile West Bengal State Electricity Board (WBSEB) into two companies viz., West Bengal State Electricity Distribution Company Limited (WBSEDCL) and West Bengal State Electricity Transmission Company Limited (WBSETCL).  The main business of WBSEDCL is distribution and hydro generation of electricity. It is also the nodal Agency of the Government of West Bengal for undertaking Rural Electrification task in the State with objective of providing access of electricity to all rural households in the state in line with the			
TED 1.2 ()	National Rural Electrification Policy.			
ITB 1.2 (m)	Bidding/ Bids by/ from Joint Venture (JV) is "permitted".			
	In case Bidding/ Bids by/ from Joint Venture is permitted, the number of members/ partners of the JV shall not exceed 03 (three)			
	B. Contents of Bidding Document			

## **ITB 6.1**

Bidding against RFB shall be conducted through/ with Electronic – Procurement (e- Procurement/ e- Tendering) System.

Employer shall use the following Electronic-Procurement system to manage this Request for Proposal (RFP) process:

# www.wbtenders.gov.in

The electronic-procurement system shall be used to manage the following part of the bidding process under the RFB:

Issuing RFB/ Bidding document, amendments/ corrigendum/ addendums/ clarifications, etc., submissions of bids, opening of Bids, etc.

	To aid and facilitate the Bidders on e-Procurement/ e-Tendering process a detailed manual on the same titled <b>Bidder Help Manual for e-Bidding</b> has been provided annexed to the Bid Data Sheet as <b>Annexure I (BDS).</b> The same may be utilized by the Bidders.				
ITB 6.2	A Bidder requiring any clarification of the bidding document may notify the Employer online through the electronic bidding system if provisioned/permitted or through e-mail at the following e-mail address:  ceit@wbsedcl.in, itcell@wbsedcl.in  Requests for clarification should be received by the Employer no later than: As per Key dates of NIT/RFB.				
ITB 6.5	Pre-Bid meeting shall take place at the following date, time and place:  Date: 07.02.2024  Time: 12:00 Hrs (IST).  Place: Chief Engineer, IT  WBSEDCL  Vidyut Bhawan, 3 <sup>rd</sup> Floor, D-Block,  Block-DJ, Sector-II, Bidhannagar, Kolkata-700091  Tel (O): 033-2319 7445  Website: www.wbsedcl.in, Email: ceit@wbsedcl.in, itcell@wbsedcl.in				
ITB 7.1	The addendum/corrigendum/ amendment will appear on the e-procurement system specified in ITB 6.1 and email notification is also automatically sent through the system to those bidders who have started working on this procurement.				
	C. Preparation of Bids				
ITB 10.2.8	The Bidder shall submit the following additional documents in Technical Part of its Bid:  (i) Integrity Pact, prepared using the relevant form furnished in Section 4 - Bidding Forms - Technical Part of the Bid.				

	<ul> <li>(ii) Self-certified copy of the document to establish legal status of the firm viz. Certificate of Incorporation issued under The Companies Act / The Limited Liability Partnership Act / Partnership deed etc. as applicable;</li> <li>(iii) Self-certified copy of PAN;</li> <li>(iv) Self-certified copy of GST Registration;</li> <li>(v) Self-certified copy in support of MSME, if applicable.</li> <li>(vi) Bank Guarantee (BG) for Bid security</li> <li>(vii) Power of Attorney</li> </ul>				
ITB 10.3.3	The Bidder shall submit the following additional documents in its Financial Part of its Bid. Deleted.				
ITB 11	Note for Bidders: Bidders have to submit the bids on the e-procurement portal along with the relevant required documents. For this purpose, the bidders shall fill up online, the forms that are available for online filling onthe e-portal. The rest of the forms shall be download by the bidders and filled up. The filled up pages shall then be scanned and uploaded on the e-procurement portal along with the scanned copies of the supporting documents. The bid shall be digitally signed.				
ITB 11.3	The bidders are required to submit hard copy of the documents listed below in original along with the Technical part of their Bid within 2 working days after the last date of the bid submission.  i) Integrity Pact, prepared using the relevant form furnished in Section 4 - Bidding Forms - Technical Part of the Bid.  ii) Self-certified copy of the document to establish legal status of the firm viz. Certificate of Incorporation issued under The Companies Act / The Limited Liability Partnership Act / Partnership deed etc. as applicable  iii) Self-certified copy of PAN.  iv) Self-certified copy of GST Registration.  v) Self-certified copy in support of MSME, if applicable.  vi) Bank Guarantee (BG) for Bid security  (Last Date: at Hrs).  vii) Power of Attorney.  For submission of original documents, the Employer's address is:  Chief Engineer, IT  WBSEDCL  Vidyut Bhawan, 3 <sup>rd</sup> Floor, D-Block, Block-DJ, Sector-II, Bidhannagar, Kolkata-700091  Tel (O): 033-2359 7445  Website: www.wbsedcl.in, Email: ceit@wbsedcl.in, itcell@wbsedcl.in				

ITB 13.1 Not Applicable

ITB 13.5.1(i), ITB 13.5.2 (i)	Final Destination (Site/ Project Site) is:				
ITB 13.6	The prices quoted by the Bidder shall be subject to adjustment during the performance of the Contract.  The adjustment of contract price, if provided, will be done in accordance with Appendix to Contract Form.				
ITB 13.11	GST applicable in India, on the Plant and Installation Services provided/supplied by the Contractor to the Employer under the Contract shall be paid/ reimbursed by Employer against requisite documents, at actuals.				
ITB 17.1	The Bid shall remain valid until i.e. upto and including 180 days reckoned from the deadline for Submission of Bids specified in ITE 21.1, as may be extended by the Employer from time to time in accordance therewith.				
ITB 18.1	A Bid Security shall be required. The amount of the Bid Security shall be as specified in <b>Table</b> ( <b>Key Dates</b> ).				
ITB 18.2 (c)	Other forms of acceptable Bid securities:None				
ITB 18.8	If the Bidder performs any of the actions prescribed in ITB 18.8 (a) or (b), the Employer will declare the Bidder ineligible to be awarded a contract by the Employer for a period of <b>01</b> ( <b>One</b> ) year.				

1 - Bludling Floces	dures and Requirements 62					
ITB 19.3	The written confirmation of authorization to sign on behalf of the Bidder shall consist of: Legally valid Power of Attorney demonstrating the authority of the signatory to sign the Bid.					
D. Submission of Bids						
ITB 21.1	The Deadline for Submission of Bids by uploading on e- Procurement system specified in <b>ITB 6.1 and ITB 11</b> is:					
	Date: 05.03.2024					
	Time: (IST). 11:00 Hrs					
	The Deadline for Submission of documents in hard copy as specified in <b>ITB 11.3</b> is:					
	Date: 05.03.2024					
Time: (IST). 11:00 Hrs						
	E. Public Opening of Technical Parts of Bids					
ITB 24.1	The online opening of Technical Part of Bids, shall take place at:  Office of Chief Engineer, IT  WBSEDCL  Vidyut Bhawan, 3 <sup>rd</sup> Floor, D-Block, Block-DJ, Sector-II, Bidhannagar, Kolkata-700091  Tel (O): 033-2359 7445  Website: www.wbsedcl.in, Email: ceit@wbsedcl.in, itcell@wbsedcl.in					
Date: 05.03.2024						
	Time: (IST). 15:00 Hrs					
	In the event of the specified date of bid opening being declared a holidayfor the Employer, the bids will be opened at the appointed time and location on the next working day.					

F. Evaluation of Bids - General Provisions				
ITB 28.3	The adjustment shall be based on the <b>highest</b> price of the item or component as quoted in other substantially responsive Bids. If the price of the item or component cannot be derived from the price of other substantially responsive Bids, the Employer shall use its best estimate.			
	I. Evaluation of Financial Part of Bids			
ITB 32.1 (e)	GST, quoted separately as per <b>ITB 13.12</b> , shall be considered for arriving at the evaluated Bid cost/ price and comparison of Bids.			
ITB 32.1(f)	The Employer's evaluation of a Bid <b>shall also require</b> the consideration of <b>factors listed herein below</b> . Wherever specified, the adjustments shall be determined using the criteria and methodology mentioned in Section 6. Employer's Requirement:			
	(a) Time for Completion: The Plant and Installation Services specified in Employer's Requirement are required to be supplied / provided within the specified Time for Completion. No credit will be given if provided/ supplied before the specified date or period, and Bids offering supply/ completion after the final date/ specified period shall be treated as nonresponsive;			
	(b) Deviation in payment schedule/ terms and conditions of payment: Bidders shall state their Bid price for the payment schedule outlined in the Conditions of Contract. Bids shall be evaluated on the basis of this base price. If a Bid deviates from the specified payment schedule/ terms and conditions of payment, it shall be treated as non-responsive;			
	(c) Life cycle costs: the projected operating and maintenance costs during the life of the Plant, goods or equipment: <b>NO</b>			
(d) Functional Guarantees of the Facilities -YES: (For Items mentioned 74 of Part-3 of Employer's requirement)				
	(e) Functional Guarantees shall be in consolidated bank guarantee period +90 Days claim period thereafter, amounting 10% of quoted supply cost of the referred materials/equipment excluding GST (Format Attached as Form 23) and shall be covered with the Latent Defect Warranty in the form of additional bank guarantee as per the SBD provision in part -3 Employers requirement clause no. 74.			
	(f) Cost of withdrawal of deviations: - <b>Not Acceptable</b> (as per Attachment 6 in Section 4)			

P	Part 1 - Bidding Procedures and Requirements		64
	ITB 38.3	Price negotiations: As per NIT.	

ITB 35.1 refers to Class I local supplier which is not applicable as per discussion dated 28.03.23

TED 25 1						
ITB 35.1	Only Class I suppliers are eligible for the bid  'Class I local supplier' means a supplier or service provider, whose goods, services or works offered for procurement, meets the minimum					
	local content as prescribed for 'Class-I local supplier'. The local content requirement to categorize a supplier as 'Class-I local supplier' is minimum 50%.					
ITB 36	Provisions related to Abnormally Low Bids will apply.					
	Bids in the range (-20% to -80%) of the estimated rate shall furnish an additional Performance Security in the format given in the Annexure (Form-22) which shall be equal to 10% of the tendered amount.					
ITB 37	The percentage is 70%					
	J. Award of Contract					
ITB 44.1	The Performance Security amount is 10% of Contract Price excluding GST.					
1	GS1.					
	The Additional Performance Security amount is 10% percentage of the level of unbalancing i.e. (actual value of supply part of contract) minus (70% of overall contract price excluding GST). 70% is to be defined as per ITB 37 under BDS.					
	The Additional Performance Security amount is 10% percentage of the level of unbalancing i.e. (actual value of supply part of contract) minus (70% of overall contract price excluding GST). 70% is to be defined as					
	The Additional Performance Security amount is 10% percentage of the level of unbalancing i.e. (actual value of supply part of contract) minus (70% of overall contract price excluding GST). 70% is to be defined as per ITB 37 under BDS.  The Standard Form of Performance Security acceptable to the Employer					

## **Annexure I (BDS)**

## **Bidder Help Manual for E-Bidding**

Guideline for e-Tendering: Instructions/Guidelines for electronic submission of the tenders have been mentioned below for assisting the bidders to participate in e-Tendering.

Registration of bidder: Any bidder willing to take part in the process of e-Tendering will have to be enrolled & registered with the e-Procurement system, through logging on to https://wbtenders.gov.in. Bidder has to log into the portal giving user id / password chosen during enrollment.

Digital Signature certificate (DSC): Each bidder is required to obtain a class-II or Class-III Digital Signature Certificate (DSC) for submission of tenders. DSC is given as a USB e-Token. After obtaining the Class-II or Class-III Digital Signature Certificate (DSC) from approved Certifying Authority they are required to register the fact of processing the Digital Signature Certificates through the registration system available in the website. DSC once mapped to an account cannot be remapped to any other account. It can only be Inactivated. The e-token that is registered should be used by the bidder and should not be misused by others.

Downloading of Bid: The bidder can search and download NIT & Tender Documents electronically from the https://wbtenders.gov.in using the Digital Signature Certificate. This is the only mode of collection of Tender Documents

Submission of Bid: Bids shall be submitted as under:

- 1. Tenders are to be submitted online through the website https://wbtenders.gov.in only and no other mode of submission of bid will be accepted. All the documents uploaded by the Tender Inviting Authority form an integral part of the contract. Tenderers are required to upload all the tender documents along with the other documents, as asked for, in the tender, through the above website within the stipulated date and time as given in the Tender. Tenders are to be submitted in two folders one is Technical Proposal and the other is Financial Proposal. The tenderer shall carefully go through the documents and prepare the required documents and upload the scanned documents in Portable Document Format (PDF) to the portal in the designated locations of Technical Bid.
- 2. The bidder needs to download the Forms / Annexure, fill up the particulars in the designated Cell and upload the same in the designated location of Technical Bid
- 3. The documents uploaded shall be virus scanned and digitally signed using the Digital Signature Certificate (DSC). Tenderers should take note of all the addendum/corrigendum related to the tender and upload the latest documents as part of the tender

#### 4. Technical Proposal:

The Technical Proposal shall contain scanned copies and/or declarations in the following standardized formats in three covers (folders).

Folder-1: NIT& any Corrigendum & Scanned copy of Bank Guarantee (BG) towards Bid Security as prescribed in NIT along with under takings and also original Bid proposal are to be submitted in details

in folder-1.

Folder-2: Credentials and documents must be filled & submitted in folder-2

5. Financial Proposal:

The financial proposal should contain the following documents in one cover (folder) named as Financial Proposal Folder. A pro-forma is enclosed as Annexure-VI for reference; please do not quote in the pro-forma.

6.Bill of Quantities(BOQ):

The bidder is to quote the Price online through computer in the space marked for quoting Price in the BOQ for each respective zone

7. At the time of freezing the bid, the eProcurement system will give a successful bid

updation message after uploading all the bid documents submitted and then a bid summary will be shown with the bid no, date & time of submission of the bid with all other relevant details. The documents submitted by the bidders will be digitally signed using the e-token of the bidder and then submitted.

- 8. After the bid submission, the bid summary has to be printed and kept as an acknowledgement as a token of the submission of the bid. The bid summary will act as a proof of bid submission for a tender floated and will also act as an entry point to participate in the bid opening event.
- 9. The bidders are requested to submit the bids through online eProcurement system to the TIA well before the bid submission end date and time (as per Server System Clock).

#### ASSISTANCE TO BIDDERS:

- ➤ There is no limit on the size of the file uploaded at the server end. However, the upload is decided on the Memory available at the Client System as well as the Network bandwidth available at the client side at that point of time. In order to reduce the file size, bidders are suggested to scan the documents in 75-100 DPI so that the clarity is maintained and also the size of file also gets reduced. This will help in quick uploading even at very low bandwidth speeds.
- > Successful bid submission from the system means, the bids as uploaded by the bidder is received and stored in the system. System does not certify for its correctness.
- > The bidder should see that the bid documents submitted should be free from virus and if the documents could not be opened, due to virus, during tender opening, the bid is liable to be rejected.
- ➤ The time that is displayed from the server clock at the top of the tender Portal, will be valid for all actions of requesting bid submission, bid opening etc., in the e-Procurement portal. The Time followed in this portal is as per Indian Standard Time (IST) which is GMT+5:30. The bidders should adhere to this time during bid submission.
- ➤ Bidders are requested to visit e-procurement portal, The details and relevant links are available in the Bidders Manual Kit on the right pane of website which is furnished here:-

#### SL.NO Particulars

- 1. Notice to Bidders for e-Bid Submission
- 2. Registration of Bidders
- 3. Bidders Manual for Tender Cum Auction
- 4. Uploading of My Documents
- 5. Online e-Bid Submission

#### **Downloads**

Notice to bidders v906.pdf

Bidder\_Registration\_Manual\_Updated\_v906.pdf

<u>Instructions\_to\_Bidders\_for\_Tender\_Cum\_Auction\_18\_06\_2021.pdf</u>

MyDocument\_Updated\_v906.pdf

Four cover bid submission new v906.pdf

Two cover bid submission new v906.pdf

Single\_Cover\_bid\_submission\_New\_v906.pdf

Three\_Cover\_Bid\_Submission\_New\_v906.pdf

bid withdrawal updated v906.pdf

Bid Resubmission Updated v906.pdf

Enquiry Updated v906.pdf

ItemRate\_BOQ\_Updated\_v906.pdf

6. Online Bid Withdrawal

7. Online Bid Re-submission

8. Clarifications (Tender Status, My Archive...)

9. BOQ Preparation Guidelines

## **Section - 4: Bidding Forms - Technical Part of the Bid**

#### **Letter of Bid – Technical Part**

**Date of this Bid submission**: [insert date (as day, month and year) of Bid submission]

**NIT/RFB No.:** [insert number of Bidding process]

**Title of Procurement/ Contract:** [Insert here the title]

To:

Chief Engineer, IT WBSEDCL Vidyut Bhawan, 3<sup>rd</sup> Floor, Block-DJ, Sector-II, Bidhannagar, Kolkata-700091 Tel (O): 033-2359 7445

Website: www.wbsedcl.in, Email: ceit@wbsedcl.in, itcell@wbsedcl.in

- 1.0 We, the undersigned Bidder, hereby submit our Bid, in two parts, namely:
- (a) the Technical Part, and
- (b) the Financial Part.
- 2.0 In submitting our Bid we make the following declarations:
  - (a) **No reservations:** We have examined and have no reservations to the bidding document (ITB5), including addenda issued in accordance with Instructions to Bidders (ITB 7);
- (b) **Eligibility**: We meet the eligibility requirements and have no conflict of interest in accordance with ITB 3 and Section 3;
- (c) **Bid/Proposal-Securing Declaration**: We have not been suspended nor declared ineligible by the Purchaser based on execution of a Bid Securing Declaration by the Purchaser in accordance with ITB 10.2.2;
- (d) **Conformity:** We offer to supply in conformity with the bidding document and in accordance with the Delivery Schedules specified in the Schedule of Requirements the all the Goods and Related Services as per the scope mentioned in Part 2, Section 6.;
- (e) **Bid Validity Period**: Our Bid shall be valid for the period specified in BDS 17.1 (as amended if applicable) from the date fixed for the deadline for submission of Bids (specified in BDS 21.1 (as amended if applicable), and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (f) **Performance Security**: If our Bid is accepted, we commit to obtain a performance security in accordance with the bidding document;
- (g) **One Bid per Bidder**: We are not submitting any other Bid(s) as an individual Bidder, and meet the requirements of ITB 4.2;
- (h) **Suspension**: We, along with any of our subcontractors, suppliers, consultants, manufacturers, or service providers for any part of the contract, are not subject to, and not controlled by any entity or individual that is subject to, a temporary suspension or a blacklist as specified in Section 2, Clause 1.3. Further, we are not ineligible under the Purchaser's country laws or official regulations or pursuant to a decision of the United

Nations Security Council;

- (i) **Binding Contract**: We understand that this Bid, together with your written acceptance thereof included in your Letter of Acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed;
- (j) Not Bound to Accept: We understand that you are not bound to accept the lowest evaluated cost/price Bid, the Most Advantageous Bid or any other Bid that you may receive;
- (k) **Fraud and Corruption**: We hereby certify that we have taken steps to ensure that no person acting for us, or on our behalf, engages in any type of Fraud and Corruption;
- (1) (applicable only if the bidder is a Joint Venture as per Section 2 of RFB/ bidding document) We have bid as a Joint Venture as per Section 2 of RFB/ bidding document) and in accordance with Clause 1.2 of Section 2 we declare and confirm that all partners of the joint venture shall be liable jointly and severally for the execution of the contract in accordance with the contract terms;
- (m) We submit appended herewith, as integral part of the Technical Part of our bid, the details/ documents as listed in the table below in the Forms duly filled, as prescribed, along with supporting documentary evidence as required/specified. We understand and confirm that we would be solely responsible for any errors or omissions in our Bid and your decision in regard to sufficiency and/ or adequacy of the details/ documents comprising our Bid for determining its completeness shall be final and binding.

Sr.	Document	Status (Submitted/ Not Submitted/ Not Applicable)
1.	This Letter of Bid as per format prescribed in <b>Form 1</b> given in Section 4 of RFB/ bidding document	
2	Bidder Information as per the format prescribed in <b>Form 2</b> given in Section 4 of RFB/ bidding document	
3	Bid Security or Bid Securing Declaration, as may be specified in ITB 18 Section 3 of RFB/ bidding document, in the form of specified in ITB. Bid Securing Declaration in format prescribed in <b>Form 3A</b> given in Section 4 and Bid Security in the form of Bank Guarantee in format prescribed in <b>Form 3B</b> given in Section 4 of RFB/ bidding document.	
4.	Power of Attorney by Lead Joint Venture Member/ Sole Bidder authorizing an Individual Designated Representative for the Joint Venture Bidder/ Sole Bidder as per the format prescribed in <b>Form 4</b> given in Section 4 of RFB/ bidding	

Sr.	Document	Status (Submitted/ Not Submitted/ Not
		Applicable)
	document	
5.	Declaration of conformance of the Bidder and the Facilities	
	offered, to the specified eligibility requirement specified in	
	Section 2 and Section 3, as per the format prescribed in	
	Form 5 given in Section 4 of RFB/ bidding document	
6.	Local Content Certificate for Class I Local Supplier, as	
	specified in Clause 1.5 of Section 2 of RFB/ bidding	
	document, Affidavit of Self certification as per the format	
	prescribed in <b>Form 6</b> given in Section 4 of RFB/ bidding document or by certificate ( <b>format not specified</b> ) of	
	Statutory Auditor, as may be applicable	
7	Power of Attorney by each member/ partner of the Joint	
/	Venture in favour of Lead member/ partner as per format	
	prescribed in <b>Form 7</b> given in Section 4 of RFB/ bidding	
	document (applicable only for Joint Venture Bidder)	
8 A	Joint Deed of Undertaking (JDU) signed by each member/	
	partner of the Joint Venture, as per format prescribed in	
	Form 8 given in Section 4 of RFB/ bidding document	
	(applicable only for Joint Venture Bidder)	
8 B		
	members of the Joint Venture in their own format but	
	without violating any of the requirements of the bidding	
	documents and necessarily including the confirmation as	
	specified in Clause 1.2 of Section 2 of RFB/ bidding	
	document (applicable only for Joint Venture Bidder)	
9	Details/ Data and documentary evidence in support of	
	meeting the Qualification Requirement specified in Section 2 of RFB/ bidding document, as per the format prescribed	
	in <b>Form 9</b> given in Section 4 of RFB/ bidding document	
10.	The details of all major items of Plant and Installation	
10.	Services proposed to be subcontracted in case of award,	
	indicating name and nationality of the proposed	
	subcontractor/sub-vendor for each item, as per the format	
	prescribed in Form 10 given in Section 4 of RFB/ bidding	
	document.	
	as per the format prescribed in Form 1 given in Section 4	
11.	Form of Undertaking on Compliance of Terms &	
	Conditions of the RFB/ bidding document including Scope	
	of Work and other related requirements, as per the format	
	prescribed in <b>Form 11</b> given in Section 4 of RFB/ bidding	
	document, subject to Sl No. 12 below of this table	

Sr.	Document	Status (Submitted/ Not Submitted/ Not Applicable)
12	Statement of Deviation from the requirements specified in the RFB/ bidding documents including Conditions of Contract, Employer's Requirement/ Specification and Drawings etc, including, inter alia, the cost of withdrawal thereof, as per the format prescribed in <b>Form 12</b> given in Section 4 of RFB/ bidding document	
13	Work Completion Schedule, as per the format prescribed in <b>Form 13</b> given in Section 4 of RFB/ bidding document	
14	Guarantee Declaration, as per the format prescribed in <b>Form 14</b> given in Section 4 of RFB/ bidding document	
15	Information regarding ex-employees of Employer in our firm, as per the format prescribed in <b>Form 15</b> given in Section 4 of RFB/ bidding document	
16	Filled up information regarding Price Adjustment Data, as per the format prescribed in <b>Form 16</b> given in Section 4 of RFB/ bidding document	
17	Option for Interest bearing Initial Advance payment and Information for E-payment, PF details and declaration regarding Micro/Small & Medium Enterprises, as per the format prescribed in <b>Form 17</b> given in Section 4 of RFB/bidding document	
18	Declaration for tax exemptions, reductions, allowances or benefits, as per the format prescribed in <b>Form 18</b> given in Section 4 of RFB/ bidding document	
19	Bank Guarantee verification checklist, as per the format prescribed in <b>Form 19</b> given in Section 4 of RFB/ bidding document	
20	Additional Information, if any, as per the format prescribed in <b>Form 20</b> given in Section 4 of RFB/ bidding document	
21	Integrity Pact, duly signed on each page by the person signing the bid, as per the format prescribed in <b>Form 21</b> given in Section 4 of RFB/ bidding document	

(n) We are also submitting herewith the Financial Part of our Bid, online separately, as per the prescribed Forms given in Section 4 of RFB/ bidding document, complete in all respects in electronic form only, as per the requirements of RFB/ bidding document. We

(signatories) must be attached}

confirm that the same does not contain any deviation, reservation or omission, failing which it is liable to be rejected.

Details of the contact person representing us supported by the Power of Attorney, as

## (o) Contact Person

pı	rescribed, are furnished as under:
N	ame:
D	esignation:
C	ompany:
A	ddress:
M	Iobile:
P	hone:
F	ax:
Е	mail:
	the
	Signature {(of Bidder's authorized Bid Signatory (ies)}# {In full and initials}:
	Full name: {insert full name of authorized Bid Signatory }
	Title: {insert title/position of authorized Bid Signatory }
	Name of Bidder (Sole Bidder's name or Consortium/ JV's name, if applicable):
	Capacity: {insert the person's capacity to sign for the Bidder}
	Address: {insert the authorized Bid Signatory's address}
	Phone/fax: {insert the authorized Bid Signatory's phone and fax number, if applicable} Email: {insert the authorized Bid Signatory's email address}

\*{For a joint venture, either all members shall sign or only the authorized signatory as per ITB 19.4, in either case the power of attorney of the authorized bid signatory

## (Appendix to Technical Part of the Bid)

## **Format for Bidder Information Sheet**

[The Bidder shall fill in this Form in accordance with the instructions indicated below. No alterations to its format shall be permitted and no substitutions shall be accepted.]

		FB No.: [inse	=
	Page	of	pages
1. Bidder's Legal Name			
2. Legal Status of the Bidder			
3. Bidder's Country of Registration:			
4. Bidder's Year of Registration:			
5. Bidder's Legal Address in Country of Registration:	:		
6. Bidder's Authorized Representative Information			
Name:			
Address:			
Telephone/Fax numbers:			
Email Address:			
<ul> <li>7. Attached are copies of original documents of [check documents]</li> <li>Self certified copy of the document to establish of Incorporation issued under the Companies A Act / Partnership deed etc. as applicable;</li> <li>Self certified copy of PAN</li> <li>Self certified copy of GST Registration;</li> <li>Self certified copy in support of MSME, if appl</li> <li>Organizational chart including a list of Board of Personnels</li> </ul>	n legal status of ct / The Limited	the firm viz. d I Liability Pa	Certificate rtnership

Note: In case of JV/ Consortium,	, the afore details/	documents are t	to be furnished for	or each of
the JV/ Consortium Members				

Dated the ...... [Insert date of the month] day of ...... [Insert month, year] at......[Insert place].

Signature {(of Bidder's authorized Bid Signatory (ies)}# {In full and initials}:

Full name: {insert full name of authorized Bid Signatory }
Title: {insert title/position of authorized Bid Signatory }

Name of Bidder (Sole Bidder's name or Consortium/ JV's name, if applicable):

Capacity: {insert the person's capacity to sign for the Bidder} Address: {insert the authorized Bid Signatory's address}

Phone/fax: {insert the authorized Bid Signatory's phone and fax number, if applicable}

Email: {insert the authorized Bid Signatory's email address}\_

<sup>\*{</sup>For a joint venture, either all members shall sign or only the authorized signatory as per ITB 19.4, in either case the power of attorney of the authorized bid signatory (signatories) must be attached}

## Form 3A

(Appendix to Technical Part of the Bid)

# Format of Bid Securing Declaration (if applicable)

Whereas, I/We (name of Bidder) ------ have submitted Bid in response to Request

## **BID SECURING DECLARATION**

\*{For a joint venture, either all members shall sign or only the authorized signatory as per ITB 19.4, in either case the power of attorney of the authorized bid signatory (signatories) must be attached}

#### Form 3B

(Appendix to Technical Part of the Bid)

## Format of Bank Guarantee for Bid Security

{To be on non-judicial stamp paper of Rupees One Hundred Only (INR 100/-) or appropriate value as per Stamp Act relevant to place of execution, duly signed on each page.} Reference No. ..... Bank Guarantee No. ..... Dated: To: Chief Engineer, IT WBSEDCL Vidyut Bhawan, 3rd Floor, Block-DJ, Sector-II, Bidhannagar, Kolkata-700091 Dear Sir/ Madam, Joint Venture Member followed by the words "representing Joint Venture of [ insert names of all the members of Joint Venture]"] with address ................ [Insert address of Sole Bidder /Lead Bidder /Lead Joint Venture Member] (Hereinafter, the "Bidder") wishes to participate in Tender No. [Tender Details] (the "RFB") issued by WBSEDCL for [Contract title]. And WHEREAS a Bank Guarantee for [Amount] valid till [Date] is required to be submitted by the Bidder along with the RFB. hereby give this Bank Guarantee No. ...... [Insert Bank Guarantee number] dated unconditionally to pay immediately on demand in writing from the Utility any officer authorized by it in this behalf any amount not exceeding [Amount] to the said Utility on behalf of the Bidder. the Bidder within its validity or not signing the Contract Agreement or non-submission of Performance Security by the Bidder within the stipulated time of the Letter of Award to the Bidder or any violation to the relevant terms stipulated in the RFB would constitute a default on the part of

the Bidder and that this Bank Guarantee is liable to be invoked and encashed within its validity

by the Utility in case of any occurrence of a default on the part of the Bidder and that the amount is liable to be forfeited by the Utility.

NOTWITHSTANDING anything contained hereinbefore, our liability under this guarantee is restricted to [Amount]. Our Guarantee shall remain in force till [Date]. Unless demands or claims under this Bank Guarantee are made to us in writing on or before [Date], all rights of the Beneficiary under this Bank Guarantee shall be forfeited, and we shall be released and discharged from all liabilities there under.

[Insert the address of the Bank with complete postal branch code, telephone and fax numbers, and official round seal of the Bank]	[Insert signature of the Bank's Authorized Signatory]
Attested	
[Signature]	
(Notary Public)	
Place:	Date:

#### INSTRUCTIONS FOR SUBMITTING BANK GUARANTEE

- 1. Bank Guarantee to be executed on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution.
- 2. The Bank Guarantee by Bidder shall be given from any Scheduled Commercial Bank.
- 3. The full address along with the Telex/Fax No. and e-mail address of the issuing bank to be mentioned.

Accepted

## Form 4

(Appendix to Technical Part of the Bid)

# Format of Power of Attorney of designated Bid Signatory by sole bidder/ lead joint venture member

[To be on non-judicial stamp paper of Rupees One Hundred Only (INR 100/-) or appropriate value as per Stamp Act relevant to place of execution.]	,
Know all men by these presents, we	
We hereby agree to ratify all acts, deeds and things done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall be binding on us and shall always be deemed to have been done by us.  All the terms used herein but not defined shall have the meaning ascribed to such terms unde the RFB.  Signed by the within named	

(Signature of Attorney)
[Insert Name, designation and address of the Attorney]
Attested
(Signature of the executant)
(Name, designation and address of the executant)
Signature and stamp of Notary of the place of execution
Common seal of has been affixed in my/our presence pursuant to Board of Director's Resolution dated/ Owner
1. WITNESS 1(Signature)
Name
Designation
2. WITNESS 2(Signature)
Name
Designation

### **Notes:**

- a. The mode of execution of the power of attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s).
- b. In the event, power of attorney has been executed outside India, the same needs to be duly notarized by a notary public of the jurisdiction where it is executed.
- c. Also, wherever required, the executant(s) should submit for verification the extract of the charter documents and documents such as a Board resolution / power of attorney, in favor of the person executing this power of attorney for delegation of power hereunder on behalf of the executant(s).

(Appendix to Technical Part of the Bid)

# Format of Declaration of conformance of the Bidder and the Facilities offered, to the specified eligibility requirement

NIT/RFB No.: [insert details] Contract Title: [insert details]

To:

Chief Engineer, IT WBSEDCL Vidyut Bhawan, 3<sup>rd</sup> Floor, Block-DJ, Sector-II, Bidhannagar, Kolkata-700091

Bidder's Name and Address: {In case of JV bidder, mention name and address of all the Joint Venture members}

We hereby certify that Plant and Installation Services offered to be supplied by us fully comply with all the eligibility and other requirements specified in Section 2 and Section 3 of RFB/ bidding documents.

We hereby certify that our firm is legally established in India and we fully comply with the eligibility and other requirements specified in Section 2 and Section 3 of RFB/ bidding documents,

Dated the	[Insert date of the month]	day of	[Insert month,	year]
at[Insert p	place].			

Signature {(of Bidder's authorized Bid Signatory (ies)}# {In full and initials}:

Full name: {insert full name of authorized Bid Signatory}
Title: {insert title/position of authorized Bid Signatory}

Name of Bidder (Sole Bidder's name or Consortium/ JV's name, if applicable):

Capacity: {insert the person's capacity to sign for the Bidder} Address: {insert the authorized Bid Signatory's address}

Phone/fax: {insert the authorized Bid Signatory's phone and fax number, if applicable}

Email: {insert the authorized Bid Signatory's email address}

<sup>\*{</sup>For a joint venture, either all members shall sign or only the authorized signatory as per ITB 19.4, in either case the power of attorney of the authorized bid signatory (signatories) must be attached}

(Appendix to Technical Part of the Bid)

# Format for Affidavit of Self certification regarding Local Content in line with PPP-MII order and #MoP Order/DoT order

[if applicable, to be provided on a non-judicial stamp paper of Rs. 100/-]

NIT/RFB No.: [insert details]
Contract Title: [insert details]

To: Chief Engineer, IT WBSEDCL Vidyut Bhawan, 3<sup>rd</sup> Floor, Block-DJ, Sector-II, Bidhannagar, Kolkata-700091

Bidder's Name and Address:

{In case of JV bidder, mention name and address of all the Joint Venture members}

I	We	S/o,	D/o,	W/o,			R	esi	dent
of						, on	behalf	of	the
firm	(s) named abov	e, hereby sole	mnly affir	m and declar	e as under:				

That we will agree to abide by the terms and conditions of the Public Procurement Order, 2017 of Government of India issued vide Notification No:P- 45021/2/2017 -BE-II dated 15/06/2017, its revision dated **04/06/2020** (hereinafter **PPP-MII order**),

That the local content for all inputs which constitute the said plant/ goods/material/ services/works has been verified by me and I am responsible for the correctness of the claims made therein.

That in the event of the local content of the plant/goods/material/ services/works mentioned herein is found to be incorrect and not meeting the prescribed Local Content criteria, based on the assessment of procuring agency (ies)/ WBSEDCL /Government Authorities for the purpose of assessing the local content, action shall be taken against me in line with the PPP-MII order, **MoP order** and provisions of the Integrity pact/ Bidding Documents.

I agree to maintain the following information in the Company's record for a period of 8 years and shall make this available for verification to any statutory authority.

- i Name and details of the Local Supplier (Registered Office, Manufacturing unit location, nature of legal entity)
- ii. Date on which this certificate is issued
- iii. Plant/goods/services/works for which the certificate is produced
- iv. Procuring entity to whom the certificate is furnished
- v. Percentage of local content claimed and whether it meets the Local Content prescribed for 'Class –I local supplier'/'Class-II Local supplier (choose as applicable)
- vi. Name and contact details of the unit of the Local Supplier (s)
- vii. Sale Price of the product
- viii Ex-Factory Price of the product
- ix. Freight, insurance and handling
- x. Total Bill of Material

- xi List and total cost value of input used to manufacture the Goods/to provide services/in construction of works
- xii. List and total cost of input which are domestically sourced. Value addition certificates from suppliers if the input is not in-house to be attached
- xiii. List and cost of inputs which are imported, directly or indirectly

Dated the	[Insert date of the n	nonth] day of	[Insert month,	year]
at[Insert]	place].			

Signature {(of Bidder's authorized Bid Signatory (ies)}# {In full and initials}:

Full name: {insert full name of authorized Bid Signatory }
Title: {insert title/position of authorized Bid Signatory }

Name of Bidder (Sole Bidder's name or Consortium/ JV's name, if applicable):

Capacity: {insert the person's capacity to sign for the Bidder} Address: {insert the authorized Bid Signatory's address}

Phone/fax: {insert the authorized Bid Signatory's phone and fax number, if applicable}

Email: {insert the authorized Bid Signatory's email address}\_

# choose as applicable while preparing bidding documents

<sup>\*{</sup>For a joint venture, or only the authorized signatory as per ITB 19.4, in either case the power of attorney of the authorized bid signatory (signatories) must be attached}

(Appendix to Technical Part of the Bid)

# Format of Power of Attorney by Each Member/ Partner of The Joint Venture in favor of Lead Member/ Partner

- i) To submit proposal/ Bid and participate in the aforesaid Bidding, against the RFB/RFP issued of the Employer, on behalf of the "Joint Venture".
- ii) To negotiate with the Employer the terms and conditions for award of the Contract pursuant to the aforesaid Bid and to sign the Contract with the Employer for and on behalf of the "Joint Venture".
- iii) To do any other act or submit any document related to the above.
- iv) To receive, accept and execute the Contract for and on behalf of the "Joint Venture".

It is clearly understood that the Partner In-charge (Lead Partner/ Lead Member) shall ensure performance of the Contract(s) and if one or more Partner fail to perform their respective portions of the Contract(s), the same shall be deemed to be a default by all the Partners.

It is expressly understood that this Power of Attorney shall remain valid binding and irrevocable till completion of the Defect Liability Period in terms of the Contract.

The Joint Venture hereby agrees and undertakes to ratify and confirm all and whatsoever the said Attorney/Authorized Representatives/Partner in-charge/ Lead Partner/ Lead Member quotes in the bid, negotiates and signs the Contract with the Employer and/or proposes to act or acts on behalf of the Joint Venture by virtue of this Power of Attorney and the same shall bind the Joint Venture as if done by itself.

Tower of Attenticy and the same sharroing the venture as it done by itself.
IN WITNESS THEREOF the Partners Constituting the Joint Venture as aforesaid have executed these presents on this
for and on behalf of the
Partners of Joint Venture
The Common Seal of the above Partners of the Joint Venture:
The Common Seal has been affixed there unto in the presence of:

### **WITNESS**

1.	Signature
	Name
	Designation
	Occupation
2.	Signature
	Name
	Designation
	Occupation

#### Note:

1. For the purpose of executing the power of attorney, the non-judicial stamp papers of appropriate value shall be purchased in the name of Joint Venture.

2. The power of attorney shall be signed on all the pages by the authorized representatives of each of the partners and should invariably be witnessed and notarized.

(Appendix to Technical Part of the Bid)

## Format of Joint Deed of Undertaking by the Joint Venture Partners/ Members

THIS JOINT DEED OF UNDERTAKING executed on this
successors, executors and permitted assigns ). and M/s
[hereinafter called the "Contract" {in case of award)] against the Request For Bids (RFB)/Request for Proposal (RFP) No
WHEREAS the Party No.1, Party No.2 and Party No.3 have entered into an Agreement dated
AND WHEREAS the Employer invited bids as per the above mentioned Package for the design, supply and installation of the Plant as stipulated in the Bidding Documents for (insert name of the project )
AND WHEREAS as per Section 2/ Section 3 of the Bidding Documents, inter-alia stipulates that a Joint Venture, as specified therein, may bid, provided, the Joint Venture and the partners/members in/ of the Joint Ventures fulfill all the specified requirements of the Bidding Documents and that, in such a case, the Bid shall be signed by all the partners so as to legally bind all the Partners of the Joint Venture, who will be jointly and severally liable to perform the Contract and all obligations hereunder.
AND WHEREAS the bid is being submitted to the Employer vide proposal Nodatedby Party No.1 based on this Undertaking between all the parties; under these presents and the bid in accordance with the requirements of Section 2/

Section 3 of the Bidding Documents, has been signed in accordance with the provisions contained therein.

#### NOW THIS UNDERTAKING WITNESSETH AS UNDER:

In consideration of the above premises and agreements all the parties of this Deed of Undertaking do hereby declare and undertake:

- 1. In requirement of the award of the Contract by the Employer to the Joint Venture Partners, we, the Parties do hereby undertake that M/s....... the Party No.1, shall act as Lead Partner/ Lead Member/ Authorized Representative/ Partner-in- Charge of the Joint Venture, and further declare and confirm that we the parties to the Joint Venture shall jointly and severally be bound unto the Employer for the successful performance of the Contract and shall be fully responsible for the design, supply and installation of the Plant and for successful performance of the Contract in the event of award and performance of equipment in accordance with the Contract:
- 2. In case of any breach or default of the said Contract by any of the parties to the Joint Venture, the party(s) do hereby undertake to be fully responsible for the successful performance of the Contract and to carry out all the obligations and responsibilities under the Contract in accordance with the requirements of the Contract.
- 3. Further, if the Employer suffers any loss or damage on account of any breach in the Contract or any shortfall in the performance of the equipment in meeting the performances guaranteed as per the specification in terms of the Contract, the Party(s) of these presents undertake to promptly make good such loss or damages caused to the Employer, on its demand without any demur. It shall not be necessary or obligatory for the Employer to proceed against Lead Partner to these presents before proceeding against or dealing with the other Party(ies), the Employer can proceed against any of the parties who shall be jointly and severally liable for the performance and all other liabilities/obligations under the Contract to the Employer.
- 4. The financial liability of the Parties of this Deed of Undertaking to the Employer, with respect to any of the claims arising out of the performance or non-performance of the obligations set forth in this Deed of Undertaking, read in conjunction with the relevant conditions of the Contract shall, however, not be limited in any way so as to restrict or limit the liabilities or obligations of any of the Parties of this Deed of Undertaking.
- 5. It is expressly understood and agreed between the Parties to this Undertaking that the responsibilities and obligations of each of the Parties shall be as delineated in **Appendix I** (to be suitably appended by the Parties along with this Undertaking in its bid) to this Deed of Undertaking. It is further undertaken by the parties that the above sharing of responsibilities and obligations shall not in any way be a limitation of joint and several responsibilities of the Parties under the Contract.

- 6. It is also understood that this Undertaking is provided for the purposes of undertaking joint and several liabilities of the partners to the Joint Venture for submission of the bid and performance of the Contract and that this Undertaking shall not be deemed to give rise to any additional liabilities or obligations, in any manner or any law, on any of the Parties to this Undertaking or on the Joint Venture, other than the express provisions of the Contract.
- 7. This Undertaking shall be construed and interpreted in accordance with the provisions of the Contract.
- 8. In case of an award of a Contract, we the parties to this Deed of Undertaking do hereby agree that we shall be jointly and severally responsible for furnishing a Contract performance security from a bank in favor of the Employer in the currency/currencies of the Contract.
- 9. It is further agreed that this Deed of Undertaking shall be irrevocable and shall form an integral part of the bid and shall continue to be enforceable till the Employer discharges the same or upon the completion of the Contract in accordance with its provisions, whichever is earlier. It shall be effective from the date first mentioned above for all purposes and intents.

IN WITNESS WHEREOF, the Parties to this Deed of Undertaking have through their authorized representatives executed these presents and affixed Common Seals of their companies, on the day, month and year first mentioned above.

Common Seal of	For Lead Partner (Party No1) For and on behalf of M/s
Name	
Designation	(Signature of the authorized
Signature	representative)
WITNESS:	
I	
II	
Common Seal of	For Party No2

has been affixed in my/ our presence pursuant to Board of Director's Resolution dated	For and on behalf M/s	of
Name	(Signature of the authorized representative)	
Designation	,	
Signature		
WITNESS:		
I		
II		
Common Seal of	For Party No3	
has been affixed in my/ our	For and on behalf of M/s.	
presence pursuant to Board of		
Director's Resolution dated		
Name		
Designation	(Ciamatura of the outhorized	
Signature	(Signature of the authorized representative)	
WITNESS:		
I		
II		

## Note:

- 1. For the purpose of executing the Joint Deed of Undertaking, the non-judicial stamp papers of appropriate value shall be purchased in the name of Joint Venture.
- 2. The Undertaking shall be signed on all the pages by the authorised representatives of each of the partners and should invariably be witnessed.
- 3. Appendix 1 must be enclosed

(Appendix to Technical Part of the Bid)

## **Joint Venture Agreement**

(no specified format, bidders to use own format)

(Appendix to Technical Part of the Bid)

# Format for Details/ Data and Documentary Evidence in support of meeting the Qualification Requirement

## **Notes on Form of Qualification Information**

The information is to be filled in by individual bidders. The following pages will be used for purposes of post-qualification as provided for in Section2 / Section 3 of RFB/ bidding documents. This information will not be incorporated in the Contract. Attach additional pages as necessary.

		RFB No.: [insact Title: [ins	-
	Page	of	pages
(Qualifying Requiren	nent Data)		

To: Chief Engineer, IT WBSEDCL Vidyut Bhawan, 3<sup>rd</sup> Floor, Block-DJ, Sector-II, Bidhannagar, Kolkata-700091

Bidder's Name and Address: {In case of JV bidder, mention name and address of all the Joint Venture members}

Dear Ladies and/or Gentlemen,

In support of the Qualification Requirements (QR) for bidders, stipulated in Section-2 of the bidding documents, we furnish herewith our QR data/details/documents etc., along with other information, as follows (The QR stipulations have been reproduced in italics for ready reference, however, in case of any discrepancy the QR as given in Section-2 shall prevail).

* W6	e have submitted bid as individual firm.
* W6	e have submitted bid as joint venture of following firms:
(i)	
(ii)	
(* Strike	e-off whichever is not applicable)

[For details regarding Qualification Requirements of a Joint Venture, please refer para 4.0 below.]

We are furnishing the following details/document in support of Qualifying requirement for the subject project.

- I. Attached copies of original documents defining:
  - a) The constitution or legal status;
  - b) The principal place of business;
  - c) The place of incorporation (for bidders who are corporations); or the place of registration and the nationality of the Owners (for applicants who are partnerships or individually-owned firms).
- II. Attached original & copies of the following documents.
  - a) Written power of attorney of the signatory of the Bid to commit the bidder.
  - b)\*\* Joint Venture Agreement

[\*\* To be submitted only in case of Joint Ventures. Strike off in case of individual firms.]

#### III. Technical Experience QR Data/ Details/ Document

Format A: Format for the Bidder (Single Firm / Partner(s) in case of Joint Venture) for technical experience in compliance to para 2.1 of Section-2 [In case of Joint Venture bidder, the QR data of each of the partner (in support of meeting the requirement of para 2.1.2 of Section-2)] is also to furnished, as applicable, using this format. The bidder (Single Firm / Partner(s) in case of Joint Venture) who is willing to qualify in compliance to para 2.1 of Section-2 shall fill below format for two or all three contracts.

A1.	Name of Bidder/Lead Partner of JV/other partner(s) of	
	JV	
A2.	Name of Contract (executed during the last 10 years up to	
	31.03.2023):	
A3.	Contract Reference No. & Date of Award	
A4	Name and Address of the Employer/Utility	
	by whom the Contract was awarded	
	e-mail ID	
	Telephone No.	
	Fax No.	
A5(i)	Name of completed work of project execution in	
	Eligible Projects in any Indian/Global (power,	
	water, natural gas, telecom, banking) during the	
	last ten (10) financial years:	
(ii)	Cost of the project	
(iii)	% of cost w.r.t. estimated cost of this bid (in %)	
A6(i)	Date of successful execution of the Contract/Date of	$\Box$
	commissioning	
A7.	Capacity in which the Contract was undertaken (Check	Prime Contractor
	One)	Partner of JV
		Subcontractor
		(Tick whichever is
		applicable)
A8.	Details/documentary evidence submitted in support of	
	stated experience/Contract	

(Documentary evidence, such as copies of contract agreement, letter of award, utility certificates, Completion Certificate, Go-Live Certificates in support of th details presented

above etc., in support of its experience shall be attached with the filled-up format for each experience/Contract)

## IV. Financial/ Commercial QE Data/ Details/ Documents

Format B: Format for the Bidder (Single Firm / Partner(s) in case of Joint Venture) for financial/ commercial experience in compliance to para 2.2. of Section-2 [In case of Joint Venture bidder, the QR data of each of the partner (in support of meeting the requirement of para 2.2.4 of Section-2] is also to furnished, as applicable, using this format.

A1.	Name of Bidder/Lead Partner of JV/other partner(s) of		
	JV		
A2.	Net-worth in last three years		
	1.	Financial Year 2020-21	: Rs lakhs
	2.	Financial Year 2021-22	: Rs lakhs
	3.	Financial Year 2022-23	: Rs lakhs
A3.	Details/documentary evidence submitted in support of		
	stated details		

V. We understand that:

- i. . Sub contractors' experience and resources shall not be taken into account in determining the bidder's compliance with qualifying criteria.
- ii. One of the partners shall be nominated as lead partner, and the lead partner shall be authorized to incur liabilities and receive instruction for and on behalf of any and all partners of the joint venture and the entire execution of the contract including receipt of payment shall be done exclusively through the lead partner. This authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the partners as per specified format.
- iii. All partner of the joint venture shall be liable jointly and severally for the execution of the contract in accordance with the contract terms and a copy of the agreement entered into by the joint venture partners having such a provision shall be submitted with the bid.
- VI. We have furnished the following documents/details with Technical Part of our Bid:
  - 2.1 A certificate from banker (as per format) indicating various fund based/non fund based limits sanctioned to the bidder and the extent of utilization as on date. Such certificate should have been issued not earlier than three months prior to the date of bid opening. Wherever necessary Employer may make queries with the Bidders' bankers.
  - 2.2 The complete annual reports together with Audited statement of accounts of the company for last five years of its own (separate) immediately preceding the date of submission of bid.

#### Note:

(a) In the event the bidder is not able to furnish the information of its own (i.e. separate), being a subsidiary company and its accounts are being consolidated with its group/holding/parent company, the bidder should submit the audited balance sheets, income statements, other information pertaining to it only (not of its group/Holding/Parent Company) duly certified by any one of the authority [(i)

Statutory Auditor of the bidder /(ii) Company Secretary of the bidder or (iii) A certified Public Accountant] certifying that such information/documents are based on the audited accounts as the case may be.

(b) Similarly, if the bidder happens to be a Group/Holding/Parent Company, the bidder should submit the above documents/information of its own (i.e. exclusive of its subsidiaries) duly certified by any one of the authorities mentioned in Note -2.3 above certifying that these information/ documents are based on the audited accounts, as the case may be.

Dated the	[Insert date of the month] day of [Insert month, year]
at[In	nsert place].
Signature {	(of Bidder's authorized Bid Signatory (ies))# {In full and initials}:
Full name:	{insert full name of authorized Bid Signatory }
Title:	{insert title/position of authorized Bid Signatory }
Name of B	idder (Sole Bidder's name or Consortium/ JV's name, if applicable):
Capacity:	{insert the person's capacity to sign for the Bidder}
Address:	{insert the authorized Bid Signatory's address}
Phone/fax:	{insert the authorized Bid Signatory's phone and fax number, if applicable}
Email:	{insert the authorized Bid Signatory's email address}

<sup>\*{</sup>For a joint venture, either all members shall sign or only the authorised signatory as per ITB 19.4, in either case the power of attorney of the authorized bid signatory (signatories) must be attached}

(Appendix to Technical Part of the Bid)

## Format of Bought-out & Sub-contracted Items

NIT/R	FB No.: [inse	rt details]
Contra	act Title: [inse	rt details]
Page	of	pages

To, Chief Engineer, IT WBSEDCL Vidyut Bhawan, 3<sup>rd</sup> Floor, Block-DJ, Sector-II, Bidhannagar, Kolkata-700091

Bidder's Name and Address: {In case of JV bidder, mention name and address of all the Joint Venture members}

Dear Sir/ Madam,

1.0 We hereby furnish the details of major items/ sub-assemblies, we propose to buy from our proposed sub-vendors/ subcontractors for the purpose of supply of Plant and Installation Services under the subject Project:

Sl.	Item Description	Quantity proposed to	Details of	the proposed sub-
No.		be bought-out/sub-	contractor/sub-vendor	
		contracted	Name	Nationality
1.				
2.				
3.				
4.				
5.				
6.				

2.0 We hereby declare that, in the event of award of Contract on us, we would not subcontract any portion of Installation Services under Part II of the Contract (Supply of Installation Services) and

any major item other than those mentioned above under Part I of the Contract (Supply of Plant) without the prior approval of Employer as per the provisions of the Contract. We understand that for subcontract related to hiring of labour, prior approval of the Employer is not required.

3.0 We hereby declare that total local content that will be sourced in the bid is more than 50% of the total content required under the project.

	[Insert date of the month] day of[Insert month, year] asert place].	
Signature {	(of Bidder's authorized Bid Signatory (ies))# {In full and initials}:	
Full name:	{insert full name of authorized Bid Signatory }	
Title:	{insert title/position of authorized Bid Signatory }	
Name of B	me of Bidder (Sole Bidder's name or Consortium/ JV's name, if applicable):	
Capacity:	{insert the person's capacity to sign for the Bidder}	
Address:	{insert the authorized Bid Signatory's address}	
Phone/fax:	{insert the authorized Bid Signatory's phone and fax number, if applicable}	
Email:	{insert the authorized Bid Signatory's email address}	

<sup>\*{</sup>For a joint venture, either all members shall sign or only the authorised signatory as per ITB 19.4, in either case the power of attorney of the authorized bid signatory (signatories) must be attached}

(Appendix to Technical Part of the Bid)

# Format of Undertaking on Compliance of Terms & Conditions of the Bidding Documents including Scope of Work and other related requirements

# UNDERTAKING ON COMPLIANCE OF RFB TERMS & CONDITIONS AND OTHER REQUIREMENTS

(To be submitted on ₹100 Stamp paper issued in the State where Bidder's office is located, duly signed by the authorized signatory)

I/We he	reby unde	rtake that I/W	<sup>7</sup> e have exan	nine	d/ perus	sed, st	udied and understood the Reque	st
For Bio	d (RFB)	Document	in respect	of	RFB	no_	date	ed
	and a	ny corrigend	um/ addend	um/	clarific	cation	etc. thereto completely and have	ve
submitte	ed my/our	Proposal/ B	id in pursuai	nce 1	to the s	aid R	FB document for [insert Contra	ct
Title].								

I/We hereby undertake that I/We understand that the scope of Services and other related requirement under and in pursuance of this RFB are indicative only and not exhaustive in any manner. I/We understand that the scope of Services may undergo changes as per emerging requirements of WBSEDCL as specified in the RFB document.

I/We hereby undertake that we shall comply with the scope of Services and other related requirements and the terms and conditions specified in the RFB document completely and except as mentioned in the Form 12 (Alternative, Deviations and Exceptions to the Provisions) hereof, we have no deviations and/or submissions and/or clarifications, whatsoever of any manner and/or sort and/or kind in this regard.

I/We hereby undertake to provide any further clarifications, details, documents etc. as may be required without changing the substance of our Proposal.

I/We understand that the WBSEDCL reserves the right to float a separate RequestFor Bid/Notice Inviting Tender/ Invitation for Bids for the scope of Work and related requirements as covered under this RFB, irrespective of the outcome of this RFB, and I/We hereby undertake that we have no objection for the same. I/We understand that in such a case, I/We shall bid separately in response to such Request For Bid/Notice Inviting Tender/ Invitation for Bids, and in no case our bid/ Proposal in response to this RFB shall be deemed as a Proposal/Bid in response to such Request For Bid/Notice Inviting Tender/ Invitation for Bids.

I/We hereby undertake to provide the Plant and Installation Services and undertake to be the single point of contact for WBSEDCL for complete Scope of Work and related

requirements as per the terms and conditions and as specified in this RFB document.

I/We hereby undertake that except as mentioned in the Form 12 (Alternative, Deviations and Exceptions to the Provisions) hereof, my/our bid is/ deemed to be as per the RFB document and is accordingly submitted to the WBSEDCL. In case of a failure to comply and/or variation WBSEDCL has the sole discretion not to consider or disqualify my/our Proposal/bid for the aforementioned RFB and I/We shall be not have any claim of anysort/kind/form on the same.

I/We agree to be bound by our Proposal for the period of validity as specified in and required as per Section 3 of RFB document and it shall remain binding upon us and may be accepted at any time before the expiration of that validity period as may be extended by us.

I/We hereby attach the duly signed and stamped RFB document as an unconditional acceptance and compliance of RFB specifications and terms & conditions as part of the Technical Part of our Bid without any deviations and/or submissions and/or clarifications of any manner and/or sort and/or kind in this regard, except as indicated in Form 12 (Alternative, Deviations and Exceptions to the Provisions) hereof from my/our side.

I/We understand that mentioning of any pre-requisites, presumptions, assumptions, hiding/ twisting/ deletion/ reduction/ manipulation/ disguising of Scope of Works and/or application features and/or infrastructure and/or project deliverables etc. in any form and/or by any means and/or under any head shall not be constituted as a part of the Bid/ Proposal and in case of award of the Contract the same shall not be claimed by me/us while award and/or subsequently providing of Plant and Installation Services/ execution of work. The decision of WBSEDCL on such issues shall be binding on me/us and the same shall not be arbitrated upon by me/us.

I/We hereby undertake that we abide by all the terms and conditions mentioned in the RFB document along with amendment/corrigendum/ clarification, if any, as confirmed herein

We also confirm that in case any discrepancies/ inconsistencies and deviations/ omissions/ reservations, except as indicated in Form 12 (Alternative, Deviations and Exceptions to the Provisions) hereof, is observed in the online Price Part of our Bid, the same shall be deemed as withdrawn/rectified without any financial implication, whatsoever to WBSEDCL.

I/We understand that at any stage during the tenure of the Contract if it is found that any statement or document submitted by us is false/forged/invalid, WBSEDCL has discretion to terminate the Contract and get the Plant and Installation Services delivered / work done though third party.

I/We hereby affirm that the products and/or Plant and Installation Services offered by us against this RFB are in compliance to the latest Government of India Guidelines and circulars which will remain complied to the same during the duration and execution of this assignment.

I/We also hereby affirm the following:

- a) I/ we are not insolvent, in receivership, bankrupt or being wound up, not have our affairs administered by a court or a judicial officer, not have our business activities suspended and am/ are not the subject of legal proceedings for any of the foregoing reasons;
- b) I/ we have not, and our directors and officers have not, been convicted of any criminal offence related to our/ their respective professional conduct or the making of false statements or misrepresentations as to our/ their qualifications to enter into a procurement contract within a period of two years preceding the commencement of this procurement process, or have not been otherwise disqualified pursuant to debarment proceedings;
- c) I/ we do not have a Conflict of Interest in the procurement in question as specified in the RFB document.
- d) I/ we comply with the code of integrity and other requirements as specified in the RFB document.

	[Insert date of the month] day of[Insert month, year]
at	. [Insert place].
Signatu	re {(of Bidder's authorized Bid Signatory (ies)}# {In full and initials}:
Full nar	ne: {insert full name of authorized Bid Signatory }
Title:	{insert title/position of authorized Bid Signatory }
Name o	f Bidder (Sole Bidder's name or Consortium/ JV's name, if applicable):
Capacit	y: {insert the person's capacity to sign for the Bidder}
Address	s: {insert the authorized Bid Signatory's address}
Phone/f	ax: {insert the authorized Bid Signatory's phone and fax number, if applicable}
Email:	{insert the authorized Bid Signatory's email address}

<sup>\*{</sup>For a joint venture, either all members shall sign or only the authorised signatory as per ITB 19.4, in either case the power of attorney of the authorized bid signatory (signatories) must be attached}

(Appendix to Technical Part of the Bid)

## Format of Alternative, Deviations and Exceptions to the Provisions of RFB Document

	-	ert details] ert details]
Page	of	pages

To, Chief Engineer, IT WBSEDCL Vidyut Bhawan, 3<sup>rd</sup> Floor, Block-DJ, Sector-II, Bidhannagar, Kolkata-700091

Bidder's Name and Address: {In case of JV bidder, mention name and address of all the Joint Venture members}

Dear Sir/ Madam,

The bidder shall itemize any deviation from the Specifications included in his bid. Each item shall be listed (separate sheets may be used and enclosed with this Attachment) with the following information:

Sl.	Reference clause in	Deviation	Cost of withdrawal of
No.	the Specifications		the deviation

The above deviations and variations are exhaustive. We confirm that we shall withdraw the deviations proposed by us at the cost of withdrawal indicated in this attachment, failing which our bid may be rejected and Bid Security forfeited.

Except for the above deviations and variations, the entire work shall be performed as per your specifications and documents. Further, we agree that any deviations, conditionality or

reservation introduced in this Attachment-6 and/or in the Bid form, Price schedules & Technical Data Sheets and covering letter, or in any other part of the bid will be reviewed to conduct a determination of the substantial responsiveness of the bid.

Dated the ...... [Insert date of the month] day of ...... [Insert month, year] at ...... [Insert place].

Signature {(of Bidder's authorized Bid Signatory (ies)}# {In full and initials}:

Full name: {insert full name of authorized Bid Signatory }

Title: {insert title/position of authorized Bid Signatory }

Name of Bidder (Sole Bidder's name or Consortium/ JV's name, if applicable):

Capacity: {insert the person's capacity to sign for the Bidder} Address: {insert the authorized Bid Signatory's address}

Phone/fax: {insert the authorized Bid Signatory's phone and fax number, if applicable}

Email: {insert the authorized Bid Signatory's email address}

<sup>\*{</sup>For a joint venture, either all members shall sign or only the authorised signatory as per ITB 19.4, in either case the power of attorney of the authorized bid signatory (signatories) must be attached}

(Appendix to Technical Part of the Bid)

## Format of Work Completion Schedule

	FB No.: [insect Title: [insect	-
Page	of	pages

To, Chief Engineer, IT WBSEDCL Vidyut Bhawan, 3<sup>rd</sup> Floor, Block-DJ, Sector-II, Bidhannagar, Kolkata-700091

Bidder's Name and Address:

Dear Sir/ Madam,

We hereby declare that the following Work Completion Schedule shall be followed by us in furnishing and installation of the subject Project for the period commencing from the effective date of Contract to us:

Sl. No.	Description of Work	Period in months from the effective date of Contract
1.	a)	
2.	a)	

Part 1 - B	idding Procedures and Requirements	107
3.		

Sl. No.	Description of Work	Period in months from the effective date of Contract
4.	Manufacturing	
	a) commencement	
	b) completion	
5.	Shipments & Delivery	
	a) commencement	
	b) completion	
6.	Establishment of site office	
7.	Installation at Site	
	a) commencement	
	b) completion	
8.	Testing & Pre-commissioning	
	a) commencement	
	b) completion	
9.	Trial Operation	
	a) commencement	
	b) completion	

Notwithstanding the above we reiterate our compliance to the Time for Completion of the Facilities/ Works as per the provisions of the RFB document.

Dated the	[Insert date of the month] day of	[Insert month, year]
at[Inser	t place].	

Signature {(of Bidder's authorized Bid Signatory (ies)}# {In full and initials}:

Full name: {insert full name of authorized Bid Signatory }
Title: {insert title/position of authorized Bid Signatory }

Name of Bidder (Sole Bidder's name or Consortium/ JV's name, if applicable):

Capacity: {insert the person's capacity to sign for the Bidder} Address: {insert the authorized Bid Signatory's address}

Phone/fax: {insert the authorized Bid Signatory's phone and fax number, if applicable}

Email: {insert the authorized Bid Signatory's email address}\_\_\_\_

Note:Bidders to enclose a detailed network covering all the activities to be undertaken for completion of the project indicating key dates for various milestones for each phase constituent-wise.

<sup>\*{</sup>For a joint venture, either all members shall sign or only the authorised signatory as per ITB 19.4, in either case the power of attorney of the authorized bid signatory (signatories) must be attached}

(Appendix to Technical Part of the Bid)

## **Format of Guarantee Declaration**

		RFB No.: [inseact Title: [inse	
	Page	of	pages
To, Chief Engineer, IT WBSEDCL Vidyut Bhawan, 3 <sup>rd</sup> Floor, Block-DJ, Sector-II, Bidhannagar, Kolkata-700091			
Bidder's Name and Address: {In case of JV bidder, mention name and address of all the Joint Venture members}			
Dear Sir/ Madam,			
We confirm that the plant/ equipment/ goods/ maximum, as the case may be) of the perfor Employer's Requirement/ Specification/ Scope performance/ efficiency of the plant/ equipment/ g document/ Employer's Requirement/ Specification	rmance specified i e of Work. We goods/ material offe	n the RFB further guar	document/rantee the
Dated the	day of	[Insert mon	th, year]
Signature {(of Bidder's authorized Bid Sig	natory (ies)}# {In fo	all and initials	s}:
Full name: {insert full name of authorized } Title: {insert title/position of authorized } Name of Bidder (Sole Bidder's name or Color Capacity: {insert the person's capacity to Address: {insert the authorized Bid Signa Phone/fax: {insert the authorized Bid Signa Email: {insert the authorized Bid Signa }	ted Bid Signatory } onsortium/ JV's nan sign for the Bidder atory's address} atory's phone and fa	x number, if a	ŕ

\*{For a joint venture, either all members shall sign or only the authorised signatory as per ITB 19.4, in either case the power of attorney of the authorized bid signatory (signatories) must be attached}

(Appendix to Technical Part of the Bid)

## Format of Information regarding Ex-employees

(The	informa	ation ir	n simila	r format	should	be fu	rnished	l for	each	partner	of joint	venture	in
case	of joint	ventur	e bid)										

case of joint venture bid)		1	J	
			RFB No.: [inseract Title: [inse	_
		Page	of	pages
To, Chief Engineer ,IT WBSEDCL Vidyut Bhawan, 3 <sup>rd</sup> Floor Block-DJ, Sector-II, Bidhannagar, Kolkata-				
Bidder's Name and Addre {In case of JV bidder, men and address of the concern	tion name	<i>r</i> }		
Dear Sir/ Madam,				
)				
(Information regar	ding Ex-employees of W	BSEDCL (Name	of Employer)	in
	ourOrganiza	ntion)		
Dear Sir/ Madam,				
We hereby furnish the detarretired/ resigned at the lev (Name of Employer) and s	el of {}	(Define suitable		
Sl. Name of the person	Date of Retirement/	Date of join	ning and	
No. with designation in	resignation from	designation in o	our	
<i>{}(Name of</i>	{} (Name of	Organizatio	on	
Employer)	Employer)			

1.			
2.			
3.			
Da	ted the	[Insert date of the month] day of[Insert month, year]	ı
	[In	·	
	Signature {	of Bidder's authorized Bid Signatory (ies)}# {In full and initials}:	
	Full name:	[insert full name of authorized Bid Signatory }	
	Title:	{insert title/position of authorized Bid Signatory }	
	Name of B	dder (Sole Bidder's name or Consortium/ JV's name, if applicable):	
	Capacity:	{insert the person's capacity to sign for the Bidder}	
	Address:	{insert the authorized Bid Signatory's address}	
	Phone/fax:	(insert the authorized Bid Signatory's phone and fax number, if applicable	e}
	Email:	{insert the authorized Bid Signatory's email address}	

Note: .

<sup>\*{</sup>For a joint venture, either all members shall sign or only the concerned member and authorised signatory as per ITB 19.4, in either case the power of attorney of the authorized bid signatory (signatories) must be attached}

(Appendix to Technical Part of the Bid)

## Format for Price Adjustment Data

	FB No.: [inse	-
Page	of	pages

To, Chief Engineer, IT WBSEDCL Vidyut Bhawan, 3<sup>rd</sup> Floor, Block-DJ, Sector-II, Bidhannagar, Kolkata-700091

Bidder's Name and Address: {In case of JV bidder, mention name and address of all the Joint Venture members}

Dear Sir/ Madam,

We hereby furnish the details of Price Adjustments:

Name of Material***	Price as on 30 days prior to date of bid opening*	Price as on XX days prior to date of shipment*	Variation*

<sup>\*</sup>Detailed calculations as per **Appendix-2 of Form 5** to be enclosed

<sup>\*\*</sup> Not to be filled at the time of bid submission

*** The materials	listed are illustrative, a separate row to be created for each material for
indicating price ad	justment
Dated the[In	[Insert date of the month] day of [Insert month, year] asert place].
Signature {	(of Bidder's authorized Bid Signatory (ies)}# {In full and initials}:
Full name:	{insert full name of authorized Bid Signatory }
Title:	{insert title/position of authorized Bid Signatory }
Name of B	idder (Sole Bidder's name or Consortium/ JV's name, if applicable):
Capacity:	{insert the person's capacity to sign for the Bidder}
Address:	{insert the authorized Bid Signatory's address}
Phone/fax:	{insert the authorized Bid Signatory's phone and fax number, if applicable}
Email:	{insert the authorized Bid Signatory's email address}

<sup>\*{</sup>For a joint venture, either all members shall sign or only the concerned member and authorised signatory as per ITB 19.4, in either case the power of attorney of the authorized bid signatory (signatories) must be attached}

(Appendix to Technical Part of the Bid)

Format of Option for Initial Advance (either Interest Bearing Initial Advance or No Initial Advance) and Information for E-payment, PF details and declaration regarding Micro/Small & Medium Enterprises

pages
for advance
nd details of

2.	Address with PIN Code and State	Registered Office:
		Branch Office:
		Correspondence Address:
3.	Status – Company/others	
	[Declaration of Micro/ Small/ Medium	
	Enterprise under Micro/ Small &	
	Medium Enterprises Development Act	
	2006, if applicable]	
4.	Permanent Account (PAN) No.	
5.	Goods and Services Tax Registration	
	No	
6.	PF Registration No. of the Company	
7.	PF Regional Office covered (with	
	Address)	
8.	Name of Contact Person	
9.	Telephone No(s).	Landline(s):
		Mobile(s):
	Email	Email ID:
10.	Bank Details for Electronic Payment	Name of the Bank:

			Address of Branch:			
			Account No.: Type of Account:			
			[ ] Saving			
			[ ] Current			
	11.	9 digit MICR code printed at bottom in middle, next to cheque no.				
	12.	IFSC (for RTGS)/NEFT Code (to be obtained from the Bank)				
		Sample Cancelled Cheque to be enclosed				
We hereby declare that the above information is true and correct and we agree that the payment on account of this Contract, in the event of award, be made in the above account maintained in the above mentioned Bank.						
	Dated the[Insert date of the month] day of[Insert month, year] at[Insert place].					

Signature {(of Bidder's authorized Bid Signatory (ies)}# {In full and initials}:

Full name: {insert full name of authorized Bid Signatory }
Title: {insert title/position of authorized Bid Signatory }

Name of Bidder (Sole Bidder's name or Consortium/ JV's name, if applicable):

Capacity: {insert the person's capacity to sign for the Bidder} Address: {insert the authorized Bid Signatory's address}

Phone/fax: {insert the authorized Bid Signatory's phone and fax number, if applicable}

Email: {insert the authorized Bid Signatory's email address}\_\_\_\_

(Appendix to Technical Part of the Bid)

#### FORMAT OF Declaration for tax exemptions, reductions, allowances or benefits)

	IFB No.: [in act Title: [in	,
Page	of	pages

To, Chief Engineer, IT WBSEDCL Vidyut Bhawan, 3<sup>rd</sup> Floor, Block-DJ, Sector-II, Bidhannagar, Kolkata-700091

Bidder's Name and Address: {In case of JV bidder, mention name and address of all the Joint Venture members}

#### Dear Sir / Madam,

- 1. We confirm that we are solely responsible for obtaining following tax exemptions, reductions, allowances or benefits in respect of supplies under the subject Project, in case of award. We further confirm that we have considered the same in our bid thereby passing on the benefit **to the Chief Engineer**, IT, *WBSEDCL* while quoting ourprices. In case of our failure to receive such benefits, partly or fully, for any reason whatsoever, the Employer will not compensate us.
- 2. We are furnishing the following information required by the Employer for issue of requisite certificate if and as permitted in terms of the applicable Govt. of India policies/procedures (in case of award):

Notification No. and on which applicable origin	
Notification No. and on which applicable origin	
Clause Ref. No.	

Email:

	(The requi	rements liste	ed above	are as per current N	totification of Go	ovt. of India
	indicated a	bove. These	may be m	odified, if necessary, in	terms of the Noti	fications.)
Dated	the	[Insert	date of th	ne month] day of	[Insert me	onth vearl
			aate oj ir	ie moninj day 01	[msen me	min, year j
acimin		iseri piecej.				
	Signature {	(of Bidder's	authorize	ed Bid Signatory (ies)}#	{In full and initia	als}:
	Eull nomes	Cincout full m	oma of o	uthonized Did Cienetom	. 1	
		•		uthorized Bid Signatory		
	Title:	-	-	of authorized Bid Signat	•	ahla).
		•		ame or Consortium/ JV		able):
	Capacity:	` .		capacity to sign for the E	•	
	Address:	-		l Bid Signatory's addres	-	
	Phone/tax:	{insert the ai	uthorized	Bid Signatory's phone	and tax number, if	t applicable }

{insert the authorized Bid Signatory's email address}\_\_\_\_\_

(Appendix to Technical Part of the Bid)

### Format of Bank Guarantee verification Check list

	KFB No.: [ins	,
Contra	act Title: [ins	sert details <i>)</i>
Page	of	pages

To, Chief Engineer, IT WBSEDCL Vidyut Bhawan, 3<sup>rd</sup> Floor, Block-DJ, Sector-II, Bidhannagar, Kolkata-700091

Bidder's Name and Address: {In case of JV bidder, mention name and address of all the Joint Venture members}

## (Bank Guarantee verification Check list)

Dear Sir/ Madam

We have ensured compliance to the following checklist in submission of Bank Guarantee:

S. No.	Checklist	Yes	No
1	Does the bank guarantee compare verbatim with standard		
	proforma for BG?		
2(a)	Has the executing Officer of BG indicated his name		
	designation & Power of Attorney No. / Signing power		
	Number etc. on BG?		
2(b)	Is each page of BG duly Signed/ initialed by the executants		
	and last page is signed with full particulars as required in the		
	standard proforma of BG and under the seal of the bank?		
2(c)	Does the last page of the BG carry the signatures of two		
	witnesses alongside the signature of the executing Bank		
	Manager?		
3(a)	Is the BG on non-judicial stamp paper of appropriate value?		

3(b)	Is the date of sale of non-judicial stamp paper shown on the BG and the stamp paper is issued not more than Six months prior to the date of execution of BG?	
4(a)	Are the factual details such as Bid specification No., LOA No. contract price, etc, correct?	
4(b)	Whether Overwriting /cutting, if any on the BG, authenticated under signature & seal of executants?	
5	Is the amount and validity of BG is in line with contract provisions?	
6	Whether the BG has been issued by a Nationalized bank / Non- Nationalized Bank acceptable to Buyer /Scheduled Bank in India (the applicability of the bank should be in line with the provisions of bidding documents)?	

d the	[Insert date of the month] day of [Insert month, year]
/1	nsert place].
_	
Signature	{(of Bidder's authorized Bid Signatory (ies)}# {In full and initials}:
Full name:	{insert full name of authorized Bid Signatory }
Title:	{insert title/position of authorized Bid Signatory }
Name of E	Sidder (Sole Bidder's name or Consortium/ JV's name, if applicable):
	{insert the person's capacity to sign for the Bidder}
Address:	{insert the authorized Bid Signatory's address}
Phone/fax:	{insert the authorized Bid Signatory's phone and fax number, if applicable}
Email:	{insert the authorized Bid Signatory's email address}
	(Common Seal)

# Appendix to Technical Part Attachment-4A: List of Special Maintenance Tools & Tackles included in bid price

## (List of Special Maintenance Tools & Tackles)

WBSEI Vidyut Block-I	Engineer, IT OCL Bhawan, 3 <sup>rd</sup> Floor, OJ, Sector-II, nagar, Kolkata-7000	<b>091</b>		
Bidder'	s Name and Address:			
Dear Sir,				
under the	subject project. The perfurther confirm that	orices for these tools &	tackles are in	ckles for various equipment acluded in our lumpsum bid s & tackles includes all the out below:
 S.No.	For Equipment	Item Description	Unit	Quantity

-----

--

Notwithstanding what is stated above, we further confirm that any additional special maintenance tools and tackles, required for the equipment under this project shall be furnished by us at no extra cost to the employer.

Date:	
	(Signature)
Place:	(Printed Name)
	(Designation)
	(Common Seal)

### **Appendix to Technical Part**

Attachment-4B: List of Special Maintenance Tools & Tackles not included in bid price

(List of Special Maintenance Tools & Tackles)

To, Chief Engineer, IT WBSEDCL Vidyut Bhawan, 3<sup>rd</sup> Floor, Block-DJ, Sector-II, Bidhannagar, Kolkata-700091

Bidder's Name and Address:

Dear Sir,

We are furnishing below the list of special maintenance tools & tackles for various equipment under the subject Project. The prices for these tools & tackles which are to be taken back after the completion of the work by us are not included in our lumpsum bid price. We further confirm that the list of special maintenance tools & tackles includes all the items specifically identified in your bidding documents as brought out below:

(a)	
(b)	
Date:	
	(Signature)
Place:	
	(Printed Name)
	(Designation)
	(Common Seal)

(Appendix to Technical Part of the Bid)

#### **Format of Additional Information**

	Contract Title:	-
e	of	pages

To, Chief Engineer, IT WBSEDCL Vidyut Bhawan, 3<sup>rd</sup> Floor, Block-DJ, Sector-II, Bidhannagar, Kolkata-700091

Bidder's Name and Address: {In case of JV bidder, mention name and address of all the Joint Venture members}

#### (Additional Information)

Dear Sir/ Madam,

In support of the additional information required as per the Bidding Documents, we furnish herewith our data/details/documents etc., along with other information, as follows (the stipulations have been reproduced in italics for ready reference):

## 1.0 The Bidder shall furnish

A certificate from their Banker(s) indicating various fund based/non fund based limits sanctioned to the Bidder and the extent of utilization as on date. Such certificate should have been issued not earlier than three months prior to the date of bid opening. Wherever necessary the Employer may make queries with the Bidders' Bankers. [Reference Part -1, Section 2]

1.1 In accordance with 1.0, certificate(s) from banker as per requisite format, indicating various fund based/non fund based limits sanctioned to the bidder or each member of

the joint venture and the extent of utilization as on date is/are enclosed, as per the following details:

Name of the Bidder/partner of Joint Venture	
Name of the Banker by whom certificate issued	
Date of certificate (should not be earlier than <b>3 months</b>	
prior to date of bid opening)	
Whether fund based/non fund based limits are indicated in	
the certificate	
Whether extent of utilization is indicated in the certificate	

1.2 The Bidder should accordingly also provide the following information/documents (In case of JV bidders, information should be provided separately for all the Partners of JV in the given format):

(i) Details of Banker:

Name of Banker	
Address of Banker	
Telephone No.	
Contact Name and Title	
Fax No.	
E-mail ID	

As per para 1.0, Authorization Letter(s) from the bidder (in case of JV bidder, from all the partners) addressed to the Banker(s), authorize **Chief Engineer, IT, WBSEDCL** 

to seek queries about the bidder with the Banker(s) and advising the Banker(s) to reply the same promptly, is/are enclosed as per following details:

Sl.	Letter Ref.	Date	Addressed to
No.			(name of the Bank)

### 2.0 OTHER INFORMATION

## **2.1** Current Contract Commitments of works in progress

Bidders (individual firms or each partners of JV) should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full completion certificate has yet to be issued.

Details of	Value of outstanding work	Estimated completion date
Contract	(Rs.)	

### 2.2 Financial Data:

(In Rs. Millions)

		1	Actua	ıl		Pı	ojecti	on fo	r nez	ĸt
	(previous five years) five years					year	'S			
1. Total Assets										
2. Current Assets										
3. Total Liability										

Email:

5. Profit before taxes	4. Current Liability					
6 Profit after taxes	5. Profit before taxes					
o. Tront after taxes	6. Profit after taxes					

3.	The information/documentation in support of Bidder's design infrastructure and erection facilities and capacity and procedures including quality control related to the work, are enclosed at _[]herewith.
4.	The CV and experience details of a project manager experience(as per section 6) in executing such contract of comparable nature including not less than five years as manager and the CVs of other employees to be deputed for the subject work, are enclosed at _[]_herewith.
Dated the	
	Full name: {insert full name of authorized Bid Signatory } Title: {insert title/position of authorized Bid Signatory } Name of Bidder (Sole Bidder's name or Consortium/ JV's name, if applicable): Capacity: {insert the person's capacity to sign for the Bidder} Address: {insert the authorized Bid Signatory's address} Phone/fax: {insert the authorized Bid Signatory's phone and fax number, if applicable}

{insert the authorized Bid Signatory's email address}\_\_\_\_\_

(Common Seal)....

(Appendix to Technical Part of the Bid)

## **Format of Integrity Pact**

#### **INTEGRITY PACT**

#### PRE-CONTRACT INTEGRITY PACT

#### **GENERAL**

WHEREAS the WBSEDCL propose to procure Plant and Installation Services as per the Scope of Work Mentioned in the RFB document (hereinafter called the "Facilities", against RFB No. [.....] for [Contract Title] which expression shall mean and include, unless the context otherwise requires, any additions & deletions in the said "Facilities") and the BIDDER/ Supplier is willing to offer/has offered the said "Facilities".

WHEREAS the BIDDER/ Supplier is a Private Company/Public Company/LLP/ Government Undertaking/ Partnership/Proprietorship, constituted in accordance with the relevant law in the matter and the WBSEDCL is a Ministry /Department of the Government of West Bengal /SPSU performing its function on behalf of the Governor of West Bengal.

#### NOW, THEREFORE,

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence/prejudiced dealings prior to, during and subsequent to the currency of the Contract to be entered into with a view to:-

Enabling the WBSEDCL to obtain the desired "Facilities" at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement, and

Enabling BIDDER/ SUPPLIER to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other practices and the WBSEDCL will commit to prevent corruption, in any form, by its official by following transparent procedures.

The parties hereto hereby agree to enter into this Integrity Pact and agree as follows: Commitments of the WBSEDCL

1.

- 1.1. The WBSEDCL undertakes that no official of the WBSEDCL, connected directly or indirectly with the contract, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the BIDDER/SUPPLIER, either for themselves or for any person, organization or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the contract.
- 1.2. The WBSEDCL will, during the pre-contract stage, treat all BIDDER/SUPPLIER alike, and will provide to all BIDDER/SUPPLIER the same information and will not provide any such information to any particular BIDDER/SUPPLIER which could afford an advantage to that particular BIDDER/SUPPLIER in comparison to the other BIDDER(S)/SUPPLIER(S).
- 1.3. All the officials of the WBSEDCL will report the appropriate Government office any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach.
- 2. In case any such preceding misconduct on the part of such official(s) is reported by the BIDDER/SUPPLIER to the WBSEDCL with the full and verifiable facts and the same is prima facie found to be correct by the WBSEDCL, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by the WBSEDCL and such a person shall be debarred from further dealings related to the contract process. In such a case, while an enquiry is being conducted by the WBSEDCL, the proceedings under the contract would not be stalled.

#### Commitments of BIDDERs/SUPPLIERs

- 3. The BIDDER/SUPPLIER commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any precontract or post-contract stage in order to secure the contract or in furtherance to secure it and in particular commit itself to the following:-
  - 3.1. The will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the WBSEDCL, connected directly or indirectly with the biding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.
  - 3.2. The BIDDER/SUPPLIER further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any

material or immaterial benefit or other advantage, commission, fees, brokerage, or inducement to any official of the WBSEDCL or otherwise in procuring the Contract of forbearing to do or having done any act in relation to the obtaining or execution of the contract or any other contract with the Government for showing or forbearing to show favour or disfavor to any person in relation to the contract or any other contract with the Government.

- 3.3. The BIDDER/SUPPLIER shall disclose the name and address of agents and representatives and Indian BIDDERSs shall disclose their foreign principals or associates.
- 3.4. The BIDDER/SUPPLIER shall disclose the payments to be made by them to agents/brokers or any other intermediary, in connection with this bid/contract.
- 3.5. The BIDDER/SUPPLIER further confirms and declares to the WBSEDCL that he BIDDER/SUPPLIER is the original manufacture/Integrator/authorized government sponsored export entity of the defense stores and has not engage any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to the WBSEDCL or any of its functionaries, whether officially or unofficially to the award of the contract to the BIDDER/SUPPLIER, nor has any amount been paid. Promised or intended to be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation.
- 3.6. The BIDDER/SUPPLIER, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payment he has made, is committed to or intends to make to officials of the WBSEDCL or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.
- 3.7. The BIDDER/SUPPLIER will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.
- 3.8. The BIDDER/SUPPLIER will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
- 3.9. The BIDDER/SUPPLIER shall not use improperly, for purpose of competition or personal gain, or pass on to others, any information provided by the WBSEDCL as part of the business relationship, regarding plans, technical proposal and business details, including information contained in any electronic data carrier. The BIDDER/SUPPLIER also undertakes to exercise due and adequate care lest any such information is divulged.
- 3.10. The BIDDER/SUPPLIER commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.
- 3.11. The BIDDER/SUPPLIER shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.
- 3.12. If the BIDDER/SUPPLIER or any employee of the BIDDER/SUPPLIER or any person acting on behalf of the BIDDER/SUPPLIER, either directly or indirectly, is a relative of any of the officers of the WBSEDCL, or alternatively, if any relatives of an officer of the WBSEDCL had financial interest/stake in the

BIDDER's/SUPPLIER's firm, the same shall be disclosed by the BIDDER/SUPPLIER at the time of filling of tender.

The term 'relative' for this purpose would be as defined in Section 6 of the Companies Act 1956.

3.13. The BIDDER/SUPPLIER shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the WBSEDCL.

### 4. Previous Transgression

- 4.1. The BIDDER/SUPPLIER declares that no previous transgression occurred in the last three years immediately before signing of this Integrity Pact with any other company in any country in respect of any corrupt practices envisaged hereunder or with any Public Sector Enterprise in India or any Government Department in India that could justify B1DDER's/SUPPLIER's exclusion from the tender process.
- 4.2. The BIDDER/SUPPLIER agrees that if it makes incorrect statement on this subject, BIDDER can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.
- 5. Earnest Money (Security Deposit) (If applicable as per ITB Clause 18)
  - 5.1. While submitting commercial bid, the BIDDER/SUPPLIER deposit an amount \_\_\_\_\_(as specified in TENDER) as Earnest Money/Security, Deposit, with the WBSEDCL through any of the following instruments:
    - 5.1.1. Bank Draft or a Pay Order in favour of 'WBSEDCL' payable at Kolkata.
    - 5.1.2. A confirmed guarantee by an Indian Nationalized Bank, promising payment of the guaranteed sum to the WBSEDCL on demand within three working days without any demur whatsoever and without seeking any reasons whatsoever. The demand for payment by the WBSEDCL shall be treated as conclusive proof of payment.
    - 5.1.3. Any other mode or through any other instrument (to be specified in the TENDER.
  - 5.2. The Earnest Money/ Security Deposit shall be valid as per terms of TENDER.
  - 5.3. In the case of successful BIDDER/SUPPLIER, a clause would also be incorporated in the Article pertaining to Performance Bond in the procurement Contract that the provisions of Sanctions for violation shall be applicable for forfeiture of Performance Bond in case of a decision by the WBSEDCL to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.
  - 5.4. No interest shall be payable by the WBSEDCL to the BIDDER/SUPPLIER on Earnest Money/Security Deposit for the period of its currency.

#### 6. Sanctions for Violations

6.1. Any breach of the aforesaid provisions by the BIDDER/SUPPLIER or anyone employed by it or acting on its behalf (whether with or without the knowledge of the

- BIDDER/SUPPLIER/SUPPLIER) shall entitle the WBSEDCL to take all or any one of the following actions, wherever required:-
- 6.1.1. To immediately call off the pre contract negotiations without assigning any reason or giving any compensation to the BIDDER/SUPPLIER. However, the proceedings with the other BIDDER(s) would continue.
- 6.1.2. The Earnest Money Deposit (in pre-contract stage) and/or Security Deposit/Performance Bond (after the contract is signed) shall stand forfeited either fully or partially, as decided by the WBSEDCL and the WBSEDCL shall not be required to assign any reason, therefore.
- 6.1.3. To immediately cancel the contract, if already signed, without giving any compensation to the BIDDER.
- 6.1.4. To recover all sums already paid by the WBSEDCL, and in case of the Indian BIDDER/SUPPLIER with interest thereon at 2% higher than the prevailing Prime Lending Rate of State of India, while in case of a BIDDER/SUPPLIER from a country other than India with Interest thereon at 2% higher than the LIBOR. If any outstanding payment is due to the BIDDER from the WBSEDCL in connection with any other contract for any other stores, such outstanding payment could also be utilized to recover the aforesaid sum and interest
- 6.1.5. To encash the advance bank guarantee and performance bond/warranty bond, if furnished by the BIDDER/SUPPLIER, in order to recover the payments, already made by the WBSEDCL, along with interest.
- 6.1.6. To cancel all or any other contracts with the BIDDER/SUPPLIER. The BIDDER shall be liable to pay compensation for any loss or damage to the WBSEDCL resulting from such cancellation/rescission and the WBSEDCL /PRINCIPAL shall be entitled to deduct the amount so payable from the money(s) due to the BIDDER/SUPPLIER.
- 6.1.7. To debar the BIDDER/SUPPLIER from participating in future bidding processes of the Government of India or any country listed by ADB/WBSEDCL /PRINCIPAL for a minimum period of five years, which may be further extended at the discretion of the WBSEDCL.
- 6.1.8. To recover all sums paid in violation of this Pact by BIDDER/SUPPLIER (s) to any middlemen or agent or broken with a view to securing the contract.
- 6.1.9. In cases where irrevocable Letters of Credit have been received in respect of any contract signed by the WBSEDCL with the BIDDER/SUPPLIER, the same shall not be opened.
- 6.1.10. Forfeiture of performance Bond in case of a decision by the WBSEDCL to forfeit the same without assigning any reason for imposing for sanction for violation of this pact.
- 6.2. The WBSEDCL will be entitled to take all or any of the actions mentioned at para 6.1 (i) to (x) of this Pact also on the Commission by the BIDDER/SUPPLIER or anyone employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER/SUPPLIER), of an offence as defined in Chapter IX of the Indian

- Penal code, 1860 or Prevention of Corruption Act, 1988 or any other statute enacted for prevention of corruption.
- 6.3. The decision of the WBSEDCL to the effect that a breach of the provisions of this pact has been committed by the BIDDER/SUPPLIER shall be final and conclusive on the BIDDER/SUPPLIER. However, the BIDDER/SUPPLIER can approach the Independent Monitor(s) appointed for the purposes of this Pact.

#### 7. deleted

7.1. deleted

## 8. Independent Monitors

- 8.1. The WBSEDCL has appointed Independent Monitors (hereinafter referred to as Monitors) for this Pact in consultation with the Central Vigilance Commission (Names and Addresses of the Monitors shall be published subsequently by WBSEDCL.
- 8.2. The task of the Monitors shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this Pact.
- 8.3. The Monitors shall not be subject to instructions by the representatives of the parties and perform their functions neutrally and independently.
- 8.4. Both the parties accept that the Monitors have the right to access all the documents relating to the project/procurement, including minutes of meetings.
- 8.5. As soon as the Monitor notices, or has reason to believe, a violation of this Pact, he will so inform the Authority designated by the WBSEDCL.
- 8.6. The BIDDER/SUPPLIER(s) accepts that the Monitors has the right to access without restriction to all project documentation of the WBSEDCL including that provided by the BIDDER/SUPPLIER. The BIDDER/SUPPLIER will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor shall be under contractual obligation to treat the information and documents of the BIDDER/SUPPLIER/Subcontractors(s) with confidentially.
- 8.7. The BUYER will provide to the Monitors sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the parties. The parties will offer to the monitor the option to participate in such meetings.
- 8.8. The Monitor will submit a written report to the designated Authority of WBSEDCL /Secretary in the Department/ within 8 to 10 weeks from the date of reference or intimation to him by the WBSEDCL /BIDDER/SUPPLIER and, should theoccasion arise, submit proposals for correcting problematic situations.

#### 9. Facilitation of Investigation

In case of any allegation of violation of any provisions of this Pact or payment of commission, the WBSEDCL or its agencies shall be entitled to examine all the documents including

the Books of Accounts of the BIDDER/SUPPLIER and the BIDDER/SUPPLIER shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination.

#### 10. Law and Place of Jurisdiction

This Pact is subject to Indian Law. The place of performance and jurisdiction is the seat of the WBSEDCL.

#### 11. Other Legal Actions

The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the any extent law in force relating to any civil or criminal proceedings.

#### 12. Validity

- 12.1. The validity of this Integrity Pact shall be from the date of its signing and extend up to 5 years or the complete execution of the contract to the satisfaction of both the WBSEDCL and the BIDDER/SUPPLIER, including warranty period, whichever is later. In case BIDDER/SUPPLIER is unsuccessful, this Integrity Pact shall expire after six months from the date of the signing of the contract.
- 12.2. Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact shall remain valid. In this case, the parties will strive to come to an agreement to their original intentions.

13. The parties hereby sign this Integrity Pact aton
Signed on(Insert the Date)
Signature (of Bidder's authorized Bid Signatory)# {In full and initials}:  Full name: {insert full name of authorized Bid Signatory }  Title: {insert title/position of authorized Bid Signatory }  Name of Bidder (Sole Bidder's name or Consortium/ JV's name, if applicable):  Capacity: {insert the person's capacity to sign for the Bidder}  Address: {insert the authorized Bid Signatory's address}  Phone/fax: {insert the authorized Bid Signatory's phone and fax number, if applicable Email: {insert the authorized Bid Signatory's email address}
#{For a joint venture, either all members shall sign or only the authorised signatory of per ITB 19.4, in which case the power of attorney to sign on behalf of all members shall be attached}
Witness 1

2.	
[WBSEDCL]	
Name of the	
Officer	
Designation	
Deptt/MINISTR	
Y/PSU	
Witness	
1.	
2.	

<sup>\*</sup> Provision of these clauses would need to be amended/deleted in line with the policy of the [WBSEDCL] in ¬regard to involvement of Indian agents of foreign supplies.

### **Form-22**

# FORMAT OF THE BANK GUARANTEE FOR ADDITIONAL PERFORMANCE SECURITY DEPOSIT

To
(Designation of Engineer-in Charge)
(Office address of Engineer-in Charge)
WHEREAS
(Name and address of Contractor) hereafter called "the Contractor") has undertaken in pursuance of
Contract No
Dated to execute(name of Contract and brief description of Works) (hereinafter called
"the Contract")
AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you
with a Bank Guarantee by a Scheduled Commercial Bank for the sum specified therein for
'ADDITIONAL PERFORMANE SECURITY DEPOSIT' for compliance with his obligation in
accordance with the Contract.
NOW WHEREAS, we
have agreed to give the Contractor such a Bank Guarantee.
NOW THEREFORE, we(indicate the name of the bank &
branch) hereby affirm that we are the Guarantor and responsible to you on behalf of the Contractor, upto a
total of Rs(amount of guarantee)
(in words). We undertake to pay you upon your first written demand and without cavil
of argument, a sum within the limits of
(amount of guarantee) as aforesaid without your needing to prove or to show grounds
or reasons of your demand for the sum specified therein.
We, (indicate the name of the bank and branch) hereby
waive the necessity of your demanding the said debt from the contractor before presenting us with the
demand.
We ( indicate the name of bank and branch) further
agree to pay to you any money so demanded notwithstanding any dispute or disputes raised by the
contractor(s) in any suit or proceeding pending before any court or
Tribunalthe present absolute and unequivocal.
The payment so made by us under this bond shall be valid discharge of our liability for payment there
under and the contractor(s) shall have no claim against us for making such payment.
We (indicate the name of bank and branch ) further agree that no change or addiction
to or other modification of the terms of the Contract or of the works to be performed there under or of any
of the Contract documents which may be made between you and Contractor shall in nay way release us
from any liability under the guarantee, and we hereby waive notice of any such charge, addition or
modification.

We	(indicate the name of the bank and branch) lastly undertake not to revoke this							
guarantee	except with the	previous cons	ent of you in	writing.				
This Guar	antee shall be	valid upto				It	come into	force with
immediate effect and shall remain in force and valid for a period upto the time of completion of work								
under the stated contract plus claim period of Six months for the Bank Guarantee . Notwithstanding								
anything	mentioned	above our	liability	against	this	guarantee	is rest	ricted to
	• • • • • • • • • • • • • • • • • • • •							
	with							
upto					thi	is guarantee a	all our liabi	lities under
this guarar	ntee shall cease	to exist.						
Signed		and				aled		this
day		of		• • • • • • • • • • • • • • • • • • • •	202	4	at	
				,		D AND DEL		
				For	and on	behalf of the	BANK	
By:								
						`	Signature)	
						,	Designation)	
						`	de Number)	
						(1	Address)	

**NOTES:** (1) The bank guarantee should contain the name, designation and code number of the officer(s) signing the guarantee.

The address, telephone number and other details of the Head Office of the Bank as well as of issuing Branch should be mentioned on the covering letter of issuing Branch.

#### Form 23

#### West Bengal State Electricity Distribution Company Limited Agreement for Third Party Access Security Policy of WBSEDCL

Organization Name & Address:	Date:				
First Name Middle Name Last Name	Department:				
Designation:					
Third Party Access Security Policy					
User shall access only the appropriate physical area of the premises and ap resource.	propriate information				
<ul> <li>Users shall not access any information resources of WBSEDCL, without prio concerned officials of WBSEDCL.</li> </ul>	r authorization of the				
<ul> <li>User shall not carry any Personal storage media like USB, Hard drives, Laptop, zones like Data Centre, Disaster Recovery Centre, SCADA Centers, Smart Grid C</li> </ul>					
• Users shall not access any information resources without the presence of WBSEDCL's authorized personnel.					
<ul> <li>Any passwords and access privileges given shall not be disclosed to anyor WBSEDCL's physical and logical boundaries.</li> </ul>	ne inside and outside				
<ul> <li>Users shall not engage in abusive or improper use of information resources, which includes, but is not limited to, misuse of resource/ privileges, tampering with resource and unauthorized removal of resource components.</li> </ul>					
User shall not conduct or permit "hacking" activities. User shall not run "packe not distribute computer viruses, Trojan horses, worms, or any other malicious."					
I hereby declare that I have understood the information security practices followed at WBSEDCL, and I shall adhere to the procedures.					
(Signature of the Bidder) Date:					
Name of the Bidder:					

#### Form 24

## West Bengal State Electricity Distribution Company Limited NON-DISCLOSURE AGREEMENT

(To be done with successful bidder in a 100/- stamp paper)

This Non-Disclosure Agreement ("Agreement") dated Date, Month, Year ("Effective Date") is entered	
BETWEEN	
WBSEDCL a company incorporated under the provisions of Companies Act, 1956 and having its principal place of business thereinafter referred to as " " which expression shall mean and include its executions, administrations, subsidiaries and assigns).	at
AND	
M/s	

#### **Purpose**

#### **Disclosure of Confidential Information**

Either party may disclose to the other party either orally or in any recorded medium, information comprising or relating to its/ or its subsidiaries or franchisees techniques; schematics; designs; contracts; financial information; ERP information; SAP Modules; client data; business affairs; operations; strategies; inventions; methodologies; technologies; employees; subcontractors; pricing; service proposals; methods of operations; procedures; products and / or services (Confidential Information). Confidential Information shall include all nonpublic information furnished, disclosed or transmitted regardless its source.

#### **Confidentiality**

Either party shall use the Confidential Information solely in furtherance of the actual potential business relationship between the parties. The parties shall not use the Confidential Information in any way that is directly or indirectly detrimental to the other party and shall not disclose the Confidential Information to any unauthorized third party.

Parties shall ensure that access to Confidential Information is granted only to those of its employees or agents ("Representatives") who have a demonstrated need to know such information in order to carry out the business purpose of this Agreement. Prior to disclosing any Confidential Information to such /Representatives, party shall inform them of the confidential nature of the information and their obligation to refrain from disclosure of the Confidential Information. Each party and its Representatives will take all reasonable measures to maintain the confidentiality of the Confidential Information, but in no. event less than the measures it uses for its own information of similar type. Parties and its Representatives shall not disclose to any person including, without limitation, any corporation, sovereign, partnership, limited liability company, entity or individual(i) the fact that any investigations, discussions or negotiations are taking place concerning the actual or potential business relationship between the parties, (ii) that it has requested or received Confidential information, or (iii) any of the terms, conditions or any other fact about the actual or potential business relationship.

Each party and its Representatives will immediately notify the other party of any use of disclosure of the Confidential information that is not authorized by this Agreement. Each party and its Representatives will use its best efforts to assist the other party in remedying any such unauthorized use or disclosure of the Confidential Information Either Party shall implement and follow the rules as laid down in the information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules, 2011 as and where apply.

The obligations contained under the agreement will not apply to the extent that either Party can demonstrate that the Confidential information: (a) was part of the public domain at the time of disclosure or properly became party of the public domain, by publication or otherwise; (b) was rightfully acquired by Receiving Party prior to disclosure by Disclosing Party; (c) was independently developed by Receiving Party or its Representatives without reference to the Confidential information: or (d) is required to be disclosed by a government agency or by a proper court of competent jurisdiction; provided; however, that Receiving Party and its Representatives shall provide Disclosing Party prompt prior written notice of such requirement, shall consult with and assist Disclosing Party in obtaining a protective order prior to such disclosure, and shall only disclose the

portion of Confidential information which it has been advised by written opinion of counsel is legally required to be disclosed and shall use its best efforts to obtain assurance that confidential treatment will be accorded such information if the protective order is not obtained or if Disclosing Party waives disclosure of such information.

#### Ownership of Material/No Warranty

Each Party retains all rights, title and interest to its confidential information. No license under any trademark, patent or copyright, or application for same which are now or thereafter may be obtained by the other Party is either granted or implied by the disclosure of confidential information.

#### **Term**

This Agreement shall terminate ....... years from the Effective Date. Receiving Party's obligations with respect to confidentiality shall expire after ...... years from the date of disclosure.

#### **Return of Confidential information**

Upon written request of either Party, Parties and its Representatives shall promptly return to the other Party all copies of Confidential information in its possession including all copies of any analyses, compilations, studies or other documents prepared by Receiving Party or its Representatives containing or reflecting any Confidential information. Either Party shall clarify in writing that it and its Representatives have returned all such information to the other Party.

#### General

- (a) This Agreement shall be governed by and construed in accordance with the applicable laws of India.
- (b) Either Party agrees that breach of the provisions of this Agreement by any Party will cause the other Party and irreparable damage for which recovery of money damages would be made in court of law' is Kolkata inadequate. Receiving Party and its Representatives hereby irrevocably and unconditionally consent to submit to the exclusive jurisdiction of the courts of Kolkata, West Bengal for any actions, suits or proceedings arising out of a relating to this Agreement and the transactions contemplated hereby (and agree not to commence any action, suit or proceeding relating thereto except in such courts), and further agree that service of any process, summons, notice 'or document by registered mail or tracked courier service to the address set for the above shall be effective service of process for any action, suits or proceeding brought against Receiving Party and its Representatives in any such court.
- (c) Neither party may assign any of its rights or obligations under this Agreement without the prior written consent of the other party. This Agreement shall be binding upon and inure to the benefit of the parties permitted successors and assigns.
- (d) This Agreement may be amended or supplemented only by a writing that is signed by duly authorized representatives of both parties.
- (e) No terms or provision hereof will be considered waived by either party, and no breach excused by it, unless such waiver or consent is in writing signed an authorized representative of the non-breaching party. No consent to, or waiver of, a breach by a party, whether express or implied, will constituted a consent to, waiver of, or excuse of any other, different, or subsequent breach.
- (f) If any part of this Agreement is found invalid or unenforceable, that par will be amended to achieve as nearly as possible the same economic and legal effect as the original provision and the remainder of this Agreement will remain in full force.
- (g) This Agreement constituted the entire agreement between the parties relating to this subject matter and supersedes all prior or simultaneous representations, discussions, negotiations, and agreements, whether written or oral, in the instant subject matter.

IN WITNESS WHEREOF the parties have executed these presents on the day, month and year first above written.

Signed, Sealed and delivered by:
Shrirepresenting
WBSEDCL in presence of:
Witness:
1)
Signed, Sealed and delivered by:
Shrirepresenting
M/S in presence of:
Witness:
1)

Authorized signature with designation and seal

### **Section - 5: Bidding Forms - Financial Part of the Bid**

INSTRUCTIONS TO BIDDERS: The bidder must fill and submit the price schedules online as specified in BDS.

#### 1. Illustration of Price schedule (Schedule No 1 to Schedule No 5):

SI.	Item Description	Quantity	Units
No.			
1	2	4	5
1.00	Hardware ,Software with Licenses and Services for DC		
1.10	OMS System Hardware		
1.11	Outage Management System (Main & Standby) Server	1	Set
1.12	Interface Server	1	Set
1.13	Layer 3 Gigabit Ethernet Switch (24 Ports)	2	Set
1.14	Structure Cabling with Accessories for all LAN Network	1	LS
1.15	Rack-Mount Sliding Monitor with inbuilt Keyboard and Mouse along with Rack mounted KVM Switch	1	Set
1.16	Operator Work Stations with accessories	10	Set
1.17	Printer, Scanner, Copy - Colour for A3 & A4 Size	2	Set
1.18	Printer, Scanner, Copy - B/W for A3 & A4 Size	2	Set
1.19	OMS System Software with Licenses		
1.20	Outage Management System (Main & Standby)	1	LS
1.21	Trouble Call Management	1	LS
1.22	Crew Management, Field Scheduling and Dispatch	1	LS

I ui t I	rading 110ccadies and recommends		
1.23	Outage Analysis & Prediction	1	LS
1.24	Web Portal for Outage Management	1	LS
1.25	Mobile Crew Management Client	1	LS
1.26	Interactive Voice Response	1	LS
1.27	Reporting Tool	1	LS
1.28	Enterprise Service Bus Suite	1	LS
1.29	Protocols Licenses :	1	LS
	IEC 61970, IEC61968 (Common Information Model) , OPC-UA & DA, ODBC, SQL, DDE & XML,		
1.30	Services		
1.31	Engineering, Installation, Commissioning, Integration & Testing - OMS	1	LS
2.00	Hardware ,Software with Licenses and Services for DRC		
2.10	OMS System Hardware		
2.11	Outage Management System (Main & Standby) Server	1	Set
2.12	Interface Server	1	Set
2.13	Layer 3 Gigabit Ethernet Switch (24 Ports)	2	Set
2.14	Structure Cabling with Accessories for all LAN Network	1	LS
2.15	Rack-Mount Sliding Monitor with inbuilt Keyboard and Mouse along with Rack mounted KVM Switch	1	Set
2.16	Operator Work Stations with accessories	10	Set
2.17	Printer, Scanner, Copy - Colour for A3 & A4 Size	2	Set
2.18	Printer, Scanner, Copy - B/W for A3 & A4 Size	2	Set
2.19	OMS System Software with Licenses		
2.20	Outage Management System (Main & Standby)	1	LS
2.21	Trouble Call Management	1	LS
2.22	Crew Management, Field Scheduling and Dispatch	1	LS
2.23	Outage Analysis & Prediction	1	LS
2.24	Web Portal for Outage Management	1	LS

2.25	Mobile Crew Management Client	1	LS
2.26	Interactive Voice Response	1	LS
2.27		1	LS
	Reporting Tool		
2.28	Enterprise Service Bus Suite	1	LS
2.29	Protocols Licenses :	1	LS
	IEC 61970, IEC61968 (Common Information Model)	•	
	, OPC-UA & DA, ODBC, SQL, DDE & XML,		
	MQTT, NB-IoT, LORA		
	SFTP/FTPS, HTTPS, XMPP, SOAP, REST		
2.30	Services		
2.31	Engineering, Installation, Commissioning, Integration & Testing - OMS	1	LS
3.00	AMC for Hardware, Software Maintenance, upgradation and Patch Management		
	Services, etc the period of 3 Years for DC and DR		
3.10		1	LS
	Resident Engineer Support - For all the system including sub-vendor equipment		
3.11		1	LS
	Software Maintenance, Upgradation and Patch Management Services		
3.12	Hardware Maintenance & Upgradation	1	LS
4.00			
	ATS for the period of 3 Years for DC and DR		
4.10	ATS for 3 years	1	LS
5.00	Training		
5.10		1	LS
	User Training		

#### PART 2

#### **EMPLOYER'S REQUIREMENTS**



# **Section 6 Technical Specification**



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# Section I: Introduction and General Information



#### 1 Section I: Introduction and General Information

#### 1.1 About West Bengal electricity Distribution Company Limited

West Bengal West Bengal State Electricity Distribution Company Limited (WBSEDCL) was established in 2007 following the unbundling of the state electricity board of West Bengal and responsible for providing power to 96% of West Bengal with a customer base of more approx. 2.15 Crore across the state. WBSEDCL owns, operate and maintains about 17818ckm of 33kV, 176861 ckm of 11kV &363475 ckm of LT lines with more than 3.25 lakh Distribution Transformers (DTs) having about 16000 MVA transformation capacity. Entire state is divided into five zones - Kolkata, Burdwan, Midnapore, Berhampur and Siliguri for its operation and maintenance. Each zone is responsible for operating and maintaining the substations under its jurisdiction. The recent advancement in the field of monitoring and measurement system provides vast opportunities to create remote monitoring facilities instead of putting manpower at each substation location for shift operation. The implementation of Control Centers & Divisional Operation Centers will enable the virtual manning of the S/S from remote locations, thereby optimizing the requirement of skilled manpower and managing the network with the available skilled workforce effectively and efficiently. Further, the information available at these locations will help in quickly analyzing & restoring the system.

#### 1.2 Existing Status

#### 1.2.1 Geographical Information System

The Vidyut Manchitra App incorporates GIS for efficient electrical network surveys, automatically establishing a network layer on a base map. It boasts features like online and offline survey capabilities, live map visualization, and attribute correction for Substations, Poles, Distribution Transformers (DTRs), and Consumers. During Substation surveys, the app captures attributes such as Voltage Level, Substation Name, and Substation Code, while also automatically logging latitude, longitude, and altitude. The app allows for location adjustments within a range of ±10 meters. Pole attributes encompass Structure Type, Number of Poles, System-generated Survey Identification Number (SIN), and location data, with the flexibility to modify within ±10 meters. Feeder attributes include Feeder Type, Feeder Name, Feeder Code, Area Type, Town, Main/Branch Line, Number of Wires, Conductor/Cable type, Insulator Type, Stringing, and automatic distance calculation between current and previous poles. DTR attributes cover CCC Name, Feeder Name, Locality, Capacity, Painting Code, Area Type, and Town. Consumer attributes involve Type of Consumer, Feeder Name, Category of Consumer, Area Type, and Consumer ID, which can be scanned from the QR/Barcode on the consumer's energy bill. In essence, the app streamlines the survey process, ensuring precise attribute capture and enabling real-time map visualization.

#### 1.2.2 Smart Metering/Smart Grid Project

#### a) Existing Scada system

In the Current Setup the Licensee area of WBSEDCL is divided into Five (5) Distribution Zones: Kolkata, Burdwan, Siliguri, Berhampur and Midnapur. There are 3 number Zonal SCADA Control Centers, each at Kolkata, Burdwan and Siliguri Zone which were constructed under RAPDRP project where all IT equipment including Servers, Workstations, network and communication equipment were installed from where monitoring and control of the 59 Sub-stations are presently being done. The SCADA application software presently used is from M/s OSI (Open Systems International) with license valid up to 19/01/2038.

The details of License Sizing of I/O SCADA points at control centers are as under:



Zonal SCADA Centre	No. of S/S Covered in existing SCADA	DI (Status Points)	DO Points	AI (Analog Inputs)	Accumulator Points	ICCP (Export Points)	ICCP (Import Points)	Total (I/O) Counts
Kolkata	45	126198	7846	80778	21304	70000	1000	307126
Asansol	06	16102	1408	10240	2400	30000	1000	61150
Siliguri	08	18308	1426	12190	3200	35000	1000	71124
Total	59	160608	10680	103208	26904	135000	3000	439400

During the time of bidding WBSEDL is assuming that all the existing hardware shall be replaced with the new one, however during the time of detailed engineering if the WBSEDCL find some hardware from the existing system useful in the proposed system the same shall be installed by the bidders with no additional cost. At Substation level there are 59 substations where RTU are already installed and most of them are reporting to their respective zonal control Centers.

#### b) Smart Metering

- I. WBSEDCL has planned to implement smart metering program in phases and has tendered and awarded Phase-1 of the program which accounts for about 2,50,000 endpoints includes consumers having connected load between 5 to 50 KVA of Industrial & Commercial category and all Govt. consumers below 50 KVA. During phase-1 implementation WBSEDCL is executing the programme in two different packages.
- II. Package-1: Implementation of Centralize MDM solution hosted at cloud and integration with existing applications considering license of 2.5 lakh end point and future scalability upto 2.5 Cr. end points and a separate tender for the same is already floated and under process.
- III. **Package-2:** Roll out of 2.5 lakh Smart meters with communication module and deployment of cloud based HES including integration with implemented MDMS and execution of the Project in OPEX model.
- IV. In Phase-2 of the roll-out, WBSEDCL intends to execute package 3 of the programme as mentioned below in select region within West Bengal.
- V. **Package-3:** Roll out of approx. 4,80,000 Smart meters with open communication and deployment of Cloud based HES including integration with implemented MDMS (Package-1) and execution of the Project in TOTEX model.

#### 1.2.3 Other IT Applications

WBSEDCL's Core IT applications Like SAP-ISU MBC (Metering, billing, Collection), SAPERP, CRM, IVRS system, E-office, GIS, MDAS etc.



# Section II: Scope of Work



#### 2 Section II: Scope of Work

#### 2.1 About Project Objective

West Bengal State Electricity Distribution Company Limited (WBSEDCL) intends to implement the outage management system (OMS) System. The OMS system implementation is intended to efficiently detect, monitor and respond to power outages in order to decrease the outage restoration time, increasing the customer satisfaction vis-à-vis improving the reliability indices.

The following are the indicative objectives from OMS WBSEDCL intends to:

- Decreased downtime durations through expedited restoration facilitated by predictions of outage locations
- Improved performance indices and customer satisfaction
- Enhanced public relations with the media by delivering precise information regarding outages and restoration efforts.
- Reduced regulatory grievances resulting from the ability to prioritize the restoration of emergency facilities and essential customers.
- Decreased frequency of outages by leveraging outage statistics to implement specific reliability enhancements.
- Loss Reduction



#### 2.2 Scope of Work

West Bengal State Electricity Distribution Company Limited (WBSEDCL) with a vision to provide, uninterrupted power supply to every consumer is under process of implementing outage management system (OMS)

- The Scope of work for System Integrator is to implement web based Commercial Off the Shelf (COTS) Outage Management system (OMS) covering entire consumer base.
- The scope of work includes supply, delivery, design, customization, integration, implementation, testing, commissioning of Hardware and software of the OMS with necessary Facility Management Services.



 The OMS thus supplied and implemented shall be complemented with COTS database, Middleware, Network and customer care equipment and other software in conformance to Industry standards and installation of necessary infrastructure (at DC & DR) and its maintenance for all the users.

The major modules/functions (envisaged) are mentioned below:

OMS Function/Modules					
₹ <u>`</u>	Outage Scheduling Management				
	Trouble Call Management System				
© \$\$\$	Crew Dispatch & Work Management Key Features				
<u> </u>	Outage Analytics & Reporting				
<b>©</b>	Web Clients & Mobile Views				
	Disptacher Training Simulator (DTS)				
<u>م</u>	DTS Database and Displays				

#### 2.2.1 Requirement Gathering/AS-IS/TO-be

- a) SI shall carry out a current state assessment of the existing IT architecture of WBSEDCL including IT Applications & Solutions, Utility Business process, ICT Infrastructure Solutions, End user's competency, information system security, governance structure, etc.
- b) SI will identify gap areas also formulate a high level To-Be report including but not limited to recommendation on sunset/carry forward of existing IT applications & solutions which need before/post implementation of the OMS, change management requirements, key risks and mitigation strategy, proposed governance structure, procedures and policies, security requirements, etc.
- c) The SI will take the necessary inputs and approval on the formulated As-Is Status and To-Be report from Stakeholders/Nodal Officers of WBSEDCL.
- d) SI should arrive at the optimum design, architecture and sizing of IT infrastructure for Data Center & Disaster Recovery Center based on the requirement gathering exercise and should design the solution accordingly.
- e) SI should also assess the end user expertise level at the control centre.

#### 2.2.2 **Design and Documentation**

a) SI would submit a report on status AS-IS assessment & requirement gathering including communication infrastructure to the Nodal/Designated Officers of WBSEDCL.



- b) SI would submit the reports on As-Is status and TO-BE process documents for OMS systems to the Nodal/Designated Officers of WBSEDCL
- c) SI should prepare and submit a detailed solution architecture and deployment architecture of the system (HLD & LLD Reports for IT infrastructure). SI should submit Solution Architecture for IT infrastructure deployment for Data Center and Disaster Recovery Center.
- d) SI should submit the Guaranteed technical parameters for each of the IT infrastructure assets and obtain approval before manufacturing, design and supply.
- e) SI should design the OMS systems considering the user distribution and ensure optimum performance of the various modules.
- SI should factor necessary security parameters should be built in to ensure data security of OMS systems.
- g) The proposed solution architecture should be submitted and approved by the WBSEDCL before commencement of the customization and development.
- h) The submitted documents and reports shall include but not limited to FRS, technical specifications, data model, solution design, business requirement document, periodic reports, change control document, system test scripts, acceptance test scripts etc.
- SI should develop manuals such as User Manuals, Training Manuals, FAQ & Trouble Shooting Guide, etc. as agreed upon with WBSEDCL for different kinds of users such as System Administrator, Super user, Normal user etc.
- SI should ensure that the documentation is in line with the defined documentation standards.
- k) Solution Architecture & Communication Infrastructure deployment along with IP scheme: SI shall be required to design and provide IP addressing scheme for the Communication Infrastructure. The IP addressing scheme proposed by SI shall be reviewed by WBSEDCL.
- I) This shall include the implementation of the approved IP addressing scheme including necessary configuration of the IP addresses in all the OMS Systems & Sub systems.
- m) SI need to address the above requirements according to assessment and the solution design.

#### 2.2.3 Hosting OMS system on existing DC and DR.

- a) SI shall be responsible for supply and installation of necessary hardware, software and supporting systems for successfully running OMS operations for scope of work at Data Center and Disaster Recovery Centers.
- b) SI shall supply, install, commission, and maintain the additional hardware and software systems for OMS including supporting system and services at Data Center (DC) and Disaster Recovery (DR).
- c) SI shall procure software licenses in the name of WBSEDCL and renew the software licenses during annual technical support.
- d) Shall provide business continuity services from the Disaster Recovery site, in case the primary site becomes unavailable.
- e) WBSEDCL Shall provide space and location of Data Center and Disaster recovery Site post award of the contract depending on the proposed sizing.



#### 2.2.4 Software Design and Customization

- a) SI should carry out the supply, installation, development and customization of modules based on the approved solution design, technical specifications document and FRS document for OMS systems.
- b) SI shall prepare and submit a detailed project plan for the software development /Customization.

#### 2.2.5 Solution Testing

- a) The SI shall conduct all types of software testing to ensure that the software is defect free and acceptable to WBSEDCL. Software testing shall be in accordance with the general testing procedures of the Software Development Life Cycle (SDLC).
- The OMS system modules/functions would be re-tested to ensure closure of identified defects/issues.
- c) SI should provide detailed test scripts for carrying out the acceptance test of various systems supplied.
- d) WBSEDCL shall nominate a team to carry out acceptance testing of the various modules supplied by SI for OMS System.
- e) SI should provide necessary tools for logging of defects and carrying out testing if required.
- f) SI should setup testing environment at the DC/DR hosting facilities for testing requirements.
- g) SI should provide training to the Acceptance Testing team prior to the commencement of the acceptance testing of the system.
- h) SI shall resolve all the defects/issues identified by the WBSEDCL acceptance testing team during OMS System acceptance procedure/phase.
- i) Any Level of development and fixes will be tested by support team of SI in development environment and subsequently UAT will be carried out by end users in test environment before they are implemented in production environment.
- j) Subsequently, the authorized representative nominated by WBSEDCL shall issue an acceptance certificate which should be produced by SI to go ahead with the enterprise wide rollout of OMS system.

#### a) Inspection and Testing

Inspections and tests are important aspects of OMS implementation. Most of the hardware and the software are procured from various agencies in Lots. There is need for a proper Standard Operating Procedure (SOP) to conduction inspections. Tests should be conducted in accredited labs and standard sampling methodologies shall be adopted.

#### i Inspection

Inspections should be performed by WBSEDCL or their authorized agency, which will include visual examination of hardware, enclosure cable dressings, and equipment and cable labeling. Documentation should also be examined to verify that it adequately identifies and describes all wiring, hardware and spare parts.



#### ii Software Testing

All types of tests are generally orchestrated by the System integrator and witnessed by the WBSEDCL in presence of PMA. Generally, such tests are software tests and hardware tests. Test Plans shall contain the following:

Following software testing phases are generally followed in an OMS implementation.

- a) Unit testing Testing of an individual unit or group of related units to verify if the unit produced is not producing any unexpected results.
- b) Integration testing Testing in which a group of components are combined to produce output. The interaction between software and hardware shall be tested to identify the software and hardware components relation.
- c) Incremental Integration Testing Continuous testing of an application as new functionality is added.
- d) Functional testing Testing to ensure that the specified functionality required in the system requirements works.
- e) System testing System testing is performed when all the components are delivered to central repository prior to the release of the software. The testing is done on priority basis of business processes. All the defects are logged and assigned to respective component owners. The component and unit testing are performed after the correction of code. However, it may depend on size and type of individual test specifications. Impact analysis is useful to narrow done testing efforts by identifying critical test cases affected due to code change.
- f) Stress testing Testing to evaluate how system behaves under unfavorable conditions.
- g) Performance testing Although performance testing is described as a part of system testing, it can be regarded as a distinct level of testing. Performance testing will verify the load, volume, and response times as defined by requirements.
- h) Load Testing Testing an application under heavy loads, such as the testing of a web site under a range of loads to determine at what point the systems response time degrades or fails.
- i) Usability testing Testing is performed to the perspective of the client, to evaluate how the GUI is user-friendly? How easily can the client learn? After learning how to use, how proficiently can the client perform? How pleasing is it to use its design?
- j) Regression testing The objective of regression testing is to ensure software remains intact. A baseline set of data and scripts will be maintained and executed to verify changes introduced during the release have not "undone" any previous code. Expected results from the baseline are compared to results of the software being regression tested. All discrepancies will be highlighted and accounted for, before testing proceeds to the next level.
- k) User Acceptance Testing User acceptance testing shall consist of all necessary integration and interfaces mentioned under the scope
  - a) User Acceptance testing is the last phase of software testing process before final installation of OMS system software at WBSEDCL and when following prerequisites are met;



- b) Business Requirements must be available
- c) Application Code shall be fully developed
- d) Unit Testing, Integration Testing & System Testing shall be completed
- e) No Show stoppers, or High or Medium defects in the System Integration Test Phase
- f) Only Cosmetic errors are acceptable before UAT
- g) Regression Testing shall be completed with no major defects
- h) All the reported defects shall be fixed and tested
- i) Traceability matrix for all testing shall be completed
- j) UAT Environment must be ready
- k) During the test scenarios definition, for each of the business scenario, an acceptance criterion is defined. Acceptance criteria include expected behavior of the s/w component and the expected results (data). Expected results form a part of the Exit Criteria. In addition to expected result and behaviors, some conditions are also specified in the exit criteria. They can be:
  - i. Number of bugs to be discovered for a functional module. This depends on size of the functionality and is an indicator of amount of testing done.
  - ii. If any medium or low-priority errors are outstanding the implementation risk must be signed off as acceptable by WBSEDCL and System Integrator
  - iii. All High Priority errors from System Test must be fixed and tested
  - iv. Installation Testing Testing full, partial, or upgrade install/uninstall processes. The installation test for a release will be conducted with the objective of demonstrating production readiness. This test is conducted after the application has been migrated to the client's site. It will encompass the inventory of configuration items (performed by the application's System Administration) and evaluation of data readiness, as well as dynamic tests focused on basic system functionality. When necessary, a sanity test will be performed following the installation testing. After installation, if any bug is reported or there is non-compliance to requirements then a proper procedure shall be followed. End-user shall report ("Change Request") to his/her supervisor about the bug that will in turn get forwarded to Project Manager (PM). PM will forward the List of change request to SI After the bug is fixed, it shall be reflected in the production copy after testing it.
- Security/Penetration Testing How well the system protects against unauthorized internal or external access, willful damage, etc.
- m) Recovery/Error Testing Testing how well a system recovers from crashes, hardware failures, or other catastrophic problems.



#### 2.2.6 Solution Integration

#### a) Integration with Existing Scada system

SI shall integrate the OMS system with existing Scada system (M/s OSI (Open Systems International) with license valid up to 19/01/2038.)

#### b) Integration With upcoming SCADA/ADMS system

WBSEDCL is planning to implement a new SCADA/ADMS. The Proposed solution should be compatible/interoperable with upcoming SCADA/ADMS system. SI Shall carry all necessary integration during implementation of upcoming Scada system.

#### c) OMS from/to AMR/AMI Interface

AMI allows ping meters, disconnect and reconnect meters, receive unsolicited outage and event reports from meters, and read voltages and other data on demand or on schedule. SCADA/ADMS shall interface with WBSEDCL's AMR/AMI/ Meter Data Management System. OMS shall have the functionalities to validate the meter connect/disconnect and outage information from MDMS

#### d) OMS from/to VMS Interface

OMS shall interface with WBSEDCL's VMS System. This shall be tightly integrated with OMS System to provide real-time status of the equipment on the Same OMS GUI.

#### e) Data Exchange with VMS

The proposed OMS system shall exchange data from real time video surveillance system using API level programming.

#### f) Data Exchange with SAP

The proposed OMS system shall exchange various types of real-time as well as historical data (IS&R) from Scada system with the SAP system for processes like Maintenance management, Outage management, Operation reports etc. The system shall integrate with SAP PM module for transfer of orders and creation of notifications.

#### g) Data Exchange with PC based applications

Proposed OMS system shall provide a multi-purpose interface opening the system to off theshelf PC applications running under the Microsoft Windows™ environment. This interface shall be usable outside from the Control Centre on office PCs. This requirement includes data exchange with all office tools generally used in administrative tasks like Microsoft Office (MS Excel, MS Access, MS Word) etc.

#### h) Data Exchange with GIS System

The GIS will interface using CIM/XML adapters to other applications. OMS system will have model aware adapters to read from GIS network model repository and update its own models. The system shall utilize an IEC 61970 and IEC 61968 compliant interface. The system shall enable export of all data via a CIM-XML or any standard web services interface per IEC 61970-452 and IEC 61970-552-4 and shall utilize modelling from IEC 61968-11 as appropriate.

Data exchange shall be over model neutral messaging services and CIM/XML data exchange for real-time or historical data. The following standards as applicable shall be used to achieve the functional requirements:



- Messaging interfaces shall be based on model neutral interfaces as per the IEC 61970-40X, series for access to real-time and historical data and
- b) Use the IEC 61968-3 and IEC 61968-9 standards for messaging interfaces that are model dependent for network operations and metering respectively.
- c) The proposed system shall take the power system network data from the existing GIS System of the WBSEDCL.
- d) The GIS interface with OMS system needs to be bidirectional for data migration that means bi direction means both the application must be able to exchange data via application layer as and when required.
  - e) Export for GIS need to be available for network attribute data, loading data/analog values, historical values, energies, de-energies status and device status data.

All interfaces should be self-checking so that any exceptions or data validation errors are reported by system. Integration logs should be maintained to confirm the success or otherwise of the integration interface. Any adapters, licenses, tools, scripts etc. required for integration with the existing and upcoming IT solutions of WBSEDCL will need to be arranged by the SI. The access to data will only be through business rules i.e. the applications will not access data directly without going through APIs managed by business rules/validation/workflow. The integration middleware/interface must validate the Data to be integrated. WBSEDCL can arrange for a session with existing SIs in case the SI need to understand any of the existing solutions and clarify their doubts. The System shall accurately maintain system time synchronization across all devices to ensure accuracy of data.

An indicative interface of OMS is shown below:

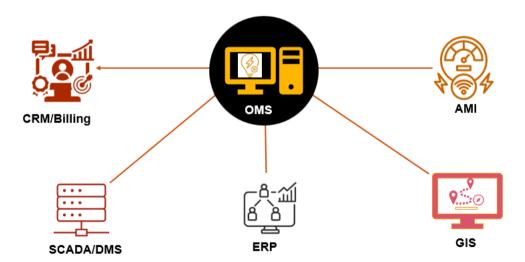


Figure 1 Proposed indicative interfaces



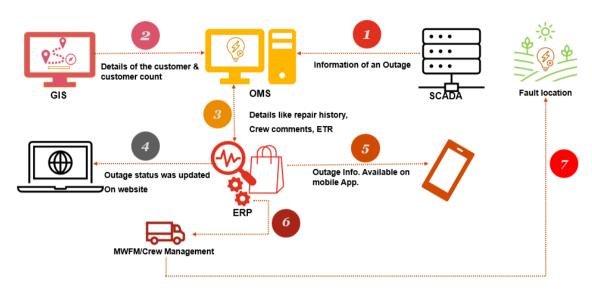


Figure 2 SCADA-OMS-GIS-CRM interfaced Process flow

#### 2.2.7 Solution Security

The SI will have to establish all the necessary procedures / infrastructure/ technology / personnel to ensure that the OMS Security is not compromised.

Broad Security requirements are:

- a. Security features should be compliant with the e-Governance Security Guidelines (e Gov Security Standards Framework (www.egovstandards.gov.in), National Cyber Security Policy (NCSP 2013) and NCIIPC Guidelines, CEA (Cyber Security in Power Sector) Guidelines 2021 or any amendment from time to time etc. All systems should have integrated security features that are configurable by the system administrator to control access to the application, functional modules, transactions, and data.
- b. Public key verification methods should be followed for verifying that the contents of a document have not been tampered with and allowing the receiver to confirm the identity of the sender.
- c. The applications should require the use of unique user IDs and passwords for authentication purposes and digital signatures, Biometric and other devices as applicable.
- d. The application should allow for the following:
  - a) The enforcement of password standards
  - b) The establishment of a specified period for password expiration, and
  - c) The prohibition of recent password reuse
- e. System administrator should be able to define functional access rights and data access rights by assigned user ID, functional role, and owner organization.
- f. The systems should permit the system administrator to assign multiple levels of approval to a single user.
- System administrator should be able to restrict access to sensitive data elements by named



user, groups of users, or functional role.

- h. System should be auditable as per requirements from time to time.
- i. System should have audit logging capability to record access activity, including the following:
  - a) All log-in/log-out attempts by user and workstation
  - b) User-submitted transactions
  - c) Initiated processes
  - d) System override events; and direct additions, changes, or deletions to application-maintained data
- j. System should provide the ability to query the audit log by type of access, date and time stamp range, user ID, IP address and terminal ID.
- k. All the information assets (information and information systems) should be classified, and security should be defined according to criticality of the information asset. All the data / information contained within systems or in hard copies related to this project, are owned by Utility. No information should be made public either directly or indirectly nor allowed to be accessed by unauthorized persons.
- System audit should be enabled for all the information assets to establish detective controls.
   System should have evidence, like audit trails, logs, registers, proof of background checks, approvals from Utility or its designated agency, support for various decisions, support for accounts etc. for the purpose of third- party security audit.
- m. System should have security incident management procedures. This incident management procedure has to use Technical Support facilities and should be reported in the incident management System.
- n. Should have system development and change control procedures including effective segregation of duties and environment.
- o. Proper protection against malicious software should be ensured. This would include scanning viruses at regular intervals or on certain triggers and updating the solution as and when new patch is received from the anti-virus solution provider.
- p. Should have proper logical access security for all the information assets. Entire network including servers, communication links, database etc., should be logically segregated from rest of the networks.
- q. Should ensure suitable technical and procedural controls to protect the network. Wherever the OMS project network comes in contact with an untrusted network, additional security measures should be taken like firewall, IDS, DMZ, proxy server, encryption etc.
- r. Should have a business continuity plan and a disaster recovery plan that should be implemented before commencement of the operations. Robust backup procedures should be established for the same.
- s. Policies and Procedures adopted by WBSEDCL must also be followed.

#### A. Security during Development & Integration Phase:

The SI shall meet the security requirements listed below (including but not limited to) during the development and integration stage:

a. The SI shall address emerging cybersecurity vulnerabilities in their software coding under System Development Life Cycle (SDLC). This should be done by taking into consideration the SANS Top 25 Most Dangerous Programming Errors and the OWASP Top 10 Projects.



- b. The SI shall propose a legacy data cleansing approach.
- c. The SI shall propose a security mechanism to be used for API and adopt the best practices such as OWAPS guidelines to ensure security.
- d. The SI shall promptly notify Utility when vulnerabilities are found in their code.
- e. The SI shall apply security related patches and updates.
- f. Remote access by the SI will only be performed using technology authorized by Utility.
- g. Any data interfaces implemented or built by the SI will be required to have encryption and authentication (strong authentication when possible.)
- h. Files containing Utility information will be transferred using encrypted file transfer techniques agreed upon by both parties.

#### B. Security during Operations phase

#### a. Security Policy

SI shall be certified for ISO 27001 (Information Security Management System). It will adopt leading information security framework and business continuity management systems requirements to define, monitor and update security policies (including network, server, application, and website/mobile app security).

#### b. Incident Response

SI shall do the analysis of application and network incidents, do post-incident reporting, and implement practices to ensure rapid response to attacks. The SI shall do a proactive review of incident response plan to improve incident response time and implement continuous improvement process to strengthen overall effectiveness of security.

#### c. Distributed Denial of Service (DDOS) Protection

SI should secure OMS against DDoS attacks such as network and application level attacks with minimal business disruption. For DC/DR, it must keep the businesses up and running at high performance levels even under attack, avoiding any monetary losses and serious reputation damage.

#### d. Malware Analysis

SI shall conduct analysis of newly discovered malware to uncover its scope and origin. Perform dynamic real-time analysis of advanced malware identified and prevent true zero-day and target attacks which can aggressively evade signature-based defenses through various channels such as Web, Email & Files.

SI shall perform the threat analysis of unwanted or suspicious malwares by the behavior or signature- based deduction and take input from the logs, detection, vulnerability, or suspicious activities feeds IOC.

#### e. User Authentication and Control

SI shall define and implement highest level of access governance. The proposed of this solution is to have an enhanced user role security where access should be restricted to only authorized users with multi-factor or two-factor authentication.

The system should have access control features for controlling the access rights over the system and over the various functions/features available for different types of users. Best practices from enterprise security including password strength,



password aging, password history, reuse prevention etc. must be followed for access control.

Application user authentication and authorization related transactions should be encrypted and used a wide array of authentication schemes, standards, or token types to ensure that only valid users and applications get access.

#### f. Hardening

All unnecessary packages must be removed and/or disabled from the system. Additionally, all unused operating system services and unused networking ports must be disabled or blocked. Only secure maintenance access shall be permitted, and all known insecure protocols shall be disabled.

- a. SI shall provide consolidated view of the availability, integrity, and consistency of the Web/App/DB tiers on DC/DR.
- b. SI must ensure Database nodes (RDBMS) should be protected with higher security layer at DC/DR.

#### g. Security Audit

The SI shall engage with the Cert-IN empaneled agency appointed by Utility and SI will cooperate fully with the auditor. The **auditors** shall be responsible to conduct the following activities:

- Security Audit that includes (but not limited to) vulnerability assessment, penetration testing, application security assessment API testing and Mobile application assessment biannually (once in six months) for entire infrastructure.
- b. Implementation of information security controls and perform periodic (once in a year) assessment.
- c. Propose ways to enhance the protection of OMS & Supporting IT Infrastructure.
- d. Ensure the applications are free from OWASP Top 10/SANS and CERT-IN web/mobile application vulnerabilities as released from time to time.
- e. SI is responsible for mitigating all security risks found and continuous monitoring Activities. All high-risk vulnerabilities must be mitigated within 15 days from the date vulnerabilities are formally identified.

Apart from the SI's tasks, a third party agency may be appointed by the utility to conduct:

- Source Code Review: Third party agency shall review the source code of web and mobile applications for hidden vulnerabilities and design flaws. It shall also verify whether security controls are implemented appropriately.
- Secure Configuration Review: Third Party Agency shall review the security configuration OMS and provide the detailed report that include the recommendations for remedial actions and submit the results to Utility

#### 2.2.8 **Design Consideration**

#### a) Solution Scalability and interoperability

The proposed system shall be 100% scalable. Expansion includes adding and removing monitored and displayed quantities, adding, and removing system functions and altering



computer memory and input/output hardware. The system shall permit the compiling, debugging and integration of new software on-line with no interruption of normal system operations. Online and tabular displays shall be generated, altered and maintained online.

#### b) N-Tier / Modular Design

The application user interface, logic, and data must be separate. The logical design of components, subsystems, application systems and databases will be ideally partitioned. These partitions shall have well-defined interfaces established. Logical boundaries are needed to separate components from each other. Modular design is more adaptive to changes in internal logic, platforms, and structures. It is easier to support, is more scalable and supports interoperability.

#### c) User-Directed Termination:

Functions taking long execution times shall recognize and process user requests to abort the processing.

#### d) Programming languages:

The software shall be written using ISO or ANSI or ECMA standard programming languages like FORTRAN, C, C++, and RDBMS and others.

#### e) Portability & Interoperability:

The software shall be designed for hardware independence and operation in a network environment that includes dissimilar hardware platforms. The use of system services software shall be built on Open standards.

#### f) SOA architecture:

A service-oriented architecture is required for a collection of services required for achieving the functionality specified under this specification.

#### g) Enterprise Service Bus (ESB):

ESB based architecture is essential to enable interaction of applications from different product manufacturer, platforms etc.

#### h) Validation of Database Changes/Modification

- a) The System / Software linkages of every modification in database / displays shall be highlighted in the PDS & QAS prior to roll out the changes into the production system.
- b) Facility to get a trail of each modification done in the system database.

#### i) Software Management Tools and Services

- a) All OMS software management tools and engineering services, necessary to administer the OMS system shall be provided such that no additional software or IT hardware should be required to configure or run each and every feature of the
- b) Inbuilt license management system with auto common repository and renewal alerts.
- c) Maintenance with condition-based report (means based on if-else, what -if, set of subset, filter based queries and answers), supporting the periodic findings generated by the system with guidelines and WI to address the issues.



- d) All the system application software/operating system shall support auto cleaning of unwanted and temporary files generated in the system with advanced warnings as a part of upkeep of the system and shall generate logs / reports for the same.
- e) During database configuration the system shall check automatically the standardization of text, duplication, repetition, and generate guidance for correction of the same.

#### j) Application Version

SI shall upgrade the latest version and patches of software without any additional charge to WBSEDCL during the duration of the project.



#### 2.2.9 Documentation and Deliverables

To ensure that the proposed OMS System conform to the requirements, specifications and delivery schedule, the SI shall submit the required documentation and deliverables for review and approval to WBSEDCL. The SI shall obtain the approval of WBSEDCL on the relevant deliverable at each stage of project before proceeding for purchase, design, customization, provisioning, deployment, testing, roll out, training etc. for OMS System.

As part of OMS System implementation, the SI shall submit all the required deliverables as necessary for successful completion of the project, whether exclusively mentioned or not.

#### a) Deliverables Acceptance Procedure

- Initially, SI will provide the draft deliverable within stipulated timeframe & considering the approved project timelines for review and feedback to WBSEDCL.
- WBSEDCL will provide feedback within the agreed timeframe to make necessary change corrections (if required). SI shall be required to re-submit the revised documents/deliverables incorporating the shared feedback & corrections.

#### b) Key Deliverables

The indicative list of project deliverables which are required to be submitted by the SI shall include, but not limited to the followings:

Project Phase	Key Deliverables
Project Initiation	<ol> <li>Project Kick-off with presentation on OMS System overview to Senior Management</li> <li>Project Inception Report         <ul> <li>a. Detailed project plan with work breakdown structure along with dependencies</li> <li>b. Resource schedule &amp; deployment plan</li> <li>c. List of complete deliverables</li> <li>d. Communication matrix</li> <li>e. Project Governance structure &amp; escalation matrix</li> <li>f. Project management templates</li> <li>g. Roles &amp; responsibilities and expectations from WBSEDCL</li> </ul> </li> <li>As-Is study report including existing business process, work-flows, reporting requirement, process maps etc.</li> <li>Gap analysis Report with identified gap &amp; areas of Improvement</li> <li>Project Preparation / Initiation phase closure report</li> </ol>
Business Blueprinting	<ol> <li>Requirement gathering workshops with findings for updated requirement specification</li> <li>Detailed To-Be report including:         <ul> <li>a. Business blueprint/design documents. (HLD &amp; LLD)</li> <li>b. Business Process Re-engineering (BPR) with updated utility business process.</li> <li>c. Updated Functional Requirement Specifications</li> </ul> </li> </ol>



Project Phase	Key Deliverables
	d. Updated Technical Requirement Specifications e. Requirements Traceability Matrix f. Design Document for Communication Infrastructure g. Design Documents for IT Systems h. Database Design Documents: Logical & physical database design with ER diagram & Other data modeling. i. Draft Roles & Responsibilities of Users (Authorization Matrix) j. Updated BOM/BOQ etc. 3. Engineering drawing & Data Requirement 4. System Design Document (SDD) including: a. Software Design & Development Document including development of each unit or module, Customized Code, approvals, etc. b. Functional Design Document of OMS including integration c. Technical requirement specification 5. Cyber Security Policy 6. Refined Quality Plan 7. Business continuity / Disaster Recovery Plan 8. Standard Operating Procedures for events and exceptions handling 9. Key Performance Indicator (KPIs) of OMS System
OMS System - Solution Testing	<ol> <li>Test data, script, plan and procedure</li> <li>Solution Design &amp; Development</li> <li>Customization &amp; Configuration</li> <li>Solution Testing and Acceptance (Unit, Integration, System Testing)</li> <li>Other Software testing (Regression, Stress, Load, Cyber Security etc.)</li> <li>Software/hardware performance report for maximum load through virtual metering point &amp; simulation tools which will be provided by the SI.</li> <li>User Acceptance Testing (UAT)</li> <li>Incorporation of Changes &amp; Observations – Identified during User Acceptance Testing (UAT)Final Roles &amp; Responsibilities of Users (Authorization Matrix)</li> <li>Intellectual property Rights (IPR) including all custom code, data models with Database objects depicting entity relationship diagrams</li> </ol>
OMS System – ICT Infrastructure	Provisioning of necessary infrastructure for hosting OMS on Data     Center & Disaster Recovery Center
OMS System – Roll out	Successful Installation & Configuration of OMS for entire consumer base
OMS System – Go live	<ol> <li>Stabilization Support</li> <li>Pre-Go-live assessment report</li> </ol>



Project Phase	Key Deliverables		
	<ol> <li>Cut-over Communication Strategy</li> <li>Release Management and Change Management Strategy.</li> </ol>		
	5. SLA and Performance Monitoring Plan		
	<ul><li>6. Final Preparation/Transition Phase report</li><li>7. OMS System - Software licenses</li></ul>		
	Solid System - Software licenses     Enterprise wide Go-live completion report		
	6. Enterprise wide Go-live completion report		
	Monthly project progress report indicating progress, bottlenecks,		
Monthly Report	deliverables during the month, next month plan		
	System Performance Report (SLA compliance)		
Operation and	2. Monthly activities report.)		
Maintenance	3. User Manual with necessary revision.		
Support	Issue log and resolution report		
	5. Exit Management Plan		
	Training strategy & schedule		
	2. Functional training to Core Team/Nodal Officers throughout the		
	duration of the project as finalized with WBSEDCL.		
Training	Change readiness assessment		
	4. OMS System - Configuration manual		
	5. End User training completion certificate		
	6. User training Manual, FAQ etc.		

#### Note:

- 1. The project deliverables mentioned above are indicative and will be finalized based on agreement and discussion between WBSEDCL and the successful SI. Decision of WBSEDCL or WBSEDCL appointed consultant shall be deemed final pertaining to additions or omissions to the documentation and deliverables requested from the SI.
- 2. The SI will provide respective deliverables as per the captured schedule for review and feedback within stipulated timelines to WBSEDCL.
- 3. WBSEDCL will provide feedback within the agreed timelines to make necessary changes, corrections, if required. The SI will be required to resubmit the revised deliverables.
- 4. Feedback and revision of documents and deliverables will be an iterative process.



# 2.2.10 Minimum Resource Requirements

The SI shall propose personal with relevant experience for this project during the implementation and the operations and maintenance phases.

# a) Before OMS Go - Live

The minimum resource requirement before Go-Live is mentioned in table below.

SI. No.	Resource	Min No. of Staff Required (Before Go- Live)
1.	Project Manager	
2.	Database Expert	
3.	OMS/Application Expert	SI shall provide the resources in
4.	Integration Expert	compliance to the project timelines and implementation requirement to make
5.	Solution Architect	OMS system Go-live
6.	Power Distribution Business Process Expert	
7.	IT infra Expert	

Table 1

# b) Post OMS System Go-Live

The minimum resource requirement post Go-Live is mentioned in table below.

SI. No.	Resource	Min No. of Staff Required at WBSEDCL (After Go- Live)
1.	Project Manager	1
2.	OMS System operator	9 (3 System operator for each shift)
3.	Ticketing Management Support Staff	3

Table 2

The minimum qualification and experience of the resources is mentioned below:



SI. No.	Resource	Qualification & Experience
1.	Project Manager	The Project Manager will serve as SPOC and will be responsible for the overall coordination to ensure the satisfactory fulfillment of the requirements of the Scope of work. He shall act as the SI's representative on all matters relating to the work.  The Project Manager shall keep close contact with WBSEDCL and will be responsible for the timely submission/ deliverables as per defined project plan. Project Manager shall have at least 10 years of experience in managing SCADA/DMS/ADMS/OMS related projects in Power distribution.  The project manager shall have power distribution experience. The Project Manager shall possess a B.E./B.Tech degree in Electrical/Electronic Engineering or its relevant equivalent.  MBA or equivalent degree is preferable
2.	OMS/Application Expert	The OMS/Application expert shall possess at least a degree of MCA/B.Tech/B.E. or equivalent and have at least 5 years of relevant work experience in OMS system in power distribution and should have completed at least 2 OMS projects.
3.	Integration Expert	The Integration Expert shall have at least a degree in B. Tech/MCA or equivalent with minimum 5 years of experience as Integration expert.  The Integration Expert shall have experience in successful integration of distribution utility systems, preferably in SCADA/OMS/GIS/CRM/Billing domain.  The integration expert will play a crucial role; hence it is advisable for the SI to propose a resource with relevant experience.
4.	Solution Architect	The solution architect shall have at least a degree in B. Tech/MCA or equivalent with minimum 5 years of experience as solution architect.  Solution architect should have knowledge of SOA, Microservices, ESB, framework development.  TOGAF certification is preferable.



SI. No.	Resource	Qualification & Experience
5.	Power Distribution Business Process Expert	The Power Distribution Business Process Expert shall possess a B.E./B.Tech degree in Electrical/Electronic Engineering or its relevant equivalent with minimum 5 years of experience in Power distribution.  Power Distribution Business Process Expert should have knowledge of outage management, distribution network, CRM process etc.
6.	IT infra Expert	Shall possess an B. Tech/B.E./MCA/MSc or higher qualification or its equivalent with at least 5 years of experience.  Shall have relevant experience of 5 years on DC/DR operations Relevant certification from recognized institution shall be preferred
7.	OMS System operator	The Power Distribution Business Process Expert shall possess a B.E./B.Tech degree in Engineering or its relevant equivalent with minimum 2 years of experience in Power distribution.  OMS system operator should have at least 1-year experience in OMS operation
8.	Ticketing Management Support Staff	Ticketing Management Support Staff should have graduate degree with 1year prior experience in ticketing management.

Table 3

## i. Initial Composition, Full Time Obligation; Continuity of Personnel

- a) SI shall ensure that each member of the Key Personnel devotes substantial working time to perform the services to which that person has been assigned as per the proposal.
- b) SI shall not make any changes to the composition of the Key Personnel and not require or request any member of the Key Personnel to cease or reduce his or her involvement in the provision of the Services during the Term (or agree to any request other than from WBSEDCL that would have the same effect):
  - ▶ unless that person resigns, is terminated for cause, dies, is long-term disabled, is on permitted mandatory leave under Applicable Law or retires; and
  - ▶ Without WBSEDCL's prior written consent. The clauses of non-disclosure agreement shall always operate in any such case.

# ii. Replacement

 a) In case the resource has resigned, then the SI must inform WBSEDCL within one week of such resignation.



- b) SI shall promptly initiate a search for a replacement and use commercially reasonable efforts (including the expenditure of reasonable sums, such as to engage the services of a recruiting firm) to ensure that the role of any member of the Key Personnel is not vacant for any longer than 30 days, subject to reasonable extensions requested by SI of WBSEDCL.
- c) Before assigning any replacement member of the Key Personnel to the provision of the Services, SI shall provide WBSEDCL with:
  - ► A resume, curriculum vitae and any other information about the candidate that is reasonably requested by WBSEDCL; and
  - ► An opportunity to interview the candidate.
- d) The SI must provide replacement resource, who scores at least the same marks as the resource proposed originally on the same evaluation parameters defined in this RFP document. Once this confirmation is received, WBSEDCL may request for an interview of the candidate and notify SI within mutually agreed timelines. If WBSEDCL does not request an interview within mutually agreed timelines, then it would be deemed as accepted.
- e) If **WBSEDCL** does object to the appointment, SI shall not assign the individual to that position and shall seek an alternative candidate in accordance with this Section.
- f) The SI must ensure at least 4 weeks of overlap period in such replacements.

# iii. High Attrition

If in the first 6-month period from the Contract Effective Date or in any rolling 12 months period during the Term, 15 percent or more of the members of the Key Personnel cease or reduce their involvement in the Services for any reason other than with WBSEDCL's prior written consent, SI shall:

- a) provide **WBSEDCL** with a reasonably detailed explanation as to the reasons for such change, including, where applicable and permitted, notes from any exit interviews conducted by MSP with any departing member of the Key Personnel; and
- b) if such change to Key Personnel has or is likely to have any material adverse impact on the provision of the Services or any substantial part thereof, undertake, at its own costs, such remediation acts as are reasonably necessary in order to improve the retention of the Key Personnel including making reasonable changes to the human resources policies and procedures applicable to the Key Personnel (including those related to compensation, benefits and other conditions so that they are competitive with the market) as may be necessary to ensure that such policies and procedures comply with Best Industry Practice.



# 2.2.11 Performance Criteria and Service Level Agreement (SLA)

#### a) Calculation for Availability Service Levels

The availability service levels shall be calculated as per the following:

- OMS/VPN connectivity will be available 24 hours a day, 7 days a week (Normal Service Hours); except for scheduled maintenance, where scheduled maintenance will be in accordance with agreed date and time.
- ii. Availability SLA of OMS/ VPN connectivity shall be computed on a calendar monthly basis as below:

Means 1-(A-(B+C+D))/E rounded to two places of decimal for any calendar month.

#### Wherein:

**An** equal the number of whole minutes for which the Head end system (excluding COMMUNICATION network) was not available in that month,

**B** equals the sum of the time in whole minutes planned service interruptions in that month,

**C** equals the sum of the time in whole minutes of any service interruptions due to Utility or any 3rd party connected to Utility in that month,

**D** is the sum of the time in whole minutes of all service interruptions due to a Force Majeure Event.

**E** is the number of minutes in the same calendar month being calculated by multiplying the number of days in the month by 1440. (In order to calculate SLA in minutes)

## I. Uptime calculation for the month:

- 1. {[(Actual Uptime + Scheduled Downtime) / Total No. of Hours in a Month] x100}
- 2. "Actual Uptime" means, of the Total Hours, the aggregate number of hours in any month during which each equipment, is available for use.
- 3. "Scheduled Downtime" means the aggregate number of hours in any month during which each equipment, is down during total Hours, due to preventive maintenance, scheduled maintenance, infrastructure problems or any other situation which is not attributable to Supplier's (or Service provider's) failure to exercise due care in performing Supplier's responsibilities.
- 4. WBSEDCL would provide a maximum of 04 hours of planned downtime for the preventive maintenance (as part of scheduled downtime) per month per equipment/service.
- 5. The downtime for scheduled maintenance (patch application, upgrades OS, Database, etc.) would need to be mutually agreed between WBSEDCL and the SI. To reduce this time, various maintenance activities can be clubbed together with proper planning.
- "Total Hours" means the total hours over the measurement period i.e. one month (24 \* number of days in the month).

#### II. Downtime Calculation:

The recording of downtime shall commence at the time of registering the call with SI or Telecom Service Provider for any downtime situation for the equipment.



Downtime shall end when the problem is rectified, and the application/ service is available to the user.

Down time will not be considered for following:

- 1. Pre-scheduled preventive maintenance and health checks (Scheduled Downtime).
- 2. Failover time (30 minutes) in case of cluster environment. Beyond which the service would be not available and appropriate penalty shall be imposed on the Supplier.
- 3. Bug in any application which causes the non-availability of the service.

# c) Operational Service Levels

FMS is Facility Management System provided by the SI to the Utility for support and maintenance of OMS system. The table below shows the performance criteria and service level agreements.

SI. No.	Service	Parameter	Service level	Validation	Penalty
1.	OMS Applications uptime	All modules of OMS	>99.5% of the time	Monthly report	2% of monthly FMS charges will be deducted for every 0.5% decrease
2.	Integration Services uptime	Web Services for all he interfaces in the scope	>99.7% of the time	Monthly report	2% of monthly FMS charges will be deducted for every 0.3% decrease
3.	Project delay	Slippage from Project timelines	Monthly	Monthly report	1% of total contract price for each month of delay maximum upto 10%
4.	DC/DR Services	RPO	15 Min		10% of Monthly Payment per every additional 15 minutes of data lag.
		RTO	4 Hours	Monthly report	10% of Monthly Payment per



SI. No.	Service	Parameter	Service level	Validation	Penalty
					every additional 1 (One) hours of downtime

Table 4

#### Change of Service Levels

- WBSEDCL may inform the service provider at least one month prior to making a change in the Service Levels.
- The WBSEDCLS reserves the right to change the criticality, service availability duration, service levels and service level measurements with prior information.
- The WBSEDCLS may introduce a new Service Level that needs to monitor but will include the basic aspects like Expected Service Levels, Minimum Service Levels etc.

SI to mention percentage change in quoted value for first quarter in case of change in service levels.

#### The SI shall note the following:

- WBSEDCL reserves the right, at its sole discretion to waive any penalty being imposed on the SI sue to failure to meet service level agreement. Waiver shall be granted as exception by WBSEDCL / Utility Officials.
- Penalty related to delivery of services may be waived by WBSEDCL if cause of such delay is not in SI control or the delay is due to WBSEDCL's written request. Penalty shall be adjusted in case WBSEDCL approves such waiver. The penalty recovered shall be adjusted in the subsequent AMC payment and no interest shall be paid on this amount.

#### 2.2.12 Project Timelines

- 1. The supply, development, customization, implementation, roll out and Go-Live of the OMS System is envisaged to be completed within a period of 12 months.
- The SI is expected to follow the schedule as mentioned below. Each of the project activity should be accompanied with a presentation on the deliverables by the SI. The submission of deliverable will be considered complete only after the submission of the hard/soft copy of the deliverables and the presentation by the SI.
- The SI must submit a detailed project implementation schedule including but not limited to the below mentioned project activities and deliverables that would be delivered during the project implementation.
- 4. The table below gives a set of high-level activities and corresponding expected timelines, which WBSEDCL envisions to be required as a part of this project. The SI should use this list only as an indicative guideline expected in terms of activities. The SI is required to furnish detailed information regarding each step of activities proposed during and after the implementation of the project. The SI is encouraged to propose the timelines to complete the activities and achieve the milestone before the expected timelines.



Project Phase	Key Deliverables			
Project Initiation	<ol> <li>Project Kick-off with presentation on OMS System overview to Senior Management</li> <li>Project Inception Report         <ul> <li>a. Detailed project plan with work breakdown structure along with dependencies</li> <li>b. Resource schedule &amp; deployment plan</li> <li>c. List of complete deliverables</li> <li>d. Communication matrix</li> <li>e. Project Governance structure &amp; escalation matrix</li> <li>f. Project management templates</li> <li>g. Roles &amp; responsibilities and expectations from WBSEDCL</li> </ul> </li> <li>As-Is study report including existing business process, workflows, reporting requirement, process maps etc.</li> <li>Project Preparation / Initiation phase closure report</li> </ol>	M-1		
Business Blueprinting	<ol> <li>Requirement gathering workshops with findings for updated requirement specification</li> <li>Detailed To-Be report including:         <ul> <li>a. Business blueprint/design documents. (HLD &amp; LLD)</li> <li>b. Business Process Re-engineering (BPR) with updated utility business process.</li> <li>c. Updated Functional Requirement Specifications</li> <li>d. Updated Technical Requirement Specifications</li> <li>e. Requirements Traceability Matrix</li> <li>f. Design Document for Communication Infrastructure</li> <li>g. Design Documents for IT Systems</li> <li>h. Database Design Documents: Logical &amp; physical database design with ER diagram &amp; Other data modeling.</li> <li>i. Draft Roles &amp; Responsibilities of Users (Authorization Matrix)</li> <li>j. Updated BOM/BOQ etc.</li> </ul> </li> <li>Engineering drawing &amp; Data Requirement</li> <li>System Design Document (SDD) including:         <ul> <li>a. Software Design &amp; Development Document including development of each unit or module, Customized Code, approvals, etc.</li> <li>b. Functional Design Document of OMS including integration</li> <li>c. Technical requirement specification</li> </ul> </li> <li>Cyber Security Policy</li> <li>Refined Quality Plan</li> </ol>	M-2		



Project Phase	Key Deliverables	Time lines
	<ol> <li>Business continuity / Disaster Recovery Plan</li> <li>Standard Operating Procedures for events and exceptions handling</li> <li>Key Performance Indicator (KPIs) of OMS System</li> </ol>	
OMS System - Solution Testing	<ol> <li>Test data, script, plan and procedure</li> <li>Solution Design &amp; Development</li> <li>Customization &amp; Configuration</li> <li>Solution Testing and Acceptance (Unit, Integration, System Testing)</li> <li>Other Software testing (Regression, Stress, Load, Cyber Security etc.)</li> <li>Software/hardware performance report for maximum load through virtual metering point &amp; simulation tools which will be provided by the SI.</li> <li>User Acceptance Testing (UAT)</li> <li>Incorporation of Changes &amp; Observations – Identified during User Acceptance Testing (UAT)Final Roles &amp; Responsibilities of Users (Authorization Matrix)</li> <li>Intellectual property Rights (IPR) including all custom code, data models with Database objects depicting entity relationship diagrams</li> </ol>	M2- M5
OMS System – ICT Infrastructure	Provisioning of necessary infrastructure for hosting OMS on Data Center & Disaster Recovery Center	M2- M5
OMS System – Roll out	Successful Installation & Configuration of OMS for entire consumer base	M5- M9
OMS System – Go live	<ol> <li>Stabilization Support</li> <li>Pre-Go-live assessment report</li> <li>Cut-over Communication Strategy</li> <li>Release Management and Change Management Strategy.</li> <li>SLA and Performance Monitoring Plan</li> <li>Final Preparation/Transition Phase report</li> <li>OMS System - Software licenses</li> <li>Enterprise wide Go-live completion report</li> </ol>	M9- M12
Monthly Report	Monthly project progress report indicating progress, bottlenecks, deliverables during the month, next month plan	Ever y Mont h for entire durati on of



Project Phase	Key Deliverables		
		contr	
		act	
	System Performance Report (SLA compliance)	M12-	
Operation and	2. Monthly activities report.)	M36	
Maintenance	3. User Manual with necessary revision.		
Support	Issue log and resolution report		
	5. Exit Management Plan		
	Training strategy & schedule	M5-	
	2. Functional training to Core Team/Nodal Officers throughout	M12	
	the duration of the project as finalized with WBSEDCL.		
Training	Change readiness assessment		
	4. OMS System - Configuration manual		
	5. End User training completion certificate		
	6. User training Manual, FAQ etc.		

## Note:

- 1. The Project timelines and schedule mentioned above is indicative and will be finalized based on discussion and agreement between WBSEDCL and the successful bidder.
- 2. Initially, SI will provide draft schedule with respective deliverables to WBSEDCL for their review and feedback within stipulated timelines.
- 3. WBSEDCL will provide feedback within the agreed timelines to make necessary changes, corrections, if required. The SI will be required to resubmit the revised schedule document.
- 4. Feedback and revision of documents and deliverables will be an iterative process.



## 2.2.13 Go-Live Criteria and Quality Control / Inspection by WBSEDCL

"Go Live" of a particular project area shall be considered only after all the scope of work for that project area is completed. Subsequently, Enterprise wide GO LIVE shall be considered when all the scope of work for all the project areas are completed and accepted by WBSEDCL.

In case go-live of any project area is delayed, the entire cost and/or time over run shall be the responsibility of the SI and not WBSEDCL.

The SI shall maintain a Quality Assurance/Quality Control (QA/QC) program that provides hardware, software and services under this specification whether manufactured, designed or performed within the organization of bidder or at any sub-Agency source shall be controlled at all points necessary to assure conformance to contractual requirements. The program shall provide for prevention and ready detection of discrepancies and for timely and positive corrective action.

The SI shall make objective evidence of quality conformance readily available to WBSEDCL. Instructions and records for quality assurance shall be controlled and maintained at the system levels. The bidder shall describe their QA/QC program in the Technical Proposal, (along with samples from his QA/QC manual) and shall submit his QA/QC Manual for review and acceptance by WBSEDCL.

Such QA/QC program shall be outlined by the bidder and shall be finally accepted by WBSEDCL after discussions before the award of Contract. A Quality Assurance Program of the bidder shall generally cover but not be limited to the following:

- a) The organization structure for the management and implementation of the proposed Quality Assurance Program
- b) Documentation control system
- c) Qualification data for key personnel
- d) The procedure for purchase of materials, parts/components and selection of outsourced services including service provider analysis, source inspection, incoming raw material inspection, verification of material purchases, etc.
- e) System for shop manufacturing including process controls
- f) Control of non-conforming items and system for corrective action
- g) Control of calibration and testing of measuring and testing equipment
- h) Inspection and test procedure for development, implementation and configuration of system
- i) System for indication and appraisal of inspection status
- i) System for quality audits
- k) System for authorizing release of developed and configured system to SI
- I) System for maintenance of records
- m) System for handling, storage and delivery
- n) A Quality Plan detailing out the specific quality control procedure adopted for control-ling the quality characteristics of the product

The Quality Plan shall be mutually discussed and approved by WBSEDCL after incorporating necessary corrections by the SI as may be required. Neither the enforcement of QA/QC procedures nor the correction of work mandated by those procedures shall be cause for an excusable delay. An effective Quality Assurance and Quality Control procedure shall be maintained by the bidder for at least the duration of this Contract. The personnel performing QA/QC functions shall have well-defined responsibility, authority and organizational freedom to identify and evaluate quality problems and to initiate, recommend or provide solutions during all phases of the Contract. The bidder shall be required to submit all the Quality Assurance Documents as stipulated in the Quality Plan at the time of WBSEDCLs inspection of



equipment/materials.

# 1.1 Go live Criteria Checklist:

S.NO.	Activity*	Comments	Readiness Status/Score	Potential Impact/ Changes
1.	Submission of Project Deliverables			_
2.	Submission of System Hardware and Software documents.			
3.	Submission of User Documentation			
4.	Documentation Completed			
6.	Data Concentrator/Access Point Commission and Acceptance as per scope			
7.	IT Infrastructure commissioning and acceptance			
8.	Completion of Software customizations			
9.	Completion of OMS System testing as per Bid Documents			
10.	Software solution commissioning and acceptance			
11.	User Acceptance Testing Completed			
12.	FRS Compliance Achieved			
13.	Fit/Gap Analysis Completed			
14.	Data download in compliance to SLA for at least 3 Months			
15.	Business Process Changes in Place			
16.	Training as per schedule approved by WBSEDCL			
17.	Change Management Process in Place as per WBSEDCL acceptance			
18.	Handover Plan Accepted by the WBSEDCL			
19.	Detailed Schedule Available for Go - Live			
20.	A Roll Back Plan Available			
21.	Benefit Realization Process in Place			



S.NO.	Activity*	Comments	Readiness Status/Score	Potential Impact/ Changes
22.	Adequate Man Power in Place for Handover			
23.	Scope of Work Completed			

Note: The given list of activities is indicative.



#### 2.2.14 Roll out, Stabilization Period and Go-Live Declaration

Post successful roll out of OMS, SI shall provide stabilization support for a period for three (3) months. SI would be required to depute requisite numbers of people who would be responsible for resolving end-user queries and problems on OMS System and supporting software at WBSEDCL. The system will be called Go-live after due approval from WBSEDCL and compliance to the Go-Live criteria defined in the RFP.

# 2.2.15 Operation & Maintenance (O&M) Support

- a) The SI shall carry out Operations and Maintenance support services for a period of 3 (Three) years after the date of Go-live of the project.
- b) During the O&M period the SI will provide Annual Technical Support (ATS) for Software of the of OMS system which shall include all types of support, patches, bug fixes, upgrades etc. for a period of 3 years after successful Go-live declaration.
- c) For the Hardware procured at the Data Centre and the Disaster Recovery Centre (DC and DRC), the SI shall provide Annual Maintenance Contract (AMC) services for a period of years from Go-Live declaration.
- d) The details of all activities covered under the support and maintenance services and the expected service levels is mentioned in Operations and Maintenance Services'

Bidder(s) should propose all required functions from OMS system to meet the requirements of WBSEDCL. Bidder(s) should note that the technical specifications mentioned in the RFP are only the minimum and indicative technical and functional specifications and Bidder(s) should design and propose the solution appropriately keeping the SLA requirements and scalability in view as well as plan to conduct detailed design workshops to gather design requirements and customize the OMS system to the satisfaction of WBSEDCL.



## 2.2.16 Training and Handholding

The primary objective of the training is to achieve 100% user adoption of Oms System through technical and behavioral competencies covering all end users of WBSEDCL. Training shall be provided in English Language. The SI shall propose a training plan (including training curriculum and calendar) so that there is a proper transfer of knowledge about the deployed OMS systems to utility staff.

The audience of the trainings shall vary for each type of training. The OMS System - Hardware and IT Solution training will cover Technical & Non-Technical nominated employees of WBSEDCL. The OMS System end user training for various OMS System modules including equipment's installation, maintenance and other associated support shall be for the users of respective OMS System modules & field staff of WBSEDCL.

General requirement for training to be imparted is as follows:

- 1) Training shall be conducted by SI personnel who are experienced instructors and speak understandable English language.
- 2) The SI shall provide training to various user groups nominated by WBSEDCL. The SI shall provide the Training Approach in the response.
- 3) All necessary training material shall be provided by the SI. Each trainee shall receive individual copies of documents used for training. Training material shall be organized by functional process that will serve as the training documentation for a functional area.
- 4) Training materials, including the documents provided to the trainees as well as handouts, shall become the property of WBSEDCL. Also, WBSEDCL reserves the right to copy such materials, but for in-house use only.
- For all trainings the travel expenses will be borne by WBSEDCL for their own employees only.
- 6) The schedule, location, detailed contents, for each course shall be finalized during detail engineering. The number of participants in the training program may undergo change. However, the training courses shall preferably be conducted in single batch.
- 7) The training will consist of a curriculum of courses to address the issues of system operation, business-wide application, changed business processes and general use of the new system.
- 8) Representatives from the contractor, WBSEDCL's project management teams will be involved throughout in the development of training strategy, training material design and development, standards and training delivery to ensure that change management issues are incorporated, and that training strategies and materials are aligned to the requirements of the project and as business-specific as possible.
- 9) WBSEDCL will have the option to cancel any or all training. In the case of cancellation, the rate quoted against the respective training will not be paid to the Contractor.

SI shall provide training sessions to all employees from lower level to higher level including officers from WBSEDCL on the domains listed in below table.

SI shall be required to organize following training for the WBSEDCL personnel: -

# Professional Training (Implementation team)



This is the training for the core group of implementation team of WBSEDCL. The Implementation/Core team will comprise of members from Smart Grid/IT/Any Other domain of WBSEDCL. Each member would be trained in the relevant function/module. It is the responsibility of SI to deliver this training which shall include standard curriculum designed and agreed by WBSEDCL for OMS System - hardware, software, communication infrastructure and network etc. The training should be arranged and conducted preferably by OEM partner or OEM's certified training partner for each group. WBSEDCL will prefer if a portion of the training is conducted onsite.

## **End User Training**

The SI will provide training to all end users of OMS System including hardware, software, communication infrastructure and network etc. This is the training for End users, Business users and field staff of the WBSEDCL. The End Users/Business Users/Field staff team will comprise of members carrying out day to day operation and task including field activity for maintenance and support of OMS System at WBSEDCL. Each member of End User/Business user/Field staff group would be trained in the relevant function / module.

These training sessions will be required to be conducted at any of the sites. The recommended training material can be in paper / electronic media with courses on Business Process Automation software fundamentals, business process overview, job activity training, and delivery options being on-line, CBTs, instructor led class rooms, etc.

## **OMS System Training**

On instruction & approval of Nodal Officer, the train the trainer approach shall be adopted by the SI for further training & handholding. The OMS System - Functional, Technical, System administration and Database management training for core team should be arranged by SI directly from OEM Certified Resources at WBSEDCL.

The training activity for OMS System shall comprise of the followings:

- The training materials will be uploaded to WBSEDCL Systems for access by end users and should be available as ready reckoners to the end users. The content should be updated regularly and kept up to date as when changes take place to the OMS System.
- 2. Training sessions shall cover more hands-on training rather than instructive mode.
- 3. The training and delivery options shall be on-line, CBTs, instructor led class rooms. Training material will be organized by functional process that will serve as the training documentation for a functional area.
- WBSEDCL plans to adopt training platform as e-classrooms in future. SI should consider the same for compatibility.
- 5. Necessary handholding and change management support shall be provided post training.
- 6. Feedback exercise shall be conducted for each training and accordingly evaluation will be used for improvement of further trainings.
- The SI in consultation and convenience of the WBSEDCL shall workout the training program and all the other modalities of the training, which should be delivered by certified consultants and SI.
- 8. The participants from WBSEDCL will be issued a certificate by OEM/SI for attending these courses.
- 9. The SI shall provide associated documentation for all deployed systems to ensure a



- smooth transition from deployment to post-deployment operations and maintenance of the system.
- 10. The ideal approach of the training should be formulation and involvement of core implementation group from the very start of the project to ensure maximum retention and adequate technical competency level.
- 11. Subsequent trainings and re-trainings should be conducted for identified groups/personnel.
- 12. Handholding during pre-implementation, implementation, Go Live and Post Go-live should be done by the SI.
- 13. Training calendar should be published to stakeholders and training sessions should be organized either on field/site or over the web as per the requirement of WBSEDCL.
- 14. Knowledge sharing strategy should be adopted.
- 15. Training staff would be deployed at WBSEDCL offices during the project as per requirement of WBSEDCL.
- 16. SI shall provide the necessary access of OEM training platforms and data repository to WBSEDCL.
- 17. Training shall be planned in stages as required before the implementation, during the implementation and post implementation depending on the frequency as finalized by WBSEDCL.
- 18. WBSEDCL will consider competence development and capacity development within Training. Product OEM will facilitate WBSEDCL end users for the customized code developed and deployed by the SI.
- 19. SI shall carry out the capacity building of core team including functional and technical employees with an intent to create a team of experts capable to independently handle the application operations & maintenance task and issues, if any.
- 20. SI shall carry out the training of client team on reports development, configuration of application setups and other skill sets as required to create a team of experts capable to independently handle the maintenance & support requirement by WBSEDCL.
- 21. SI shall carry out the hands-on training of core team members & end users on OMS System, hardware equipment's and other associated system.
- 22. SI shall formulate user manuals of oms System and other associated applications by considering the specific configuration of implemented solution.
  - Scope of training for OMS System End users
- The SI along should propose comprehensive end user training plan for adoption of the OMS System proposed to WBSEDCL.
- The plan should incorporate a consistent, enterprise-wide user adoption strategy focusing on the following five key areas:
  - a. Business Alignment
  - b. Communication
  - c. User Training
  - d. Performance and Management
  - e. Reinforcement
- As content may vary across key business units, the degree to which the actual process, tools, and rollout strategy are consistent will provide added economies of scale, as well as levels of skill standardization. In summary, the end goal is striving to achieve 100% user adoption of the OMS System through behavioral and technical competencies.



## **Training Needs Analysis**

Conduct a Training Needs Analysis to determine the training and development needs for all the job roles that will be affected by the OMS System technology initiative at WBSEDCL. The SI will collect the appropriate data on user groups, functional and process requirements per user group, required skills and knowledge, existing training culture and training resources through workshops and interviews with WBSEDCL business owners and key business users. This will result in a Training and Development Plan including:

- 1. The training requirements per user group.
- 2. Recommendations on the most appropriate training delivery methods and channels.
- 3. Identification of the criteria for training success along with any challenges and risks.
- 4. Plan and responsibilities for the development of the training materials, such as instructor guides, participant guides, media-based training and quick-reference guides.
- 5. Knowledge sharing strategy to enable to perform future customizations internally.

## **Content Development**

Development of customized, modular training materials based upon user roles and business process, and customized application. The SI will work together with WBSEDCL resources to enable transfer of knowledge. The following materials will be developed:

- 1. Paper-based classroom participant guides for each identified user group. These guides include hands-on exercises and are based upon 'Day in the Life' scenarios.
- 2. Paper-based classroom instructor guides including instructor notes with additional background information and points to be highlight during the training.
- 3. Media-based training simulations for pre-class preparation, in-class practicing and knowledge and skills validation.
- 4. SI can also be required to provide context sensitive on-line help, which includes all materials provided in the hard copy manuals. Where possible, users should be able to add their own on-line help documentation.
- Usage of OMS System must be documented in video form and made available/distributed to all users. All training manuals will be uploaded to OMS System – Help & support section, also as FAQs etc. for ready reference.

#### **Train-the-Trainer Program**

Development and delivery of a Train-the-Trainer program to prepare Organization for the delivery of the training program. This program will include:

- 1. Training the WBSEDCL instructors on the customized version of the OMS System application's as it would be trained to an end-user, allowing the training team to model the approach.
- 2. Opportunity for knowledge sharing in the areas of leading practice, concepts, new business processes and knowledge to the WBSEDCL instructors.
- Sharing of leading practices on creating an effective classroom and an appropriate learning environment.



4. Sharing of leading practices on classroom communication to enable the WBSEDCL instructors to encourage student involvement and student interaction. The program includes instruction on non-verbal behaviour, listening skills, questioning techniques, how to manage difficult behaviours, interpreting body language, and general presentation tips.

## 2.2.17 Operations & Maintenance Support including Facility Management Services

The SI shall be required to provide the services to manage entire OMS system installed & commissioned by SI for the WBSEDCL in order that they have maximum availability to enable & realize their desired business objectives.

- i. System Management Services shall be provided by SI in order that maximum uptime and performance levels of installed OMS systems is ensured. As such, SI is expected to provide services as per ITIL (IT Infrastructure Library) standards with performance levels meeting or exceeding those mentioned in Service Level Agreement (SLA) agreed between WBSEDCL and SI.
- ii. Prime responsibility of providing desired services shall be that of SI during the warranty period. The FMS shall start immediately after the GO-Live declaration and shall be applicable to the meters installed before user acceptance as well.
- iii. SI should provide adequate resources for supporting the above said services at the user locations.
- iv. SI should provide the Facility Management services for agreed duration each day coinciding with the business hours of that location and SI should also make arrangement for handling of emergency calls.
- v. SI shall submit a comprehensive FMS process, plan and deliverables for the entire OMS system including the field activities along with the proposal to the WBSEDCL for approval.
- vi. SI shall perform periodic health check-ups and troubleshooting of all the OMS systems and implement proactive rectification measures as required.
- vii. **FMS Team**: SI shall appoint FMS Project Manager of project in the FMS phase. FMS Project Manager will be single-point-of-contact for responding to all the queries from WBSEDCL or accepting its problem management requests. The SI shall deploy enough and qualified, skilled manpower to carry out the FMS services. It is imperative for the FMS staff to know the RFP and be able to deal with all the queries related to the OMS system. SI shall ensure replacement in not more than 7 days of the FMS staff whose performance is not found satisfactory by the WBSEDCL.

## 2.2.17.1 Monitoring Performance and Service Levels

Provide and implement tools and processes for monitoring the availability of assigned applications, responding to system outages with troubleshooting activities designed to identify and mitigate operational issues

- i. Reviewing the service level reports, monitoring the service levels and identifying any deviations from the agreed service levels
- ii. Monitoring of service levels, including availability, uptime, performance, application specific parameters, e.g. for triggering elasticity, request rates, number of users connected to a service
- iii. Detecting and reporting service level agreement infringements



iv. Monitoring of performance, resource utilization and other events such as failure of service, degraded service, availability of the network, storage, database systems, operating Systems, applications.

# 2.2.17.2 **DC DR Operations**

#### SI shall:

- i. Monitor, log & report entire equipment & module operation on 24x 7 x 365 basis
- ii. Perform periodic health checkup & troubleshooting of all systems & modules installed by consortium members & implement proactive rectification measures

## a) Server Administration/ Management

#### SI shall;

- iii. provide the server administration and monitoring service to keep servers stable, operating efficiently and reliably.
- iv. provide administrative support for user registration, creating and maintaining user profiles, granting user access and authorization, providing ongoing user password support, and providing administrative support for print, file, and directory, services.

SI's responsibilities shall include the below but are not limited to;

- i. Setting up and configuring servers
- ii. Installation of the server operating system and operating system utilities
- iii. reinstallation on event of system crash/failures
- iv. OS Administration for IT system
- v. Manage Operating system, file system and configuration
- vi. Ensure proper configuration of server parameters, operating systems administration and tuning
- vii. Regularly monitor and maintain a log of the performance monitoring of servers including but not limited to monitoring CPU, disk space, memory utilization, I/O utilization, etc.
- viii. Regular analysis of events and logs
- ix. Apply OS Patches and updates
- x. Monitor & verify logs files and periodically clean up log files
- xi. Ensure proper running of all critical services on the servers. Schedule and optimize these services
- xii. Maintain lists of all system files, root directories and volumes
- xiii. Resolving all server related problems
- xiv. Escalating unresolved problems to ensure resolution as per the agreed SLAs
- xv. Responsible for periodic health check of the systems, troubleshooting problems, analyzing and implementing rectification measures
- xvi. Logical access control of user and groups on system
- xvii. Responsible for managing uptime of servers as per SLAs

#### b) Database Administration Services

#### SI shall:

i. Undertake end-to-end management of database on an ongoing basis to ensure smooth functioning of the same.



- ii. Undertake tasks including managing changes to database schemes, disk space, storage, and user roles.
- iii. Setting and tuning system parameters
- iv. Building appropriate indexes, specifying large enough buffers and caches, aligning the database implementation with IT infrastructure, monitoring databases and applications, reorganizing databases, etc.
- v. Manage database upgrade or patch upgrade as and when required with minimal Downtime

## c) Backup/Restore management

SI shall perform backup and restore management in accordance with mutually agreed to backup and restore policies and procedures, including performance of daily, weekly, monthly quarterly and annual backup functions (full volume and incremental) for data and software maintained on Servers and storage systems including interfacing with WBSEDCL's specified backup media storage facilities; SI shall ensure:

- i. Backup and restore of data in accordance to defined process / procedure
- ii. 24 x 7 support for file & volume restoration requests
- iii. Maintenance and Upgrade of infrastructure and/or software as and when needed
- iv. Performance analysis of infrastructure and rework of backup schedule for optimum utilization
- v. Generation and publishing of backup reports periodically
- vi. Forecasting storage requirements for backup
- vii. Ensuring failed backups are restarted and completed successfully within the backup cycle
- viii. Monitor and enhance the performance of scheduled backups
- ix. Real-time monitoring, log maintenance and reporting of backup status on a regular basis
- x. Management of storage environment to maintain performance at optimum levels
- xi. Periodic Restoration Testing of the Backup
- xii. Periodic Browsing of the Backup Storage
- xiii. Management of the storage solution including, but not limited to, management of space, volume, RAID configuration, configuration and management of disk array, SAN fabric / switches, etc.
- xiv. Interacting with Process Owners in developing / maintaining Backup & Restoration Policies / Procedures
- xv. To provide MIS reports as per agreement

#### d) Business Continuity Services

 Provide business continuity services in case the primary site becomes unavailable due to any unforeseen circumstances.

# 2.2.17.3 Exit Management and Knowledge Transfer

At the end of Contract period, the SI will be required to provide the necessary handholding and transition support including all information as may be necessary and reasonable to effect as a seamless handover as practicable in the circumstances to WBSEDCL or designated staff or any other agency that is selected for maintenance of OMS System post completion of Contract with the SI.

The SI will provide all information, handholding and support for all the activities and information in its possession or control at any time during the exit management period. Anything in the



possession or in the control of SI, associated entity or sub OEM is deemed to be in the possession or control of the SI. The transition and handholding process will include but not be limited to, conducting a detailed walkthrough and demonstrations of the OMS System, handing over all relevant documentation, addressing the queries/clarifications with respect to the working/performance levels of the Data Center and Disaster Recovery Center, Communication Infrastructure, Meter API's/Software, Software Licenses, handover of customized source codes, policies and procedure document, conducting training sessions etc.

The Knowledge transfer activity is an integral part of the scope of work assigned to SI. This knowledge transfer activity will have to be carried out effectively, even in the case of end of Contract with the SI or is terminated before the planned timelines.

Please note that this is an indicative list, any other activity, over and above these, as may be deemed necessary by the WBSEDCL or designated staff or any other agency that is selected for maintenance of OMS System to meet the service levels and requirements specified in the contract are also required to be performed by the SI at no additional cost.

In the case of closure or termination of the project, the Parties shall agree at that time whether, and if so during what period, the provisions of this schedule shall be applied. The Parties shall ensure that their respective associated entities will carry out their respective obligations set out in this Exit Management Schedule.

#### 1. Transfer of Assets/ OMS System

- i. WBSEDCL shall be entitled to serve notice in writing on the SI at any time during the exit management period requiring the SI and/or its sub-contractors to provide the WBSEDCL with a complete and up to date list of the assets and System configurations, License details, Customized Code within 30 days of such notice.
- ii. WBSEDCL shall also be entitled to serve notice in writing on the SI at any time prior to the end of exit management period requiring the SI to transfer the overall control to WBSEDCL or its nominated agencies.
- iii. In case of contract being terminated prematurely by WBSEDCL, the WBSEDCL reserves the right to ask SI to continue running the project operations for a period of 3 months after termination orders are issued. In case of contract being terminated by SI, WBSEDCL reserves the right to ask selected SI to continue running the project operations for a period of 6 months after termination notice is served by SI.
- iv. Upon service of a notice under this Article, the following provisions shall apply:
  - i) All title to the assets shall be transferred to WBSEDCL, on or before the last day of the exit management period.
  - ii) Payment to the outgoing SI shall be made to the tune of last set of completed services/deliverables, subjected to the approval and compliance on contractual and SLA terms & conditions.

# 2. Cooperation and provision of information

During the exit management period:

 SI will allow the WBSEDCL or its nominated agency to access the information reasonably required to define the then current mode of operation associated with the revision of services to enable WBSEDCL to assess the existing services being delivered;



ii. Promptly on reasonable request by WBSEDCL, the SI shall provide access to and copies of all information held or controlled by them which they have prepared or maintained in accordance with this agreement relating to any material aspect of the services (whether provided by the SI or sub-contractors appointed by the SI). WBSEDCL shall be entitled to copy of all such information. Such information shall include details pertaining to the services rendered and other performance data. SI shall permit the WBSEDCL or its nominated agencies to have reasonable access to its employees and facilities to understand the methods of delivery of the services employed by the SI and to assist appropriate knowledge transfer.

#### 3. Confidential information, security and data

SI will promptly on the commencement of the exit management period supply to the WBSEDCL or its nominated agency the following:

- i. information relating to the current services rendered and customer and performance data relating to the performance of sub-contractors in relation to the services;
- ii. documentation relating to the Project's Intellectual Property Rights;
- iii. documentation relating to sub-contractors;
- iv. all current and updated data as is reasonably required for purposes of WBSEDCL or its nominated agencies transitioning the services to its Replacement SI in a readily available format
- v. all other information (including but not limited to documents, records and agreements) relating to the services reasonably necessary to enable WBSEDCL or its nominated agencies, or its Replacement SI to carry out due diligence in order to transition the provision of the Services to WBSEDCL or its nominated agencies, or its Replacement SI (as the case may be).

#### 4. Transfer of certain agreements

On request by the WBSEDCL or its nominated agency the SI shall effect such assignments, transfers, licenses and sub-licenses as WBSEDCL may require in favour of the WBSEDCL or its Replacement SI in relation to any equipment lease, maintenance or service provision agreement between selected SI and third party lessors, service providers, and which are related to the services and reasonably necessary for the carrying out of replacement services by the WBSEDCL or its nominated agency or its Replacement SI.

# 5. General obligations of the SI

- i. SI shall provide all such information as may reasonably be necessary to effect as seamless a handover as practicable in the circumstances to the WBSEDCL or its nominated agency or its Replacement SI and which the SI has in its possession or control at any time during the exit management period.
- ii. For the purposes of this Schedule, anything in the possession or control of the SI or associated entity, or sub-contractor is deemed to be in the possession or control of the SI.
- iii. The SI shall commit adequate resources to comply with its obligations under this Exit Management Schedule.

## 6. Exit management plan

SI shall prepare an Exit Management Plan for transfer of operations to WBSEDCL or its nominated agency or its replacement SI. In the event of termination or expiry of contract with WBSEDCL,



without affecting services to stakeholders adversely. The SI shall get this process approved by WBSEDCL. The Exist Management Plan shall include, but not be limited to, the following:

- A detailed program of the transfer process that could be used in conjunction with a replacement SI including details of the means to be used to ensure continuing provision of the services throughout the transfer process or until the cessation of the services and of the management structure to be used during the transfer;
- ii. Plans for the communication with such of the SI's sub OEM, sub-contractors, staff, suppliers, customers and any related third party as are necessary to avoid any material detrimental impact on Project's operations as a result of undertaking the transfer;
- iii. Plans for provision of contingent support to WBSEDCL and Replacement SI for a reasonable period after transfer.
- iv. The SI shall re-draft the Exit Management Plan annually thereafter to ensure that it is kept relevant and up to date.
- v. Each Exit Management Plan shall be presented by SI to and approved by WBSEDCL or its nominated agencies.
- vi. In the event of termination or expiry of Agreement, Project Implementation, or Service Levels, each Party shall comply with the Exit Management Plan.
- vii. During the Exit management period, the SI shall use its best efforts to deliver the services.
- viii. Payments during the Exit Management period shall be made in accordance with the Terms of Payment Schedule and Contractual conditions or as mutually agreed between SI and WBSEDCL.
- ix. An Exit Management plan shall be furnished by SI in writing to the WBSEDCL or its nominated agencies within 180 days from the date of signing the contract.



# Section III: Functional And Technical Requirements



3 Section III: Functional & Technical Requirements Specifications



# 3.1 OMS Specifications Overview

The OMS shall be flexible Outage Management System designed to maximize the performance of Purchaser dispatchers by working with a single SCADA/DMS/OMS user interface to help operators and dispatchers better handle system outages. Purchaser likes to automate the outage management capabilities (today manually done) with a commercially available OMS.

The OMS system shall have a graphical map display capability to include functionality for locating outages and crews on a geographic background of land containing the electric transmission & distribution system with user defined settings for display of various layers of graphical data (land, roads, poles, switches, all outages, predicted locations, etc.) at various scales. The graphics system shall be able to have different symbols for different types of crews and outages and the ability to suppress the display of lower priority calls and include normal pan, zoom, and locate functionality. Outages affecting sections of primary shall highlight the affected circuit(s). The graphics system shall allow manual placement of outages. A method of linking raster images, vector design files, jpeg, bitmap or gif files, and operating procedures or other documents to specific objects shall be included which will allow selection of the object to display the associated document, image or file. A second schematic view of the distribution system shall be automatically generated from the geographic view to assist in development of planned and un-planned switching procedures.

It is intended that the OMS will interface with the following systems:

- a. The WBSEDCL's Customer Information System (CIS)
- b. The proposed Power System Applications (DMS)
- c. The WBSEDCL's Interactive Voice Response System (IVR)
- d. Work Force Management System (WFM)
- e. The WBSEDCL's SAP system
- f. Mobile Field Force Management system (FFM)

It is intended that the network model be extracted from the WBSEDCL's GIS data model. It is proposed that the application software and database reside on the Purchaser communication network, but portions of the application are also accessible to selected locations (including a back-up control center) and to maintenance crew in the field.

Implementation of the integrated OMS is intended to provide Purchaser with the following functions:

- a. A graphical display of the electric sub-transmission and distribution network with dynamic symbols indicating outages, crews and predicted failure points
- A predictive engine to identify potential outage devices based on the number, type and location of customer outage calls
- c. A management information capability to allow management and executives access to summaries and details of outage status and progress via the intranet



- d. A database capable of calculating monthly, year-to-date, and annual industry standard outage statistics using the latest IEEE or other industry bench marks
- e. A predictive engine to provide information on expected restoration time
- f. Crew scheduling and tracking capability to manage crews and field personnel during outages
- g. A switch management module that supports the initiation of Power outage requests, schedules Power outage requests, generates suggested switching plans for both a geographical view and an operating schematic view of the networks.
- h. A set of geographical views of the facilities that provide both a geographical view and an automated operating schematic view generated of the networks
- i. A set of field-based tools that facilitates status reporting and outage completion collection.
  - j. Purchaser has identified two business processes wherein a fully deployed outage management system will provide benefits to Purchaser. In order to achieve these process benefits, certain functionality for an OMS solution must be present. The two processes are described below.

# 3.1.1 Planned Outage Business Process

Planned outage is the process to de-energize a portion or an entire electric circuit. Events that trigger this process include work identified (internal or external to Purchaser) that require a Network outage or section of the network outage, requests from the Project and Maintenance department or the Control Centre and certain customer requests to Purchaser. Results of the process are that the system is returned to normal state and that the identified work is completed.

A critical aspect of this process is that a high level of communications is required to convey system status to customers for planned outages as for them it is unplanned outage. The outage management system (OMS) must provide the capability for real-time status of the system as well as provide switch status and orders.

When planned outages take place, there are several aspects of planning, communications and performance of the work that involve best practices related to outage management viz.

- a) Advance notifications
- b) Management of Power outage requests
- c) Work Permits
- d) Generating switching plans to support the Power outage requests
- e) Status updates
- f) Work order completion



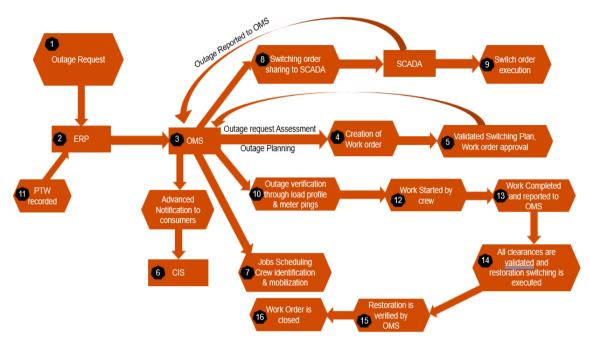


Figure 3: Planned Outages

#### 3.1.2 Advance Notifications

For planned outages, it is best practice to notify affected customers in advance so that they have adequate time to make appropriate decisions or alternate plans. This is very important for commercial and industrial customers, as well as residential customers. Purchaser will notify commercial and industrial customers by phone. Notifications are provided to the Customer Service Call Center who may receive calls from affected customers. The Purchaser Corporate Communications Department would also be notified at this time.

# 3.1.3 Status Updates

When field crews performing planned work encounter conditions that will extend the duration or extent of planned outages, it is desirable that they provide a timely update to the expected time of restoration. This information may be reported to their field supervisor or Control Centre, but the key element is that the Customer Service Call Center is also informed so that they have accurate and timely information to share with customers when they call. For larger or more critical customers, this updated information is generally passed on directly and proactively. At Purchaser, the Customer Care Department will address the notification of key industrial and commercial customers.

# 3.1.4 Work Order Completion

The practice related to the closure of work order completion is that the field crew promptly provides notification when their work is completed, submits preliminary information about changes made to the energized system, and promptly closes the associated work orders or tasks. These steps are necessary to inform the Customer Call Centre that subsequent outage calls are unplanned and should be handled as trouble calls, to provide Control Centre Engineers with immediate information about the distribution system so they can operate it safely while records are being updated, and to allow the records updating process to proceed in a timely manner.



## 3.1.5 Unplanned Outage Business Process

Unplanned outage is the business process to manage events surrounding unplanned outages, including communications to clients on outage status, and restoration of the electric circuit to energized condition. At Purchaser, a sustained outage is greater than two-minutes. Events that trigger this process include customer calls to the Customer Call Centre, IVR indications from customers, SCADA alarm, and calls from external public or essential services / private agencies such as the fire department, police or large customers. Results of this process are that the electric system is restored, and follow-on work is requested.

The outage management system technology will address this process and its activities. OMS will handle the management of trouble calls to generate trouble tickets, as well as provide the analysis of the outage calls to identify the most probable failed device or devices that is causing the outage. The OMS will provide the functionality to dispatch this information to the field and get current status information from field personnel on the extent and nature of the outage, estimated time to restore, and request for assistance. Status information, especially the estimated time to restore, is sent back to the Customer Service Call Centre through the CIS and IVR to keep customers updated. This information is also passed to internal departments such as Customer Care Department and Corporate Communications who in turn can respond to requests from the large customers and the media in a timely and accurate manner.

When unplanned outages occur, often the first indication a utility has is a call from a customer or outside agency. It has never been considered practical or economically feasible to monitor all customers to detect when service has been interrupted. For this reason, it is general practice to rely on customer calls for detecting unplanned outages, with the exception of a limited number of large customers, who may warrant direct monitoring. Best practice using an OMS with respect to unplanned outages, therefore, mainly relate to how Purchaser effectively handles trouble calls in the following areas:

- g) Call taking
- h) Overflow call handling
- i) Outage status information
- j) Callbacks
- k) Call Taking

It is common practice that customer trouble calls are entered directly in the Customer Information System (CIS). Using the CIS user interface enhances the productivity of the Customer Service Representative, since a single user interface with which they are most familiar with is most efficient. Also, the CIS often provides more robust means of searching for a customer record and payment histories than an outage management system may have. All unplanned "No Current" call from the customers will be directed to the OMS from the Call Centre.

#### 3.1.6 Overflow Call Handling

Purchaser will have means available to handle the overflow calls that cannot be taken immediately by the Customer Call Center. Purchaser typically addresses overflow call handling effectively using a combination of interactive voice response (IVR) units, outsource, and available internal staff trained in taking customer calls during storm



conditions. During extreme storm situations, Purchaser may use an outsource service located in Kolkata that have access to WBSEDCL's Customer Information System to augment the Purchaser Customer Service staff.

## 3.1.7 Outage Status Information

The most important and desired best practice in customer care is to provide outage status information readily to the utility's Customer Call Centre and interactive voice response units. The two most important pieces of information that a customer without power (No Current) desires to know are, first, that the electric company knows of my outage and is working on it, and secondly, how long will it take to restore power. Currently at Purchaser, operations Control Centre Engineers manually keep the Customer Call Centre informed about outages, the extent of the outage and the estimated time to restore. This provides the information that customer service representatives use to explain details of the outage to customers that call or to proactively call customers to inform them of outage status.

#### 3.1.8 Callbacks

Often during a storm, a single customer's service will be interrupted concurrent with the outage of a larger portion of the feeder-circuit that serves the customer. When such a nested outage occurs, it is difficult to know whether the restoration of the larger circuit portion has restored all customers. Certain situations may require call back to some of the affected customers in an attempt to determine whether any single customers remain without power. Again, a combination of using both Customer Service Representatives and the IVR system to perform callbacks and to generate new outage tickets if required.

# 3.1.9 Outage Analysis

The OMS will provide an analysis engine that processes the trouble call information received from the trouble call entry system, from the IVR system and device state change messages from the DMS/SCADA system. The outage prediction engine will generate the most likely device and an estimated restoration time for the probable outage event.

# 3.1.10 Probable event prediction

The outage prediction engine will generate a probable outage event based on the currently defined set of heuristic rules that typically takes into consideration: number of calls received, time between calls, trouble call codes, network topology, currently available crews, currently dispatched crews and type of probable outage device; the outage prediction engine will generate a probable outage event.

The system shall support incoming calls that have multiple call codes on a single call that indicate whether there may be an outage, there is an emergency situation, there is a need for maintenance or there is a request for service. The system shall support call types that indicate a service or premise level outage and it will not try to roll these types of events into events upstream, nor will the system try to group and close these events when upstream events are restored and completed.

The system shall support automatic notification of confirmed or real outages via an automated interface with a SCADA system and automatically group all future related calls to the outage event.



The system shall support a catalog of named configurations that can be loaded and put into production during special storm conditions.

The system shall support multiple voltage classes in its topology model used to predict outage events:

- a. Sub-transmission Voltages
- b. Distribution Voltages

The system shall use the transmission substation breaker as its source for sub-transmission category outages and trace to source functionality and distribution substation breakers as its source for the same in distribution category outages. Describe the system's algorithm(s) for breaking up outage prediction zones across sub-transmission and distribution voltages. Assume connectivity exists in the topology model through the distribution substation.

#### 3.1.11 Time estimation

The analysis engine shall also provide estimates of restoration time for the Control Centre Engineers, the CIS interface, the IVR interface, and management summaries through the intranet. These estimates shall be based on configurable heuristic rules and shall vary depending on weather, time of day, day of week, number of other outages within the same area and/or feeder, number of crews dispatched, and the number of crews available for dispatch. The Control Centre Engineer shall also be able to over-ride the estimated restoration time for any given outage based on field conditions reported by the crews. This Override will be tracked in a summary table with the name of the Control Centre Engineer, Time of occurrence, override and current value. The system shall generate new estimated restored times for all events that have been extended beyond their original estimated restore time because of the lack of resources to dispatch to.

The system shall assign an estimated restoration time based on device type, number of active outage events, and number of active crews. The system shall assign a start time to the outage event based on the earliest of the first call associated with the event, or the automated interface message that raised the event.

#### 3.1.12 Power outage Requests and Switch Order Management

The system shall automatically generate a suggested switching order to isolate the selected group of devices or sections of circuit based on load flow analysis, minimum number of switching steps and the current network configuration.

The switch order management module shall support both planned and unplanned switching. Before actually issuing a restoration switching order step, the user will be able to see if any voltage violations will result because of the new circuit configuration. The system needs to support the planning of future Power outage requests (switching orders) and in particular provide help in the coordination of future Power outage requests that cause the same facility to be operated. The system shall provide a graphical user interface (GUI) that allows the user to identify the area to be isolated and the system shall generate a recommended switching order based on the results of a load flow analysis and minimizing the number of switching steps.



Alternatively, the GUI interface shall allow the user to manually open and close devices and record the actions into a switching order. The user will be provided a planning or study mode that allows the user to test and verify his switching orders without affecting the operational configuration as seen by the outage management users. The switch management module shall provide a catalogue of switching templates that may be created by facility. The user shall be able to query the catalogue of switching templates and instantiate his current Power outage request based on the selected template. This will ensure a uniform approach to isolating the same facility.

The system shall have the provisions to allow the user to do the following actions

- a. The user shall be able to add safety and operational steps at the appropriate locations in the switching order. The user shall also have the capability to insert additional instructions, checks or otherwise edit the system generated step.
- b. The user shall be able to group multiple work orders and manually entered Power outage requests and generate a single switching order for that set of work orders.
- c. The user shall be able to create multiple switching orders for a single work order or Power outage request.
- d. The user shall be able to generate a list of affected customers for each planned outage and use the list to generate door hangers, mailers and phone calls.
- e. The user shall be able to generate additional switching orders based on switching orders that have been saved.
- f. The user will be able to adjust the steps within a switching order after it has been started. To support this, the system shall support alphanumeric numbering of switching steps within a switching order.
  - The switching order management tool shall have the following functionalities as
- a. The system shall pre-fill in the switching header from the details it receives from a work order.
- b. The system shall support an import mechanism to load existing switching templates and historical switching orders from a RDBMS.
- c. The system shall track all work orders supported by a switching order.
- d. The system will provide assistance to the user once he has indicated the start of a planned switching order has been executed in the field. It will timestamp the switching steps as the Control Centre Engineer acknowledges them. It will keep the active step highlighted within the switching order for the Control Centre Engineer.
- e. The system will provide assistance during the planning of Power outage requests by displaying a list of existing planned switching orders that affect overlapping facilities with the Power Out request's isolation area during an user definable window of time (within next 2 days, week, 2 weeks, etc.)
- f. The system will provide signature review cycles for planned switching orders.



- g. The system will notify the work management system when all necessary switching orders have been created for a work order/Power outage request.
- h. The system shall have a module for users to manually enter Power outage requests as well as supporting the interface with a WMS to accept Power Out requests from an external system.
- i. The system shall support GUI based management screens for users to display, sort, and group Power outage requests.

# 3.1.13 Outage Management

The system shall allow the user to perform the following functions

- a. The user shall be able to sort his list of outage events associated with his area of control by any combination of the displayed sets of fields
- b. The user shall be able to select any outage event and see the detailed customer called-in comments entered by the customer service representative associated with the predicted or confirmed event.
- c. The user shall be able to manually enter in the start time for an outage event. The system shall save all outage events that had their start times manually overridden in a table, identifying the user, time of override, current and overridden values.
- d. The user shall be able to create an event anywhere along a circuit segment or at advice for a hazardous/emergency call or add non-grouped calls to an event.
- e. The user shall be able to create a temporary jumper to capture the current configuration of a circuit as reported by the crews.
- f. The user shall be able to add one or more tags/notes to a device.
- g. The user shall be able to raise and remove conditions on a device as they are created and removed in the field to indicate:
  - i. grounds exist
  - ii. a device in local mode
  - iii. a device in lightning mode
  - iv. the communication to device has failed
  - v. a device in loop scheme
  - vi. a device in auto reclosing mode
- h. The user shall be able to generate a tabular list of all devices that are currently operating in their abnormal state.
- The user shall be able to open and close a device by selecting it graphically and performing the operation. Please indicate if the proposed system supports select before operate approach.
- j. The user shall be able to enter all outage event details required to complete the outage.



- k. The user shall be able to enter appropriate information to generate a follow-up work order for the outage event.
- I. The user shall be able to push any predicted outage event upstream to the next device.
- m. The user shall be able to push any predicted outage event downstream. The system shall generate a new predicted outage for each of the devices (typically lateral fuses) that are immediately downstream from the currently predicted outage device.
- n. The user shall be able to generate a tabular list of work orders that were created for an outage event and see their current status information or completion dates.
- o. The user shall be able to enter completion details for partial restoration events.
  - p. The system shall also support the following functions:
- q. The system shall be able to create a work order request based on the previously entered information in the work management system.
- r. The system shall track all work orders that were created for an outage event.
- s. The system shall keep track of all partial restoration events that were part of restoring all customers. Each partial step shall have its own ending time stamp for the set of customers it restored.
- t. The system shall log every device open/close action and record the person who performed the action.
- u. The system shall be able to generate a list of executives and managers to be used to page, email or phone with the related outage details when a set of critical customers are affected by either a probable or confirmed outage event.
- v. The system shall automatically refresh all users' displays that contain an event that has just been created or restored.
- w. The system shall automatically refresh all users' displays that contain a device whose status has changed or had an operating condition raised or removed.
- x. The system shall accept schematic drawings as input and generate the connectivity to the topology model based on the devices that appear on both the geo-reference view that has already been loaded from the GIS and the new schematic that is being imported.

### 3.1.14 Intranet Access

The necessary modules to allow full outage analysis, dispatching, switching and geographical map display via a standard browser for use at different locations other than the system Control Centre shall be provided. Access to these functions shall be from the Purchaser corporate intranet.

### 3.1.15 Intranet Management Summary Access

The necessary module to provide management summary information for Purchaser executive and management through the corporate intranet shall be provided.



### 3.1.16 GUI functional requirements

The system shall provide the user with a seamless view of the company's complete set of maps. That is, the user will not have to manually load map sheets or map files for display, but that the system will keep the physical storage structure invisible to the user's navigation and display functions. The system shall support scale dependent visibility of features. The system shall automatically turn on and off specific features based on the current display scale. The system shall use line color or symbology to indicate the number of phases on a section of circuit. The system shall use line color to differentiate circuits. To support this, the system shall use its own color map to generate the color to be used for each circuit such that no circuits that could be tied or jumpered together have the same circuit color. The system shall automatically generate its single circuit view and 3-phase schematic backbone view from its topology model each time the topology model is reloaded from the GIS.

### 3.1.17 Navigation (Office: Control Centre Engineers, Supervisors)

The OMS shall have both tabular and geographical map display capability. The graphical display shall include functionality for locating outages and crews on a geographic background of land and the electric sub-transmission and distribution system with user-defined settings for display of various layers of graphical data (land, roads, poles, switches, crew locations, predicted outage location, etc.) at various scales. The graphical display shall be able to have different symbols for different types of crews and outages and include normal pan, zoom, and locate functionality. Outages affecting sections of the sub transmission and/or primary distribution system shall dynamically highlight the affected line(s)/circuit(s) by changing the line/circuit segments to a de-energized color status. The system must provide automation that directly supports how Control Centre Engineers be able to find the outage geographically in case they need to dispatch instructions over a radio to the crew, they need to zoom out to its circuit level view to see if there are other related events, and in some cases they need to be able to zoom out to the three-phase backbone view to see if there are related events on other circuits.

The function shall include current predicted outages, emergency alarms, outages being worked by crews and recently completed outages, listing customers affected by an outage and reviewing the customer supplied notes associated with specific trouble calls.

Following functions shall also be considered:

### a) Pan and zoom facility for Navigation

The system shall support navigational aids that will be based on the information Control Centre Engineers use to find locations. A sample subset of potential items is:

Facility Ids: switch number, breaker number, Pole number & street name

Customer info: name, phone, address

System shall zoom and center on the device the customer is attached to-Typically a transformer or primary meter. Street address, cross street, Circuit Name, Line Name, Substation Name, saved user view name, Outage Event ID, Crew Name, Switching Order. For all such navigational aids supported, please describe the behavior of proposed system when the user's input results in a set of values being returned instead of a single location.

The system GUI shall also allow the following functionalities



- a. The user shall be able to manually toggle on/off feature classes or sets of feature classes to be displayed.
- b. The user shall be able to select a device on any graphics display and be able to toggle/cycle through all of the views that the device is graphically depicted on. This shall include the device's representation on its geo-reference view, on its single circuit view, on its 3-phase schematic backbone view, and for substation equipment, on its substation one-line view.
- c. The user shall be able to select a device or line segment within a loop and go to its open point.
- d. The user shall be able to select an outage event from its tabular/textual displays and go to it on a graphical view.

### b) Facility Information

The graphical display shall provide the user with the ability to lookup related information about a selected facility. These include engineering/construction type of attribution typically managed in the GIS, generated operating attribution created by a load flow analysis program, and electrical network-based connectivity information indicating customers serviced by the selected facility or other conditions downstream from the selected facility that the Control Centre Engineer would typically need to know about. The system shall maintain all device states, tags, notes, conditions, jumpers, crew locations and crew assignments after its topology model has been updated from the GIS.

- e. The user shall be able to look at the selected facility 's attribution.
- f. The user shall be able to view all associated load flow analysis results associated with the selected facility.
- g. The user shall be able to view the count of customers served by the selected facility by phase.
- h. The user shall be able to view the list of all the customers as well as the list of the critical customers served by the selected facility by phase.
- The user shall be able to view the standard operating procedures associated with the selected facility.
- The user shall be able to view all conditions that are downstream from the selected device.
- k. The user shall be able to view all current and future scheduled work orders from both the work management system and the maintenance and inspection system that the selected device is a member of. For current work in progress, the system shall display the status of the work orders.
- I. The user shall be able to toggle on/off the selected facility class' annotation.
- m. The user shall be able to view all current and future scheduled work orders from both the work management system and the maintenance and inspection system that the selected customer will be affected by. For current work in progress, the system shall display the status of the work orders



### c) Tracing (Outage Trouble Analysis Aids)

The graphical display system shall provide the Control Centre Engineer with trouble shooting aids. These are mainly based on using the network topology as supplied by the GIS and further updated by the Control Centre Engineer to reflect the currently operating configuration of the sub-transmission and distribution systems.

The proposed system shall support the following functions:

- a. The user shall be able to select a device or segment of circuit and generate a trace set from the selection downstream to its distribution transformers, open points and tie switches.
- b. The user shall be able to select a device or segment of circuit and generate a trace set from the selection upstream to the previous protective or sectionalizing device.
- c. The user shall be able to select a device or segment of circuit and generate a trace set from the selection upstream to its source.
- d. The user shall be able to select a device or segment of circuit and generate a highlighted trace set from the selection to the next occurrence of a specific device type: fuse, switch, recloser, or sectionalizer in the user specified direction.
- e. The system shall keep all trace sets highlighted while the user pans and zooms until the user deactivates the highlighted trace set.
- f. The user shall be able to select a device or segment of circuit and generate a highlighted trace set from the selection to its set of sources.

### 3.1.18 Reporting

The reporting module shall provide all industry standard statistical indices by circuit, reporting area, and company summaries. These indices shall be further categorized as with and without major storms. These standard reports shall be produced monthly, quarterly, and annually. The reporting module shall provide daily operational reports. These operational reports shall be produced at the end of each shift or on demand with ad-hoc previous date & time ranges.

The system shall provide a set of daily operational reports:

- a. Outage Summary
- b. Outage Detailed
- c. Circuit Summary
- d. Line Summary
- e. Area Summary
- f. Crew Summary
- g. Crew Detailed
- h. Daily Outage Completions
- i. Outage Completion Forecasts
- j. Crew Resource Forecasts
- k. Abnormal Device Summary
- I. Abnormal Device Detailed
- m. Tomorrow's Switch Plans
- n. This Week's Switch Plans



- o. Today's Planned Outages
- p. Tomorrow's Planned Outages
- a. Next Week or Next Four Weeks
- r. Flash Report

The indices shall be further categorized as with and without major storms. These standard reports shall be produced monthly, quarterly and annually. Current operations reports will be available by circuit, operating district and reporting geographical area.

The system shall provide an ad-hoc reporting environment that allows users to develop their own reports against the system's data mart and save the same in a catalogue of reports. It shall also provide reporting and read only access of graphical and tabular screens for customer service and management users.

The user shall be able to view any report definition and copy it to reuse its logic as a starting point for a new report. The user shall also be able to designate Microsoft Excel as his output format and the system will start up Excel and load the results of his report into Excel. The user shall be able to print the results of any reports that are executed.

The reporting system should generate standard I.E.E.E.E. Reliability index reports for user supplied time frames. Reports to include:

- System Average Interruption Frequency Index (SAIFI)
- System Average Interruption Duration Index (SAIDI)
- Customer Average Interruption Duration Index (CAIDI)
- Customer Average Interruption Duration Index (CAIDI),
- Customer Average Interruption Frequency Index (CAIFI),
- Momentary Average Interruption Frequency Index (MAIFI)

### 3.1.19 Work Force Management (WFM)

Purchaser defines Work Force Management (WFM) as an information system that prioritizes, schedules, resources, and dispatches work to field personnel. Work types can include trouble orders to field trouble men during outage conditions, same day orders for customer services field crews, crews performing routine maintenance and business continuity inspection work, and crews performing construction work. WFM systems can support an OMS with functionality to dispatch trouble orders generated by the OMS to manage field personnel during outage conditions. WFM can also be used to dispatch daily work orders to personnel who perform routine field work.

Purchaser is actively seeking WFM functionality to support field personnel. The technology is seen as a critical component to support of the outage management system as well as address planned short-duration (same-day) work, such as customer service orders,



collections, maintenance and inspections and trouble orders. The benefits of WFM is increased field personnel productivity through optimum order scheduling and routing, equitable distribution of workload to available resources, and the ability to meet customer date and time preferences by offering customers smaller appointment windows. Effective scheduling and resource management of field personnel eliminates multiple visits to the same premise, helps to minimize overtime and reduces vehicle expenses from reduced travel times.

The following are high-level functional requirements for WFM system technology to meet WBSEDCL's future state process definitions.

### 3.1.20 Scheduling

The necessary interface mechanism to send both pre-assigned trouble work, and unassigned trouble work to a scheduling module is part of this project.

The functions carried out by the scheduling module of the Work force management system can be broadly explained as

- a. Ability to prioritize and book appointments in real time. The system shall generate a list of 10 alternative time slots if the requested appointment time slot is not available.
- Assign work based on field worker availability, work areas, skills, equipment and service Contracts
- Schedule work to meet customer time preferences
- d. Schedule work to optimize network performance metrics

The system shall automatically generate a schedule to be used by either the auto dispatching module or a human Control Centre Engineer. It will be based on the trouble call codes, the location of the predicted device and the location and skill types of the crews that are active.

The system shall generate a resource loaded schedule of distinct work order tasks assigned to distinct crews for the next 6 calendar weeks. The user shall be able to generate a schedule for this week, this month, or the next two months and either print a hard copy or post it to all crews personal Calendars

The system shall accept multiple work order types to be scheduled:

- a. Service (turn on, shut off, meter checks)
- b. Maintenance & inspection
- c. Trouble
- d. Emergency
- e. Construction work orders
- f. Switching orders
- g. Street light service requests



The system shall accept cancellation requests for all work order types even after the work order has been scheduled and dispatched to the field.

During major storm events, the system will take back all work orders from their scheduled crews, generate a new schedule based on the estimated restoration times for all of the known outages and generate a list of customer executives to be paged and/or a list of customers to be called or to receive a mailer to notify them that their work order has been rescheduled past its need date. The system shall accept as input the personal calendar for each crewmember.

The system shall treat emergency and outage types of tasks with higher priority and schedule the closest qualified crew to be dispatched.

The field crew will be given the option to keep their previously assigned work orders for the day when they receive a trouble event. Automatic rescheduling of all work order tasks sent back by field crew due to the new trouble work order tasks shall be done. The user shall be able to enter the company's workday calendar and shift definitions.

The system shall also have the functions required to deal with the inter work order dependencies of a work order to be auto scheduled and dispatched with its related work orders.

### 3.1.21 Dispatching

The dispatching module shall allow the following dispatching business models

- Centralized dispatching
- ii. De-centralized dispatching

During normal business hours, off-hours and during moderate storm situations, dispatching typically will be done centrally. Some severe storm situations may require de-centralized dispatching. The dispatching module shall allow a seamless transition from centralized to de-centralized and back to centralized dispatching, with appropriate communications and status reporting functionality to ensure the Control Centre Engineers fully understand the situation in the field at the transition time, i.e., from centralized to decentralized and vice versa.

The dispatching module shall allow dispatching of multiple outages to a single crew and multiple crews to a single outage. The dispatching module shall also provide crew management functionality including tracking crew makeup, allowing creation of crews, allowing additional or removal of personnel from crew and changes in crew make-up, allowing combining of crews at a single outage, searching for individual crew members by name, tracking total time worked and continuous time worked by individual crew member, tracking when meals or rest periods are due, tracking equipment needed by or assigned to crews, etc. It shall also allow for the dispatching of bidder (non-Purchaser) crews.

The system shall support the following modes of operation for field dispatching:

- i. Automatic mode
- ii. Manual mode



### a) Automatic mode

The system shall auto dispatch to the field a complete days' worth of work before the crews sign on for their shift. The user shall be alarmed when the system attempted to auto dispatch a trouble or emergency work order and the crew hasn't acknowledged it within a user defined period of time. There shall be a provision to dispatch all work orders previously dispatched to a crew who doesn't sign on within user specified time interval from his shift's scheduled start time.

### b) Manual mode

The user shall be able to manually dispatch a crew to a work order by dragging the crew to the work order or the work order to the crew. The user shall be alarmed when a crew is in jeopardy of missing his current work order's estimated end time, so the Control Centre Engineer can proactively take over the rest of the crew's work orders and reassign them.

The system shall ensure two different crews with similar skill sets won't be assigned work orders on the same street and area in the service territory.

The system shall display the current location of the crew if the system supports AVL.

The system shall be able to track when a work order has been dispatched,

- a) Acknowledged by a crew
- b) Crew is in route
- c) Crew has arrived at the location
- d) Crew has restored service
- e) Crew has completed work order.

The system shall automatically re-dispatch all work orders not marked to stay with the crew at the end of the shift.

The system shall be able to send to the field either with the original trouble work order header information or as requested by the field, a map of the probable outage device, a list of critical customers affected, a list of customers who have called in, a list of all customers affected including the actual text messages collected from customer service representative and the alternative views that contain the various customer lists plotted on the outage map as well.

### 3.1.22 Crew Management

The WFM shall provide management tools to help the Control Centre Engineer keep track of where his crews are during trouble events. The crews are made up of crew members, trucks and special equipment. For each individual crew member, the system shall contain his contact information:

- a) Cell number
- b) Radio number
- c) Truck id
- d) Emergency contact number

The system will generate the forecasted resource skill requirements for all work orders with need dates within the next 6 months.



The system needs to support the true dynamics of a storm event and allow the Control Centre Engineer to quickly merge/split existing crews, create new crews based on bidder crews, assign additional outage events to crews to be worked that are in close proximity to the event they are currently working. For shift and holiday support, the system shall be integrated with the call out roster to automatically page and assign outage events to crews acknowledging their pages.

The system shall track hours on the job for each individual crewmember. The system shall generate an alarm that color codes the crew on both the graphical and tabular displays they are displayed on when any member of the crew has reached a user definable threshold of hours on the job. The user shall be able to generate a list of all such crew members.

The system needs to track and alarm the Control Centre Engineer when crew members need to go on break or when they are coming up to the end of their current availability. This system shall also alarm the Control Centre Engineer when a crew member is overdue for a meal or rest period.

The system shall be able to generate the number of additional crews required based on the current set of known and predicted outages and the number of active crews, their remaining availability and the user entered desired outage completion time.

The user shall be able to list for each crew, its members and the hours (and partial hours to the tenth of an hour) currently on the job for each crew member and all events that have either been dispatched or assigned to the crew, thus marking a crew as active or inactive.

The system shall allow the user to view the following information:

- a) Available crews
- b) Crews that have been dispatched to trouble events in the field.
- c) Crews who have no trouble events dispatched or assigned to them.
- a)The system shall generate and display for each crew the estimated time they have left on the trouble events that have been dispatched or assigned to them. Also, the system shall provide remote access (via a secure Web based application) for all of its crew management functionality.

### 3.1.23 Order Management

- a) Ability to manage task assignments and dispatch of orders to field personnel
- b) Manage precedence relationships between jobs
- c) Monitor task status
- d) Field entry of device status, outage status and outage completion
- e) Collect and validate work results

### 3.1.24 Field Device Requirements

List mobile hardware platforms supported. Include Operating System supported, basic system requirements required, and which components/modules/products of your solution are required for the following hardware types:

- a) Laptop Computer
- b) PDA



- c) Tablet PC
- d) Hand Held Devices

### 3.1.25 Outage Web Portal

The OMS shall provide a customer facing outage mapping portal (i.e. on corporate website) that geographically displays known outages and provides basic outage status information including the number of current outages, number of affected customers, and expected restoration times per outage. Ensure outage mapping portal dynamically updates based on new, dispatched or restored outages.

The OMS shall have an optional customer facing Outage Web Portal.

Verified outages shall be automatically pushed from the OMS to the Outage Web Portal without the need for operator intervention. Outage Web Portal application should have the ability to:

- a) View locations and the extent of existing outage cases
- b) View outage ticket information such as cause, estimated time of restoration and information messages from the system operators
- c) Allow customers to submit outage reports
- d) Allow customers to view a list of all planned outages

The Outage Portal shall use mapping technology such as Microsoft Bing Map, Google Map or Open Street Map as the underlying background mapping technology.

The outage pushpins on the map point to where the outage is located. Clicking on one navigates to and highlights the area associated with that outage and displays an outage ticket containing the outage details.

The Outage Web Portal application can be used from a desktop, a laptop or a tablet; however, the application is optimized for handheld mobile devices such as smartphones.

Operators shall have the ability to update the following information on the Outage Web Portal including:

- a) Estimated time of restoration
- b) Outage Cause
- c) Pre-defined message from a dropped down list of pre-defined messages
- d) Free form message

The outage portal shall be connected in real-time to the OMS system, however it should be isolated on its on DMZ and can only access the OMS via middleware server to ensure the security of the system.

### 3.1.26 Notifications

The OMS shall be able to integrate with IVR and corporate website to provide notification of planned and unplanned outages status via customer phone lines (work phone, cell phone and home phone, etc.), emails, or text messages to customers.



The OMS shall provide method(s) to contact a customer electronically with outage status updates using IVR, Email, and SMS text messaging.

### a) Tabular List

All dynamic lists have sorting capability on any column, including the capability to have multiple nested sorts, in order to rank and sort outages in an order that is quick to locate information (i.e., medical alert customers). All dynamic lists have filtering capability, with the ability to filter on multiple fields. The sorts in the outage list can be sorted at a minimum with the following column information: customer hours and minutes interrupted priority customers, customer type, outage types and number of customers out. The OMS dynamic list of grouped calls supports a dynamic status indicating current status of event (acknowledge, crew on site, restored).

OMS have the functionality to generate estimated restoration times for each outage with the ability for manual override of the calculation. The OMS solution has the ability to provide an estimated number of customers out of power (versus actual), per outage prediction. The OMS dynamic list shall have the ability to filter on multiple fields and the ability to export in xml format or other reporting generators.

### 3.1.27 Automatic Vehicle Locator (AVL) Integration

The OMS shall have the ability to be integrated with an AVL system to receive as a minimum the following information:

- a) Vehicle GPS Coordinates
- b) Vehicle travel direction

User selectable symbols can be used to represent different types of vehicles. Vehicles can be positioned on the operator user interface to allow operators to quickly view vehicle locations. The distance of vehicles from an outage should be available to allow dispatchers to easily select the nearest crew to an outage.

### 3.1.28 Mobile Crew Outage Client (MC)

The MC should allow the extension of the OMS onto mobile devices such as laptops, tablets and smart phones. Once work items are added the assigned crews shall receive email and/or SMS notification to notify them of new work items available to them. Crews will have the ability to view work items assigned to them including the following minimum details:

- a) Location of the work item
- b) Description of the work item
- c) Assigned crew
- d) Scheduled start time
- e) Scheduled stop time
- f) Work order
- g) Switch Order
- h) Clearance
- i) Crews shall have the ability to update the following information as a minimum:
- i) Estimated Time of Restoration



- k) Outage Cause
- I) Work status

The MC client shall show the location of the outage on a map. The map should be optimized for viewing on laptops or tablets and based on industry standard mapping technology from Microsoft Bing, Google Maps or Open street Maps.

The MC shall have real time connectivity to the OMS system via a secure middle-ware server to ensure that any real time changes on the OMS are available to the MC Client.

### 3.1.29 Non-Outage Call/Events Handling Application

The OMS shall have the ability to handle tickets which may or may not be related to outages

The OMS shall have the ability to distinguish between Emergency Tickets and Service Tickets. Emergency Tickets are related to critical items from a network and public safety point of view. These must be addressed before an outage can be closed. Visual indicators must be available to flash in order highlight and bring operator attention to any outstanding emergency items.

Service Tickets are related to non-outage related items such as tree branch trimming, maintenance work, etc. These should be maintained on a separate list which is easily accessible to the operator.

### 3.1.30 Social Media / Public Website Integration

The OMS shall have the ability to share outage information through integration with social media platforms such as Twitter. The OMS shall be configurable to allow it to tweet outage information automatically. The operator should have the optional ability to tweet information about an outage directly via the OMS GUI. Pre-defined messages can be defined to ensure any tweeted messages are within the corporate policy for the organization

The system shall have the ability to add information to the tweets such as ETOR, location of outage and a short link to the Outage Web Portal. The OMS shall have the ability for tweets to be sent to a corporate communications person to allow them to approve tweets before they are posted.

### 3.2 General Requirements

Bidder shall ensure that existing systems and the new solutions offered by them are tightly integrated and do not remain stand-alone. All required external systems shall be integrated using an integration middleware layer. The integration is expected to be Industry Standards Based on IEC 61968-1 Bus (SOA Enabled on enterprise Bus) using CIM/XML, OPC, Web Services etc., which is, on-line, real time or offline where appropriate and shall operate in an automated fashion without manual intervention. Bidder shall consider necessary interfaces, provisions/software linkages in the proposed solution so that the required enterprise systems may be integrated seamlessly.

The system shall utilize an IEC 61968 and IEC 61970 compliant interface. The system shall enable export of all data via a CIM-XML interface and shall utilize modelling from IEC 61968 as appropriate. The profiles supported should be CDPSM (Common Distribution Power System Model) and CPSM (Common Power System Model). Messaging interfaces shall be



based on model neutral interfaces based on the IEC 61970-40X series for access to real-time and historical data and use the IEC 61968-3 and IEC 61968-9 standards for messaging interfaces.

Further the proposed Interfaces, socket, Adapters, software tools/applications shall be used for Integrating with WBSEDCL's enterprise Systems being deployed for real-time & historical data exchange to and from the SCADA & OMS & Other WBSEDCL's Systems.

Any Change in the electrical network system which will be captured in GIS (ESRI/In house) database of Purchaser shall be automatically added/modified to proposed outage management system. e.g.: A new asset addition, should be able to be exchanged through Model Information between the enterprise system and outage management system without programming or configuration effort automatically & adjust and accept the Model and reconfigure its databases, and shall provide updated results. OMS bidder shall provide CIM/XML Adapters for their System and CIM/XML Model repository for data and model exchange with other enterprise Systems.

### 3.2.1 Data Exchange with GIS System

The GIS will interface using CIM/XML adapters to other applications. OMS shall have model aware adapters to read from GIS network model repository and update its own models. The system shall utilize an IEC 61970 and IEC 61968 compliant interface. The system shall enable export of all data via a CIM-XML interface CIM-XML or any standard web services per IEC 61970-452 and IEC 61970-552-4 and shall utilize modelling from IEC 61968-11 as appropriate.

Data exchange shall be over model neutral messaging services and CIM/XML data exchange for real-time or historical data. The following standards as applicable shall be used to achieve the functional requirements:

- Messaging interfaces shall be based on model neutral interfaces as per the IEC 61970-40X series for access to real-time and historical data and
- b) Use the IEC 61968-3 and IEC 61968-9 standards for messaging interfaces that are model dependent for network operations and metering respectively.
- c) The proposed system shall take the power system network data from the existing GIS System of the Purchaser. The current GIS is ESRI/In house. The data, which are not available on GIS, will be arranged by the Purchaser for network modelling.
- d) Export for GIS need to be available for network attribute data, loading data/analog values, historical values, energies, de-energies status and device status data

The projection system and coordinate system of existing GIS need to be maintained to equivalent system in OMS with configurations. The Graphic data import from a GIS system shall support native formats of GIS systems which shall be potentially used for data import. All Technological addresses (TAs) shall be automatically assigned within the system to the tags linking the graphic data to the attribute data in the GIS, the attribute data shall be loaded into the OMS data base and the display diagrams shall be generated. The Graphics exchange between GIS and OMS should happen over IEC-61970-453 Scalar Vector Graphic base XML representation.



The complete network model including data of electrical network e.g. line (i.e. length, type of conductor, technical particular of conductor & transformer etc., land-base data. Suitable GIS interface adaptor to enable the compatibility with GIS software/ data format /model shall be provided. The Graphic data import from a GIS system shall support native formats of GIS systems which shall be potentially used for data import. The data shall be transferred on global & incremental basis on manual request & automatically, once in a day.

The OMS System shall automatically move elements that overlap one another in congested areas so that the Control Centre Engineer can clearly see each segment of the network in the geographic view. In addition, the system shall automatically move and scale annotation text that come from GIS so that it is visible the user's current display of OMS in the geographic view. The system shall include tools to edit annotations /text & symbology placements in geo –referenced displays, substation and distribution network. It shall be possible to import related reference layers such as streets, buildings, poles etc. and other background information.

The GIS Network Model shall be exposed to the OMS Systems over CIM/XML Models using GID to IEC 61968-1 Enterprise Bus. The single model authority of repository maintained by GIS shall be used by OMS Systems.

### 3.2.2 OMS from/to CIS Interface

The following are high level flows from CIS to the OMS:

- a. The OMS will need to receive trouble calls from the CIS on an interactive basis. This includes all IVR calls received by the CIS.
- b. The OMS will need to receive a subset of the customer information along with trouble call details. This subset includes at a minimum the customer's name, phone, premise address, and its priority code.
- c. The OMS will need to receive list of newly connected customers and any changes to the electrical network connectivity on a daily basis (this customer connectivity information may go to the GIS first and then to the OMS via daily incremental transfer).
  - The following are high level flows of information that need to go from the OMS to the CIS
- a. The OMS will need to provide the following Outage status information: confirmed outage status, crew dispatched information, cause of outage and the estimated restoration time
- The OMS will need to provide the number of times the customer has been part of an outage for a given date range
  - Bidders are required to indicate typical time (Provide reference examples of existing customers) that will be required for transferring information.



### 3.2.3 OMS to IVR Interface

Purchaser has an interactive voice response system (IVR). There is no direct interface from the OMS to the IVR, currently all information routed is through CIS. It is intended that the IVR to CIS interface will capture necessary information to create a trouble ticket that can inturn pass to the OMS. The OMS, in-turn, will provide outage status information on, but not be limited to, outage areas and customers affected by outages to the IVR system.

### 3.2.4 OMS from/to Work Management System (WFM) Interface

There will be an interface between the OMS and the Work Force Management System (WFM) to create work orders/switching orders for planning different types of planned shutdowns. On creating these planned shutdowns for follow-up work from an outage, such as additional investigative work, clean-up, tree trimming, service and meter re-attachment, etc.

### 3.2.5 OMS from/to FFM Interface

There will be an interface between the OMS and a Mobile Field Force Management (FFM) system. The interface shall allow passing of outage condition and status information from the field to the OMS.

### 3.2.6 OMS from/to AMR/AMI Interface

AMI allows to ping meters, disconnect and reconnect meters, receive unsolicited outage and event reports from meters, and read voltages and other data on demand or on schedule.

OMS shall interface with WBSEDCL's AMR/AMI/ Meter Data Management System

### 3.2.7 Data Exchange with SAP

The proposed OMS system shall exchange various types of real-time as well as historical data (IS&R) with the SAP system for processes like Maintenance management, Outage management, Operation reports etc. The system shall integrate with SAP for transfer of orders and creation of notifications.

The type of data to be exchanged shall include device Status information, Device analog measurements, Alarms, Reports, Data stored in IS&R system. The proposed OMS system shall be able to exchange the data through CIM/GID interface, OPC interface, ODBC interface. The exact exchange mechanism shall be finalized during the detailed engineering in consultation with WBSEDCL's IT team. The CIM/GID interfaces shall be as per IEC 61970-3/61970-4. The proposed OMS system shall support navigation to the SAP system web-based displays through URLs (Universal Resource Locators) defined in the OMS displays.

### 3.2.8 OMS from/to AVL Interface

AVL system allows to track crew vehicles using the GPS co-ordinates of the vehicle, this will help OMS to estimate the restoration time and get real-time update of the crew movement to the dispatcher.

OMS shall interface with WBSEDCL's Automatic Vehicle Locator System



# Section IV: IT Infrastructure Specifications





# 4 Section V: Appendix

### List of Abbreviations

- AMCC Advanced metering control computer MDM
- AMC Annual Maintenance Contract
- AMI Advanced Meter Infrastructure
- AMR Automatic Meter Reading
- BI Business Intelligence
- BMS Billing Management System
- BOQ Bill of quantity
- COSEM Companion Specification for Energy Metering
- CPP Critical Peak Pricing
- CPU Central Processing Unit
- DA Distribution Automation
- DER Distributed Energy Resources
- DAT Digital Audio Tape
- DC Data Concentrator
- DCU Data Concentrator Unit
- DLMS Device Language message specification
- DMZ Demilitarized zone
- DT Distribution Transformer
- EMS Energy Management System
- FAQ Frequently Asked Question
- FIFO First in First Out
- FRTU Field Remote Terminal Units
- GPS Global positioning system
- GUI Graphical User Interface
- HAN Home Area Network
- HES Head End System
- IDS Intrusion detection system
- IPS Intrusion prevention system
- IEC International Electro technical commission
- IT Information Technology
- LV Low Voltage
- MDAS Meter Data Acquisition System
- MDM Meter Data Management
- MOC Meter Operations Center
- MTTF Mean time to failure
- MV Medium voltage
- MB Mega Byte
- WBSEDCL West Bengal State Electricity Distribution Company Limited
- NMM Network Management Module
- NOC Network Operation Center
- OEM Original Equipment Manufacturer
- OFC Optical Fiber Cable
- OFDM Orthogonal Frequency Division Multiplexing
- OMS Outage Management System Module
- OTA Over the Air
- PDH Plesiochronous digital hierarchy



- PLC Power Line Communications
- PQM Power Quality Monitor
- RAPDRP Restructured Accelerated Power Development and Reforms Programmed
- RAM Random Access Memory
- RF Radio Frequency
- RFP Request for Proposal
- RTC Real Time Clock
- SAN Storage area network
- SLA Service Level agreement
- SDH Synchronous Digital Hierarchy
- SNTP Simple Network Time Protocol
- TOU Time of Usage
- TAT Turnaround Time
- TTF Time to first failure
- TB Tera Byte
- VEE Validation, Estimation, and Editing
- XML Extended Markup Language
- Scada Supervisory control and data acquisition
- DMS Distribution management system



# PART 3

# CONDITIONS OF CONTRACT AND CONTRACT FORMS

# **Section - 7: Conditions of Contract**

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### General Conditions of Contract

### A. Contract and Interpretation

### 1. Definitions

1.1 The following words and expressions shall have the meanings hereby assigned to them:

"Contract" means the Contract Agreement entered into between the Employer and the Contractor in accordance with the mode of contracting as per SCC, together with the Contract Documents referred to therein; they shall constitute the Contract, and the term "the Contract" shall in all such documents be construed accordingly.

"Contract Documents" means the documents listed in Article 1.1 (Contract Documents) of the Contract Agreement (including any amendments thereto).

"GCC" means the General Conditions of Contract hereof.

"SCC" means the Special Conditions of Contract.

"day" means calendar day.

"year" means 365 days.

"month" means calendar month.

"Party" means the Employer or the Contractor, as the context requires, and "Parties" means both of them.

"Employer" means the person named as such in the **SCC** and includes the legal successors or permitted assigns of the Employer.

"Project Manager" means the person appointed by the Employer in the manner provided in GCC Sub-Clause 17.1 (Project Manager) hereof and named as such in the SCC to perform the duties delegated by the Employer.

"Contractor" means the person(s) whose Bid to perform the Contract has been accepted by the Employer and is named as Contractor in the Contract Agreement, and includes the legal successors or permitted assigns of the Contractor.

"Contractor's Representative" means any person nominated by the Contractor and approved by the Employer in the manner provided in GCC Sub-Clause 17.2 (Contractor's Representative and Construction Manager) hereof to perform the duties delegated by the Contractor.

"Construction Manager" means the person appointed by the Contractor's Representative in the manner provided in GCC Sub-Clause 17.2.4.

"SubContractor," including manufacturers, means any person to whom execution of any part of the Facilities, including preparation of any design or supply of any Plant, is sub-contracted directly or indirectly by the Contractor, and includes its legal successors or permitted assigns.

"Contract Price" means the sum specified in Article 2.1 (Contract Price) of the Contract Agreement, subject to such additions and adjustments thereto or deductions therefrom, as may be made pursuant to the Contract.

"Facilities" (alternatively referred to as the "Works") means the Plant to be supplied and installed, as well as all the Installation Services to be carried out by the Contractor under the Contract.

"Plant" means permanent plant, equipment, machinery, apparatus, goods, materials, articles and things of all kinds to be provided and incorporated in the Facilities by the Contractor under the Contract (including the spare parts to be supplied by the Contractorunder GCC Sub-Clause 7.3 hereof), but does not include Contractor's Equipment.

"Installation Services" means all those services ancillary to the supply of the Plant for the Facilities, to be provided by the Contractor under the Contract, such as transportation and provision of marine or other similar insurance, inspection, expediting, site preparation works (including the provision and use of Contractor's Equipment and the supply of all

construction materials required), installation, testing, precommissioning, commissioning, operations, maintenance, the provision of operations and maintenance manuals, training, etc. as the case may require.

"Contractor's Equipment" means all facilities, equipment, machinery, tools, apparatus, appliances or things of every kind required in or for installation, completion and maintenance of Facilities that are to be provided by the Contractor, but does not include Plant, or other things intended to form or forming part of the Facilities.

"Site" (alternatively referred to as the "Project Site") means the land and other places upon which the Facilities are to be installed, and such other land or places as may be specified in the Contract as forming part of the Site.

"Effective Date" means the date of fulfillment of all conditions stated in Article 3 (Effective Date) of the Contract Agreement, from which the Time for Completion shall be counted.

"Time for Completion" means the time within which Completion of the Facilities as a whole (or of a part of the Facilities where a separate Time for Completion of such part has been prescribed) is to be attained, as referred to in GCC Clause 8 and in accordance with the relevant provisions of the Contract.

"Completion" means that the Facilities (or a specific part thereof where specific parts are specified in the Contract) have been completed operationally and structurally and put in a tight and clean condition, that all work in respect of Precommissioning, Guarantee Test, Commissioning and Asset Tagging on the GIS Portal of the Facilities or such specific part thereof has been completed as provided in GCC Clause 24 (Precommissioning, Commissioning, Guarantee Tests and Completion of Facilities) hereof.

"Precommissioning" means the testing, checking and other requirements specified in the Employer's Requirements that are to be carried out by the Contractor in preparation for Commissioning as provided in GCC Clause 24 (Precommissioning, Commissioning, Guarantee Tests and Completion of Facilities) hereof.

"Commissioning" means operation of the Facilities or any part thereof by the Contractor following Precommissioning, which operation is to be carried out by the Contractor as provided in GCC Clause 24 (Precommissioning, Commissioning, Guarantee Tests and Completion of Facilities) hereof, for the purpose of carrying out Guarantee Test(s).

"Guarantee Test(s)" means the test(s) specified in the Employer's Requirements to be carried out to ascertain whether the Facilities or a specified part thereof is able to attain the Functional Guarantees specified in the Appendix to the Contract Agreement titled Functional Guarantees, in accordance with the provisions of GCC Clause 24 (Precommissioning, Commissioning, Guarantee Tests and Completion of Facilities) hereof.

"Operational Acceptance" means the acceptance by the Employer of the Facilities (or any part of the Facilities where the Contract provides for acceptance of the Facilities in parts), which certifies the Contractor's fulfillment of the Contract in respect of Functional Guarantees of the Facilities (or the relevant part thereof) in accordance with the provisions of GCC Clause 28 (Functional Guarantees) hereof and shall include deemed acceptance in accordance with GCC Clause 25 (Operational Acceptance) hereof.

"Defect Liability Period" means the period of validity of the warranties given by the Contractor commencing at Completion of the Facilities or a part thereof, during which the Contractor is responsible for defects with respect to the Facilities (or the relevant part thereof) as provided in GCC Clause 27 (Defect Liability) hereof.

"System Integrator" or "SI", means the responsible implementation agency named in SCC appointed by Utility for implementing the Outage Management System(OMS) upon execution of the Contract subsequent to the Letter of Award referred to in SCC;

### 2. Contract Documents

2.1 Subject to Article 1.2 (Order of Precedence) of the Contract Agreement, all documents forming part of the Contract (and all parts thereof) are intended to be correlative, complementary and mutually explanatory. The Contract shall be read as a whole.

### 3. Interpretation

- 3.1 In the Contract, except where the context requires otherwise:
  - (a) words indicating one gender include all genders;
  - (b) words indicating the singular also include the plural and words indicating the plural also include the singular;
  - (c) provisions including the word "agree," "agreed," or "agreement" require the agreement to be recorded in writing;
  - (d) the word "tender" is synonymous with "Bid," "tenderer," with "Bidder," and "tender documents" with "Bidding Document," and
  - (e) "written" or "in writing" means hand-written, type-written, printed or electronically made, and resulting in a permanent record.

The marginal words and other headings shall not be taken into consideration in the interpretation of these Conditions.

### 3.2 Incoterms

Unless inconsistent with any provision of the Contract, the meaning of any trade term and the rights and obligations of Parties thereunder shall be as prescribed by *Incoterms*.

Incoterms means international rules for interpreting trade terms published by the International Chamber of Commerce (latest edition), 38 Cours Albert 1<sup>er</sup>, 75008 Paris, France.

### 3.3 Entire Agreement

Subject to GCC Sub-Clause 16.4 hereof, the Contract constitutes the entire agreement between the Employer and Contractor with respect to the subject matter of Contract and supersedes all communications, negotiations and agreements (whether written or oral) of Parties with respect thereto made prior to the date of Contract.

### 3.4 Amendment

No amendment or other variation of the Contract shall be effective unless it is in writing, is dated, expressly refers to the Contract, and is signed.

### 3.5 <u>Independent Contractor</u>

The Contractor shall be an independent Contractor performing the Contract. The Contract does not create any agency, partnership, Consortium or other joint relationship between the Parties hereto. Subject to the provisions of the Contract, the Contractor shall be solely responsible for the manner in which the Contract is performed. All employees, representatives or SubContractors engaged by the Contractor in connection with the performance of the Contract shall be under the complete control of the Contractor and shall not be deemed to be employees of the Employer, and nothing contained in the Contract or in any subcontract awarded by the Contractor shall be construed to create any contractual relationship between any such employees, representatives or SubContractors and the Employer.

### 3.6 Non-Waiver

3.6.1 Subject to GCC Sub-Clause 3.6.2 below, no relaxation, forbearance, delay or indulgence by either Party in enforcing any of the terms and conditions of the Contract or the granting of time by either Party to the other shall prejudice, affect or restrict the rights of that Party under the Contract, nor shall any waiver by either Party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.

3.6.2 Any waiver of a Party's rights, powers or

remedies under the Contract must be in writing, must be dated and signed by an authorized representative of the Party granting such waiver, and must specify the right and the extent to which it is being waived.

### 3.7 <u>Severability</u>

If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.

### 3.8 Country of Origin

"Origin" means the place where the plant and component parts thereof are mined, grown, produced or manufactured, and from which the services are provided. Plant components are produced when, through manufacturing, processing, or substantial or major assembling of components, a commercially recognized product results that is substantially in its basic characteristics or in purpose or utility from its components.

### 4. Communications

- 4.1 Wherever these Conditions provide for the giving or issuing of approvals, certificates, consents, determinations, notices, requests and discharges, these communications shall be:
  - (a) in writing and delivered against receipt; and
  - (b) delivered, sent or transmitted to the address for the recipient's communications as stated in the Contract Agreement.
- 1.1 When a certificate is issued to a Party, the certifier shall send a copy to the other Party. When a notice is issued to a Party, by the other Party or the Project Manager, a copy shall be sent to the Project Manager or the other Party, as the case may be.

### 5. Law and Language

5.1 The Contract shall be governed by and interpreted in accordance with laws of India including any other instruments having the force of law in India, as they

may be issued and in force from time to time.

- 5.2 The ruling language of the Contract shall be English.
- 5.3 The language for communications shall be the ruling language unless otherwise stated in the **SCC**.

### 6. Fraud and Corruption

6.1 The Employer requires compliance with the stipulations on Fraud and Corruption, as set forth in the Attachment 1 to the GCC and the Integrity Pact if applicable as per **SCC**.

### **B.** Subject Matter of Contract

### 7. Scope of Facilities

- Unless otherwise expressly limited in the Employer's 7.1 Requirements, the Contractor's obligations cover the provision of all Plant and the performance of all Installation Services required for the design, and the manufacture (including procurement, quality assurance, construction, installation, associated civil works, Precommissioning and delivery) of the Plant, and the installation, completion and Commissioning of the Facilities in accordance with the plans, procedures, specifications, drawings, codes and any other documents as specified in the Section, Employer's Requirements. Such specifications include, but are not limited to, the provision of supervision and engineering services; the supply of labor, materials, equipment, spare parts (as specified in GCC Sub-Clause 7.3 below) and accessories; Contractor's Equipment: construction utilities and supplies; temporary materials, structures and facilities; transportation (including, without limitation, unloading and hauling to, from and at the Site); and storage, except for those supplies, works and services that will be provided or performed by the Employer, as set forth in the Appendix to the Contract Agreement titled Scope of Works and Supply by the Employer.
- 7.2 The Contractor shall, unless specifically excluded in the Contract, perform all such work and/or supply all such items and materials not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining

Completion of the Facilities as if such work and/or items and materials were expressly mentioned in the Contract. No extra payment shall be made for these additional accessories or materials required.

- 7.3 In addition to the supply of Mandatory Spare Parts included in the Contract, the Contractor agrees to supply spare parts required for the operation and maintenance of the Facilities for the period specified in the SCC and the provisions, if any, specified in the SCC. However, the identity, specifications and quantities of such spare parts and the terms and conditions relating to the supply thereof are to be agreed between the Employer and the Contractor, and the price of such spare parts shall be that given in Price Schedule No. 4, which shall be added to the Contract Price. The price of such spare parts shall include the purchase price therefor and other costs and expenses (including the Contractor's fees) relating to the supply of spare parts.
- 8. Time for Commencement 8.1 and Completion
  - 8.1 The Contractor shall commence work on the Facilities within the period specified in the SCC and without prejudice to GCC Sub-Clause 26.2 hereof, the Contractor shall thereafter proceed with the Facilities in accordance with the time schedule specified in the Appendix to the Contract Agreement titled Time Schedule.
  - 8.2 The Contractor shall attain Completion of the Facilities or of a part where a separate time for Completion of such part is specified in the Contract, within the time stated in the SCC or within such extended time to which the Contractor shall be entitled under GCC Clause 40 hereof.
- 9. Contractor's Responsibilities
- 9.1 The Contractor shall design, manufacture including associated purchases and/or subcontracting, install and complete the Facilities in accordance with the Contract. When completed, the Facilities should be fit for the purposes for which they are intended as defined in the Contract.
- 9.2 The Contractor confirms that it has entered into this

Contract on the basis of a proper examination of the data relating to the Facilities including any data as to boring tests provided by the Employer, and on the basis of information that the Contractor could have obtained from a visual inspection of the Site if access thereto was available and of other data readily available to it relating to the Facilities as of the date twenty-eight (28) days prior to Bid submission. The Contractor acknowledges that any failure to acquaint itself with all such data and information shall not relieve its responsibility for properly estimating the difficulty or cost of successfully performing the Facilities.

- 9.3 The Contractor shall acquire and pay for all permits, approvals and/or licenses which are not covered under GCC Clause 10.3 Employer's Responsibility from all local, state or national government authorities or public service undertakings in relevent to where the Site is located, which such authorities or undertakings require the Contractor to obtain in its name and which are necessary for the performance of the Contract, including, without limitation, permits/ certificates if needed for the Contractor's and SubContractor's personnel and entry permits for all Contractor's Equipment.
- 9.4 The Contractor shall comply with all laws in force in India including any instruments having the force of law. The laws will include all local, state, national or other laws that affect the performance of the Contract and bind upon the Contractor. The Contractor shall indemnify and hold harmless the Employer from and against any and all liabilities, damages, claims, fines, penalties and expenses of whatever nature arising or resulting from the violation of such laws by the its personnel, including Contractor SubContractors and their personnel, but without prejudice to GCC Sub-Clause 10.1 hereof.
- 9.5 Any Plant and Installation Services that will be incorporated in or be required for the Facilities and other supplies shall have their origin which do not violate the provisions of any Orders/ Circulars or other instruments issued by the Government that are in force. Any subContractors retained/ engaged by the Contractorin accordance with the provisions of the

- Contract, shall not violate the provisions of any Orders/ Circulars or other instruments issued by the Government that are in force.
- 9.6 If the Contractor is a Consortium, or association (CONSORTIUM) of two or more persons, all such persons shall be jointly and severally bound to the Employer for the fulfillment of the provisions of the Contract, and shall designate one of such persons to act as a leader with authority to bind the CONSORTIUM. The composition or the constitution of the Consortium shall not be altered without the prior written consent of the Employer.
- 9.7 Protection of the Environment
- (a) The Contractor shall take all reasonable steps to protect the environment (both on and off the Site) and to limit damage and nuisance to people and property resulting from pollution, noise, and other results of his operations.
- (b) The Contractor shall ensure that emissions, surface discharges, and effluent from the Contractor's activities shall not exceed the values stated in the Specification or prescribed by applicable Laws.

# 10. Employer's Responsibilities

- 10.1 All information and/or data to be supplied by the Employer as described in the Appendix to the Contract Agreement titled Scope of Works and Supply by the Employer, shall be deemed to be accurate, except when the Employer expressly states otherwise.
- 10.2 The Employer shall be responsible for acquiring and providing legal and physical possession of the Site and access thereto, and for providing possession of and access to all other areas reasonably required for the proper execution of the Contract, including all requisite rights of way, as specified in the Appendix to the Contract Agreement titled Scope of Works and Supply by the Employer. The Employer shall give full possession of and accord all rights of access thereto on or before the date(s) specified in that Appendix.
- 10.3 The Employer shall acquire and pay for all permits, approvals and/or licenses from all local, state or national government authorities or public service undertakings in the country where the Site is located which (a) such authorities or undertakings require the

Employer to obtain in the Employer's name, (b) are necessary for the execution of the Contract, including those required for the performance by both the Contractor and the Employer of their respective obligations under the Contract, and (c) are specified in the Appendix (Scope of Works and Supply by the Employer). Such expenditure incurred by the Employer shall be booked as a part of the project cost, within the overall sanctioned costs under the scheme.

- 10.4 If requested by the Contractor, the Employer shall use its best endeavors to assist the Contractor in obtaining in a timely and expeditious manner all permits, approvals and/or licenses necessary for the execution of the Contract from all local, state or national government authorities or public service undertakings that such authorities or undertakings require the Contractor or SubContractors or the personnel of the Contractor or SubContractors, as the case may be, to obtain.
- 10.5 Unless otherwise specified in the Contract or agreed upon by the Employer and the Contractor, the Employer shall provide sufficient, properly qualified operating and maintenance personnel; shall supply and make available all utilitiesand facilities; and shall perform all work and services of whatsoever nature, including those required by the Contractor to properly carry out Precommissioning, Commissioning and Guarantee Tests, all in accordance with the provisions of the Appendix to the Contract Agreement titled Scope of Works and Supply by the Employer, at or before the time specified in the program furnished by the Contractor under GCC Sub-Clause 18.2 hereof and in the manner thereupon specified or as otherwise agreed upon by the Employer and the Contractor.
- 10.6 The Employer shall be responsible for the continued operation of the Facilities after issuance of Completion certificate, in accordance with GCC Sub-Clause 24.
- 10.7 All costs and expenses involved in the performance of the obligations under this GCC Clause 10 shall be the responsibility of the Employer, save those to be incurred by the Contractor with respect to the performance of Guarantee Tests and Commissioning,

in accordance with GCC Clause 24.

10.8 In the event that the Employer shall be in breach of any of his obligations under this Clause, the additional cost/ compensation, if any, payable to the Contractor in consequence be determined by the Project Manager of the respective project office in the district.

# C. Payment

#### 11. Contract Price

- 11.1 The Contract Price shall be as specified in Article 2 (Contract Price and Terms of Payment) of the Contract Agreement.
- 11.2 Unless an adjustment clause is provided for in the **SCC**, the Contract Price shall be a firm not subject to any alteration, except in the event of a Change in the Facilities or as otherwise provided in the Contract.
- 11.3 Subject to GCC Sub-Clauses 9.2, 10.1 and 35 hereof, the Contractor shall be deemed to have satisfied itself as to the correctness and sufficiency of the Contract Price, which shall, except as otherwise provided for in the Contract, cover all its obligations under the Contract.

# 12. Terms of Payment

- 12.1 The Contract Price shall be paid as specified in Article 2 (Contract Price and Terms of Payment) of the Contract Agreement and in the Appendix to the Contract Agreement titled Terms and Procedures of Payment, which also outlines the procedures to be followed in making application for and processing payments.
- 12.2 No payment made by the Employer herein shall be deemed to constitute acceptance by the Employer of the Facilities or any part(s) thereof.
- 12.3 In the event that the Employer fails to make any payment by its respective due date or within the period set forth in the Contract, the Employer shall pay to the Contractor interest on the amount of such delayed payment at the rate(s) shown in the Appendix to the Contract Agreement titled Terms and Procedures of Payment, for the period of delay until payment has

been made in full, whether before or after judgment or arbitrage award.

12.4 The currency or currencies in which payments are made to the Contractor under this Contract shall be specified in the Appendix to the Contract Agreement titled Terms and Procedures of Payment, subject to the general principle that payments will be made in the currency or currencies in which the Contract Price has been stated.

# 12.5 Deleted.

#### 13. Securities

#### 13.1 Issuance of Securities

The Contractor/Bidder shall provide the securities specified below in favor of the Employer at the times, and in the amount, manner and form specified below.

# 13.2 Advance Payment Security

- 13.2.1 The Contractor/Bidder shall, within twenty-eight (28) days of the notification of contract award, provide a security in an amount equal to 100% of the advance payment calculated in accordance with the Appendix to the Contract Agreement titled Terms and Procedures of Payment, and in the same currency or currencies.
- 13.2.2 The security shall be in the form provided in the Bidding documents or in another form acceptable to the Employer. The amount of the security shall be reduced in proportion to the value of the Facilities executed by and paid to the Contractor/Bidder from time to time, and shall automatically become null and void when the full amount of the advance payment has been recovered by the Employer. The security shall be returned to the Contractor/Bidder immediately after its expiration.

#### 13.3 Performance Security

13.3.1 The Contractor/Bidder shall, within twentyeight (28) days of the notification of contract award, provide a security for the due

- performance of the Contract in the amount specified in the **SCC**.
- 13.3.2 The Performance Security shall be denominated in the currency or currencies of the Contract, and shall be in the form provided in Section 8, Contract Forms, corresponding to the type of bank guarantee stipulated by the Employer in the SCC, or in another form acceptable to the Employer.
- 13.3.3Unless otherwise specified in the SCC, the security shall be reduced by half on the date of the Operational Acceptance. The Security shall become null and void, or shall be reduced pro rata to the Contract Price of a part of the Facilities for which a separate Time for Completion is provided, 540 days after Completion of the Facilities or 365 days after Operational Acceptance of the Facilities, whichever occurs first; provided, however, that if the Defect Liability Period has been extended on any part of the Facilities pursuant to GCC Subclause 27.8 hereof, the Contractor shall issue an additional security in an amount proportionate to the Contract Price of that part. The security shall be returned to the Contractor immediatel after its expiration, provided, however, that if the Contractor, pursuant to GCC Subclause 27.10, is liable for an extended defect liability obligation, the performance security shall be extended for the period and up to the amount specified in the SCC.

#### 14. Taxes and Duties

- 14.1 Except as otherwise specifically provided in the Contract, the Contractor shall bear and pay all taxes, duties, levies and charges assessed on the Contractor, its SubContractors or their employees by all municipal, state or national government authorities in connection with the Facilities in and outside of the country where the Site is located.
- 14.2 Notwithstanding GCC Sub-Clause 14.1 above, the Employer shall pay/ reimburse to the Contractor, the taxes and duties, if any, specified in **SCC**.

# **D.** Intellectual Property

# 15. License/Use of Technical Information

- 15.1 For the operation and maintenance of the Plant, including procurement of future spares, Contractor hereby grants a non-exclusive and nontransferable license (without the right to sub-license) to the Employer under the patents, utility models or other industrial property rights owned by the Contractor or by a third Party from whom the Contractor has received the right to grant licenses thereunder, and shall also grant to the Employer a non-exclusive and non-transferable right (without the right to sub-license) to use the know-how and other technical information disclosed to the Employer under the Contract. Nothing contained herein shall be construed as transferring ownership of any patent, utility model, trademark, design, copyright, knowhow or other intellectual property right from the Contractor or any third Party to the Employer.
- 15.2 The copyright in all drawings, documents and other materials containing data and information furnished to the Employer by the Contractor herein shall remain vested in the Contractor or, if they are furnished to the Employer directly or through the Contractor by any third Party, including suppliers of materials, the copyright in such materials shall remain vested in such third Party. However, this shall not prejudice the right of the Employer to use these drawings, documents and other materials containing data and information for Employer's own use whatsoever including future procurements basis the same.

#### 16. Confidential Information

16.1 The Employer and the Contractor shall keep confidential and shall not, without the written consent of the other Party hereto, divulge to any third Party any documents, data, drawings or other information furnished directly or indirectly by the other Party hereto in connection with the Contract, whether such information has been furnished prior to, during or following termination of the Contract. Notwithstanding the above, the Contractor may furnish to its SubContractor(s) such documents, data and other information it receives from the Employer

to the extent required for the SubContractor(s) to perform its work under the Contract, in which event the Contractor shall obtain from such SubContractor(s) an undertaking of confidentiality similar to that imposed on the Contractor under this GCC Clause 16.

- 16.2 The Employer shall not use such documents, data and other information received from the Contractor for any purpose other than the operation and maintenance of the Facilities, including procurement of future spares. Similarly, the Contractor shall not use such documents, data and other information received from the Employer for any purpose other than the design, procurement of Plant, construction or such other work and services as are required for the performance of the Contract.
- 16.3 The obligation of a Party under GCC Sub-Clauses 16.1 and 16.2 above, however, shall not apply to that information which
  - (a) now or hereafter enters the public domain through no fault of that Party
  - (b) can be proven to have been possessed by that Party at the time of disclosure and which was not previously obtained, directly or indirectly, from the other Party hereto
  - (c) otherwise lawfully becomes available to that Party from a third Party that has no obligation of confidentiality.
- 16.4 The above provisions of this GCC Clause 16 shall not in any way modify any undertaking of confidentiality given by either of the Parties hereto prior to the date of the Contract in respect of the Facilities or any part thereof.
- 16.5 The provisions of this GCC Clause 16 shall survive termination, for whatever reason, of the Contract.

# E. Execution of the Facilities

#### 17. Representatives

#### 17.1 Project Manager

If the Project Manager is not named in the Contract, then within fourteen (14) days of the Effective Date, the Employer shall appoint and notify the Contractor in writing of the name of the Project Manager. The Employer may from time to time appoint some other person as the Project Manager in place of the person previously so appointed, and shall give a notice of the name of such other person to the Contractor without delay. No such appointment shall be made at such a time or in such a manner as to impede the progress of work on the Facilities. Such appointment shall only take effect upon receipt of such notice by the Contractor. The Project Manager shall represent and act for the Employer at all times during the performance of the Contract. All notices, instructions, orders, certificates, approvals and all communications under the Contract shall be given by the Project Manager, except as herein otherwise provided.

# 17.2 Contractor's Representative & Construction Manager

- 17.2.1 If the Contractor's Representative is not named in the Contract, then within fourteen (14) days of the Effective Date, the Contractor shall appoint the Contractor's Representative and shall request the Employer in writing to approve the person so appointed. If the Employer makes no objection to appointment within fourteen (14) days, the Contractor's Representative shall be deemed to have been approved. If the Employer objects to the appointment within fourteen (14) days giving the reason therefor, then the Contractor shall appoint a replacement within fourteen (14) days of such objection, and the foregoing provisions of this GCC Sub-Clause 17.2.1 shall apply thereto.
- 17.2.2 The Contractor's Representative shall represent and act for the Contractor at all times during the performance of the Contract and

shall give to the Project Manager all the Contractor's notices, instructions, information and all other communications under the Contract.

All notices, instructions, information and all other communications given by the Employer or the Project Manager to the Contractor under the Contract shall be given to the Contractor's Representative or, in its absence, its deputy, except as herein otherwise provided.

The Contractor shall not revoke the appointment of the Contractor's Representative without the Employer's prior written consent, which shall not be unreasonably withheld. If the Employer consents thereto, the Contractor shall appoint some other person as the Contractor's Representative, pursuant to the procedure set out in GCC Sub-Clause 17.2.1.

17.2.3 The Contractor's Representative may, subject to the approval of the Employer which shall not be unreasonably withheld, at any time delegate to any person any of the powers, functions and authorities vested in him or her. Any such delegation may be revoked at any time. Any such delegation or revocation shall be subject to a prior notice signed by the Contractor's Representative, and shall specify the powers, functions and authorities thereby delegated or revoked. No such delegation or revocation shall take effect unless and until a copy thereof has been delivered to the Employer and the Project Manager.

Any act or exercise by any person of powers, functions and authorities so delegated to him or her in accordance with this GCC Sub-Clause 17.2.3 shall be deemed to be an act or exercise by the Contractor's Representative.

17.2.4 From the commencement of installation of the Facilities at the Site until Completion, the Contractor's Representative shall appoint a suitable person as the Construction Manager. The Construction Manager shall supervise all work done at the Site by the Contractor and shall be present at the Site throughout normal working hours except when on leave, sick or absent for reasons connected

with the proper performance of the Contract. Whenever the Construction Manager is absent from the Site, a suitable person shall be appointed to act as the Construction Manager's deputy.

- 17.2.5 The Employer may by notice to the Contractor object to any representative or person employed by the Contractor in the execution of the Contract who, in the reasonable opinion of the Employer, may behave inappropriately, may be incompetent or negligent, or may commit a serious breach of the Site regulations provided under GCC Sub-Clause 22.4. The Employer shall provide evidence of the same, whereupon the Contractor shall remove such person from the Facilities.
- 17.2.6 If any representative or person employed by the Contractor is removed in accordance with GCC Sub-Clause 17.2.5, the Contractor shall, where required, promptly appoint a replacement at his own cost.

#### 18. Work Program

# 18.1 Contractor's Organization

The Contractor shall supply to the Employer and the Project Manager a chart showing the proposed organization to be established by the Contractor for carrying out work on the Facilities within twenty-one (21) days of the Effective Date. The chart shall include the identities of the key personnel and the curricula vitae of such key personnel to be employed shall be supplied together with the chart. The Contractor shall promptly inform the Employer and the Project Manager in writing of any revision or alteration of such an organization chart.

# 18.2 <u>Program of Performance</u>

Within twenty-eight (28) days after the Effective Date, the Contractor shall submit to the Project Manager a detailed program of performance of the Contract, made in a form acceptable to the Project Manager and showing the sequence in which it proposes to design, manufacture, transport, assemble, install and precommission the Facilities, as well as the date by which the Contractor reasonably requires that the Employer shall have fulfilled its obligations under

the Contract so as to enable the Contractor to execute the Contract in accordance with the program and to achieve Completion including Commissioning and Acceptance of the Facilities in accordance with the Contract. The program so submitted by the Contractor shall accord with the Time Schedule included in the Appendix to the Contract Agreement titled Time Schedule, and any other dates and periods specified in the Contract. The Contractor shall update and revise the program as and when appropriate or when required by the Project Manager, but without modification in the Times for Completion specified in the SCC pursuant to Sub-Clause 8.2 and any extension granted in accordance with GCC Clause 40, and shall submit all such revisions to the Project Manager.

# 18.3 Progress Report

The Contractor shall monitor progress of all the activities specified in the program referred to in GCC Sub-Clause 18.2 above, and supply a progress report to the Project Manager every month.

The progress report shall be in a form acceptable to the Project Manager and shall indicate: (a) percentage completion achieved compared with the planned percentage completion for each activity; and (b) where any activity is behind the program, giving comments and likely consequences and stating the corrective action being taken.

#### 18.4 Progress of Performance

If at any time the Contractor's actual progress falls behind the program referred to in GCC Sub-Clause 18.2, or it becomes apparent that it will so fall behind, the Contractor shall, at the request of the Employer or the Project Manager, prepare and submit to the Project Manager a revised program, taking into account the prevailing circumstances, and shall notify the Project Manager of the steps being taken to expedite progress so as to attain Completion of the Facilities within the Time for Completion under GCC Sub-Clause 8.2, any extension thereof entitled under GCC Sub-Clause 40.1, or any extended period as may otherwise be agreed upon between the Employer and

the Contractor.

#### 18.5 Procedures

The Contract shall be executed in accordance with the Contract Documents including the procedures given in the Forms and Procedures of the Employer's Requirements.

The Contractor may execute the Contract in accordance with its own standard project execution plans and procedures to the extent that they do not conflict with the provisions contained in the Contract.

# 19. Subcontracting

- 19.1 The Appendix to the Contract Agreementtitled List of Major Items of Plant and Installation Services and List of Approved SubContractors, specifies major items of supply or services and a list of approved SubContractors against each item. including Insofar as no SubContractors are manufacturers. listed against any such item, the Contractor shall prepare a list of SubContractors for such item for inclusion in such list. The Contractor may from time to time propose any addition to or deletion from any such list. The Contractor shall submit any such list or any modification thereto to the Employer for its approval in sufficient time so as not to impede the progress of work on the Facilities. Such approval by the Employer for any of the SubContractors shall not relieve the Contractor from any of its obligations, duties or responsibilities under the Contract.
- 19.2 The Contractor shall select and employ its SubContractors for such major items from those listed in the lists referred to in GCC Sub-Clause 19.1.
- 19.3 For items or parts of the Facilities not specified in the Appendix to the Contract Agreement titled List of Major Items of Plant and Installation Services and List of Approved SubContractors, except when otherwise required as per the provisions of the Contract or instructions in writing by the Project Manager including the provsions if any specified in SCC, theContractor may employ such SubContractors as it may select, at its discretion.

- 19.4 Each sub-contract shall include provisions which would entitle the Employer to require the sub-contract to be assigned to the Employer under GCC 19.5 (if and when applicable), or in event of termination by the Employer under GCC 42.2.
- 19.5 If a subContractor's obligations extend beyond the expiry date of the relevant Defects Liability Period and theProject Manager, prior to that date, instructs the Contractor to assign the benefits of such obligations to the Employer, then the Contractor shall do so.

# 20. Design and Engineering

# 20.1Specifications and Drawings

20.1.1 The contractor shall execute the basic and detailed design and the engineering work in compliance with the provisions of the contract, or where not so specified, in accordance with good engineering practice.

The Contractor shall be responsible for any discrepancies, errors or omissions in the specifications, drawings and other technical documents that it has prepared, whether such specifications, drawings and other documents have been approved by the Project Manager or not, provided that such discrepancies, errors omissions are not because of inaccurate information furnished in writing to the Contractor by or on behalf of the Employer.

20.1.2 The Contractor shall be entitled to disclaim responsibility for any design, data, drawing, specification or other document, or any modification thereof provided or designated by or on behalf of the Employer, by giving a notice of such disclaimer to the Project Manager.

# 20.2 Codes and Standards

Wherever references are made in the Contract to codes and standards in accordance with which the Contract shall be executed, the edition or the revised version of such codes and standards current at the date twenty-eight (28) days prior to date of Bid submission shall apply unless otherwise specified. During Contract execution, any changes in such codes and standards shall be applied subject to approval by the Employer and shall be treated in accordance with

GCC Clause 39.

# 20.3 Approval/Review of Technical Documents by Project Manager

20.3.1 The Contractor shall prepare or cause its SubContractors to prepare, and furnish to the Project Manager the documents listed in the Appendix to the Contract Agreement titled List of Documents for Approval or Review, or elsewhere in the Contract, for its approval or review as specified and in accordance with the requirements of GCC Sub-Clause 18.2 (Program of Performance).

Any part of the Facilities covered by or related to the documents to be approved by the Project Manager shall be executed only after the Project Manager's approval thereof.

GCC Sub-Clauses 20.3.2 through 20.3.7 shall apply to those documents requiring the Project Manager's approval, but not to those furnished to the Project Manager for its review only.

- 20.3.2 Within fourteen (14) days after receipt by the Project Manager of any document requiring the Project Manager's approval in accordance with GCC Sub-Clause 20.3.1, the Project Manager shall either return one copy thereof to the Contractor with its approval endorsed thereon or shall notify the Contractor in writing of its disapproval thereof and the reasons therefor and the modifications that the Project Manager proposes.
- 20.3.3 The Project Manager shall not disapprove any document, except on the grounds that the document does not comply with the Contract or that it is contrary to good engineering practice.
- 20.3.4 If the Project Manager disapproves the document, the Contractor shall modify the document and resubmit it for the Project Manager's approval in accordance with GCC Sub-Clause 20.3.2. If the Project Manager

- approves the document subject to modification(s), the Contractor shall make the required modification(s), whereupon the document shall be deemed to have been approved.
- 20.3.5 If any dispute or difference occurs between the Employer and the Contractor in connection with or arising out of the disapproval by the Project Manager of any document and/or any modification(s) thereto that cannot be settled between the Parties within a reasonable period, then such dispute or difference may be referred for dispute resolution in accordance with GCC 46 hereof. If such dispute or difference is referred for dispute resolution in accordance with GCC 46, the Project Manager shall give instructions as to whether and if so, how, performance of the Contract is to proceed. The Contractor shall proceed with the Contract in accordance with the Project Manager's instructions, provided that if the Contractor's view on the dispute has been upheld, then the Contractor shall be reimbursed by Employer for any additional costs incurred by reason of such instructions and shall be relieved of such responsibility or liability in connection with the dispute and the execution of the instructions as may be decided under the applicable dispute resolution forum, and the Time for Completion shall be extended accordingly.
- 20.3.6 The Project Manager's approval, with or without modification of the document furnished by the Contractor, shall not relieve the Contractor of any responsibility or liability imposed upon it by any provisions of the Contract except to the extent that any subsequent failure results from modifications required by the Project Manager.
- 20.3.7 The Contractor shall not depart from any approved document unless the Contractor has first submitted to the Project Manageran amended document and obtained the Project Manager's approval thereof, pursuant to the

provisions of this GCC Sub-Clause 20.3.

#### 21. Procurement

# 21.1Plant

The Contractor shall procure and transport all Plant in an expeditious and orderly manner to the Site.

# 21.2Employer-Supplied Plant

If the Appendix to the Contract Agreement titled Scope of Works and Supply by the Employer, provides that the Employer shall furnish any specific items to the Contractor, the following provisions shall apply:

- 21.2.1 The Employer shall, at its own risk and expense, transport each item to the place on or near the Site as agreed upon by the Parties and make such item available to the Contractor at the time specified in the program furnished by the Contractor, pursuant to GCC Sub-Clause 18.2, unless otherwise mutually agreed.
- 21.2.2 Upon receipt of such item, the Contractor shall inspect the same visually and notify the Project Manager of any detected shortage, defect or default. The Employer shall immediately remedy any shortage, defect or default, or the Contractor shall, if practicable and possible, at the request of the Employer, remedy such shortage, defect or default at the Employer's cost and expense. After inspection, such item shall fall under the care, custody and control of the Contractor. The provision of this GCC Sub-Clause 21.2.2 shall apply to any item supplied to remedy any such shortage or default or to substitute for any defective item, or shall apply to defective items that have been repaired.
- 21.2.3 The foregoing responsibilities of the Contractor and its obligations of care, custody and control shall not relieve the Employer of liability for any undetected shortage, defect or default, nor place the Contractor under any liability for any such shortage, defect or default whether under GCC Clause 27 or

under any other provision of Contract.

# 21.3 <u>Transportation</u>

- 21.3.1 The Contractor shall at its own risk and expense transport all the materials and the Contractor's Equipment to the Site by the mode of transport that the Contractor judges most suitable under all the circumstances.
- 21.3.2 Unless otherwise provided in the Contract, the Contractor shall be entitled to select any safe mode of transport operated by any person to carry the materials and the Contractor's Equipment.
- 21.3.3 Upon dispatch of each shipment of materials and the Contractor's Equipment, the Contractor shall notify the Employer by telex, cable, facsimile or electronic means, of the description of the materials and of the Contractor's Equipment, the point and means of dispatch, and the estimated time and point of arrival at the Site. The Contractor shall furnish the Employer with relevant documents to be agreed upon between the Parties.
- 21.3.4 The Contractor shall be responsible for obtaining, if necessary, approvals from the authorities for transportation of the materials and the Contractor's Equipment to the Site. The Employer shall use its best endeavors in a timely and expeditious manner to assist the Contractor in obtaining such approvals, if requested by the Contractor. The Contractor shall indemnify and hold harmless the Employer from and against any claim for damage to roads, bridges or any other traffic facilities that may be caused by the transport of the materials and the Contractor's Equipment to the Site.

# 21.4 <u>Customs Clearance</u>

The Contractor shall, at its own expense, handle and be responsible and liable for all imported materials and

Contractor's Equipment including Customs clearance and shall handle any formalities for the same, provided that if applicable laws or regulations require any application or act to be made by or in the name of the Employer, the Employer if considered fit and appropriate, may take such steps to comply with such requirement as the Employer may consider necessary, without bearing any responsibility or liability for the same.

#### 22. Installation

# 22.1 <u>Setting Out/Supervision</u>

22.1.1 Bench Mark: The Contractor shall be responsible for the true and proper setting-out of the Facilities in relation to bench marks, reference marks and lines provided to it in writing by or on behalf of the Employer.

If, at any time during the progress of installation of the Facilities, any error shall appear in the position, level or alignment of the Facilities, the Contractor shall forthwith notify the Project Manager of such error and, at its own expense, immediately rectify such error to the reasonable satisfaction of the Project Manager. If such error is based on incorrect data provided in writing by or on behalf of the Employer, the expense of rectifying the same shall be borne by the Employer.

22.1.2 Contractor's Supervision: The Contractor provide all shall give or necessary superintendence during the installation of the Facilities, and the Construction Manager or its deputy shall be constantly on the Site to provide full-time superintendence of the installation. The Contractor shall provide and employ only technical personnel who are skilled and experienced in their respective callings and supervisory staff who are competent to adequately supervise the work at hand.

#### 22.2 <u>Labor:</u>

22.2.1 Engagement of Staff and Labor

Except as otherwise stated in the Specification, the Contractor shall make arrangements for the engagement of all staff and labor, local or otherwise, and for their payment, housing, feeding and transport.

The Contractor shall provide and employ on the Site in the installation of the Facilities such skilled, semi-skilled and unskilled labor as is necessary for the proper and timely execution of the Contract. The Contractor is encouraged to use local labor that has the necessary skills.

The Contractor shall be responsible for obtaining all necessary permit(s) and/or permissions(s) from the appropriate authorities for the entry of all labor and personnel to be employed on the Site. The Employer will, if requested by the Contractor, use his best endeavors in a timely and expeditious manner to assist the Contractor in obtaining any local, state, national or government permission required for bringing in the Contractor's personnel.

The Contractor shall at its own expense provide the means of repatriation to all of its and its SubContractor's personnel employed on the Contract at the Site to the place where they were recruited or to their domicile. It shall provide also suitable temporary maintenance of all such persons from the cessation of their employment on the Contract to the date programmed for their departure. In the event that the Contractor defaults in providing such means of transportation and temporary maintenance, the Employer may provide the same to such personnel and recover the cost of doing so from the Contractor.

# 22.2.2 Persons in the Service of Employer

The Contractor shall not recruit, or attempt to recruit, staff and labor from amongst the Employer's Personnel.

#### 22.2.3 Labor Laws

The Contractor shall comply with all the relevant labor Laws applicable to the Contractor's Personnel, including Laws relating to their employment, health, safety, welfare, immigration and emigration, and shall allow them all their legal rights.

The Contractor shall at all times during the progress of the Contract use its best endeavors to prevent any unlawful, riotous or disorderly conduct or behavior by or amongst its employees and the labor of its Subcontractors

The Contractor shall, in all dealings with its labor and the labor of its SubContractors currently employed on or connected with the Contract, pay due regard to all recognized festivals, official holidays, religious or other customs and all local laws and regulations pertaining to the employment of labor.

# 22.2.4 Rates of Wages and Conditions of Labor

The Contractor shall pay rates of wages, and observe conditions of labor, which are not lower than those established for the trade or industry where the work is carried out. If no established rates or conditions are applicable, the Contractor shall pay rates of wages and observe conditions which are not lower than the general level of wages and conditions observed locally by employers whose trade or industry is similar to that of the Contractor.

The Contractor shall inform the Contractor's Personnel about their liability to pay personal income taxes in the Country in respect of such of their salaries, wages and allowances as are chargeable under the Laws for the time being in force, and the Contractor shall perform such duties in regard to such deductions thereof as may be imposed on him by such Laws.

# 22.2.5Working Hours

Normally, work may not be carried out on the

Site on locally recognized days of rest, or outside the normal working hours, unless:

- (a) otherwise stated in the Contract,
- (b) the Project Manager gives consent, or
- (c) the work is unavoidable, or necessary for the protection of life or property or for the safety of the Works, in which case the Contractor shall immediately advise the Project Manager.

If and when the Contractor considers it necessary to carry out work at night or on public holidays so as to meet the Time for Completion and requests the Project Manager's consent thereto, the Project Manager shall not unreasonably withhold such consent.

This Sub-Clause shall not apply to any work which is customarily carried out by rotary or double-shifts.

#### 22.2.6 Facilities for Staff and Labor

Except as otherwise stated in the Specification, the Contractor shall provide and maintain all necessary accommodation and welfare facilities for the Contractor's Personnel. The Contractor shall also provide facilities for the Employer's Personnel if and as stated in the Specification.

The Contractor shall not permit any of the Contractor's Personnel to maintain any temporary or permanent living quarters within the structures forming part of the Permanent Works.

# 22.2.7 Health and Safety

The Contractor shall at all times take all reasonable precautions to maintain the health and safety of the Contractor's Personnel. In collaboration with local health authorities, the Contractor shall ensure that medical staff, first aid facilities, sick bay and other services are available at all times at the Site and at any

accommodation for Contractor's and Employer's Personnel, and that suitable arrangements are made for all necessary welfare and hygiene requirements and for the prevention of epidemics.

The Contractor shall appoint an accident prevention officer at the Site, responsible for maintaining safety and protection against accidents. This person shall be qualified for this responsibility, and shall have the authority to issue instructions and take protective measures to prevent accidents. Throughout the performance of the Contract, the Contractor shall provide whatever is required by this person to exercise this responsibility and authority.

The Contractor shall send to the Project Manager, details of any accident as soon as practicable after its occurrence. The Contractor shall maintain records and make reports concerning health, safety and welfare of persons, and damage to property, as the Project Manager may reasonably require.

The Contractor shall throughout the contract (including the Defects Notification Period): (i) conduct Information. Education Consultation Communication (IEC) campaigns, as per guidelines of concerned local, state or government authorities, addressed to all the Site staff and labor (including all the Contractor's employees, all SubContractors, and all truck drivers and crew making deliveries to Site for construction activities) and to the immediate local communities, concerning the risks, dangers and impact, and appropriate avoidance behavior with respect to of risks of various transmittable diseases, epidemic etc.

# 22.2.8 Funeral Arrangements

In the event of the death of any of the Contractor's personnel or accompanying members of their families, the Contractor shall be responsible for making the appropriate

arrangements for their return or burial, unless otherwise specified in the SCC.

#### 22.2.9 Records of Contractor's Personnel

The Contractor shall keep accurate records of the Contractor's personnel, including the number of each class of Contractor's Personnel on theSite and the names, ages, genders, hours worked and wages paid to all workers. These records shall be available for inspection by the Project Manager until the Contractor has completed all work.

# 22.2.10 Supply of Water

The Contractor shall, having regard to local conditions, provide on the Site an adequate supply of drinking.

# 22.2.11 Prohibition of All Forms of Forced or Compulsory Labor

The Contractor shall not employ "forced or compulsory labor" in any form. "Forced or compulsory labor" consists of all work or service, not voluntarily performed, that is extracted from an individual under threat of force or penalty.

#### 22.2.12 Prohibition of Harmful Child Labor

The Contractor shall not employ any child to perform any work that is economically exploitative, or is likely to be hazardous to, or to interfere with, the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development, as may be required as per the applicable laws.

# 22.3 Contractor's Equipment

22.3.1 All Contractor's Equipment brought by the Contractor onto the Site shall be deemed to be intended to be used exclusively for the execution of the Contract. The Contractor shall not remove the same from the Site without the Project Manager's consent that

- such Contractor's Equipment is no longer required for the execution of the Contract.
- 22.3.2 Unless otherwise specified in the Contract, upon completion of the Facilities, the Contractor shall remove from the Site all Equipment brought by the Contractor onto the Site and any surplus materials remaining thereon.
- 22.3.3 The Employer will, if requested, use its best endeavors to assist the Contractor in obtaining any local, state or national government permission required by the Contractor for removal of the equipment from Site, which was brought to Site by the Contractor for use in the execution of the Contract that is no longer required for the execution of the Contract.

#### 22.4 Site Regulations and Safety

The Employer and the Contractor shall establish Site regulations setting out the rules to be observed in the execution of the Contract at the Site and shall comply therewith. The Contractor shall prepare and submit to the Employer, with a copy to the Project Manager, proposed Site regulations for the Employer's approval, which approval shall not be unreasonably withheld.

Such Site regulations shall include, but shall not be limited to, rules in respect of security, safety of the Facilities, gate control, sanitation, medical care, and fire prevention.

#### 22.5 Opportunities for Other Contractors

- 22.5.1 The Contractor shall, upon written request from the Employer or the Project Manager, give all reasonable opportunities for carrying out the work to any other Contractors employed by the Employer on or near the Site.
- 22.5.2 If the Contractor, upon written request from the Employer or the Project Manager, makes available to other Contractors any roads or ways the maintenance for which the Contractor

is responsible, permits the use by such other Contractors of the Contractor's Equipment, or provides any other service of whatsoever nature for such other Contractors, the Employer shall fully compensate the Contractor for any loss or damage caused or occasioned by such other Contractors in respect of any such use or service, and shall pay to the Contractor reasonable remuneration for the use of such equipment or the provision of such services.

- 22.5.3 The Contractor shall also so arrange to perform its work as to minimize, to the extent possible, interference with the work of other Contractors. The Project Manager shall determine the resolution of any difference or conflict that may arise between the Contractor and other Contractors and the workers of the Employer in regard to their work.
- 22.5.4 The Contractor shall notify the Project Manager promptly of any defects in the other Contractors' work that come to its notice, and that could affect the Contractor's work. The Project Manager shall determine the corrective measures, if any, required to rectify the situation after inspection of the Facilities. Decisions made by the Project Manager shall be binding on the Contractor.

#### 22.6 Emergency Work

If, by reason of an emergency arising in connection with and during the execution of the Contract, any protective or remedial work is necessary as a matter of urgency to prevent damage to the Facilities, the Contractor shall immediately carry out such work.

If the Contractor is unable or unwilling to do such work immediately, the Employer may do or cause such work to be done as the Employer may determine is necessary in order to prevent damage to the Facilities. In such event the Employer shall, as soon as practicable after the occurrence of any such emergency, notify the Contractor in writing of such emergency, the work done and the reasons therefor. If

the work done or caused to be done by the Employer is work that the Contractor was liable to do at its own expense under the Contract, the reasonable costs incurred by the Employer in connection therewith shall be paid by the Contractor to the Employer. Otherwise, the cost of such remedial work shall be borne by the Employer.

#### 22.7 Site Clearance

- 22.7.1 Site Clearance in Course of Performance: In the course of carrying out the Contract, the Contractor shallkeep theSite reasonably free from all unnecessary obstruction, store or remove any surplus materials, clear away any wreckage, rubbish or temporary works from the Site, and remove any Contractor's Equipment no longer required for execution of the Contract.
- 22.7.2 Clearance of Site after Completion: After Completion of all parts of the Facilities, the Contractor shall clear away and remove all wreckage, rubbish and debris of any kind from the Site, and shall leave the Site and Facilities in a clean and safe condition.

# 22.8 Watching and Lighting

The Contractor shall provide and maintain at its own expense alllighting, fencing, and watching when and where necessary for the proper execution and the protection of the Facilities, or for the safety of the owners and occupiers of adjacent property and for the safety of the public.

# 23. Test and Inspection

- 23.1 The Contractor shall at its own expense carry out at the place of manufacture and/or on the Site all such tests and/or inspections of the Plant and any part of the Facilities as are specified in the Contract.
- 23.2 The Employer and the Project Manager or their designated representatives shall be entitled to attend the aforesaid test and/or inspection, provided that the Employer shall bear all costs and expenses incurred in connection with such attendance including, but not limited to, all traveling and board and lodging

expenses.

- 23.3 Whenever the Contractor is ready to carry out any such test and/or inspection, the Contractor shall give a reasonable advance notice of such test and/or inspection and of the place and time thereof to the Project Manager. The Contractor shall obtain from any relevant third Party or manufacturer anynecessary permission or consent to enable the Employer and the Project Manager or their designated representatives to attend the test and/or inspection.
- 23.4 The Contractor shall provide the Project Manager with a certified report of the results of any such test and/or inspection.
  - If the Employer or Project Manager or their designated representatives fails to attend the test and/or inspection, or if it is agreed between the Parties that such persons shall not do so, then the Contractor may proceed with the test and/or inspection in the absence of such persons, and may provide the Project Manager with a certified report of the results thereof.
- 23.5 The Project Manager may require the Contractor to carry out any test and/or inspection not required by the Contract, provided that the Contractor's reasonable costs and expenses incurred in the carrying out of such test and/or inspection shall be added to the Contract Price. Further, if such test and/or inspection impede the progress of work on the Facilities and/or the Contractor's performance of its other obligations under the Contract, due allowance will be made in respect of the Time for Completion and the other obligations so affected.
- 23.6 If any Plant or any part of the Facilities fails to pass any test and/or inspection, the Contractor shall either rectify or replace such Plant or part of the Facilities and shall repeat the test and/or inspection upon giving a notice under GCC Sub-Clause 23.3.
- 23.7 If any dispute or difference of opinion shall arise between the Parties in connection with or arising out of the test and/or inspection of the Plant or part of the Facilities that cannot be settled between the Parties within a reasonable period of time, it may be referred

for settlement of dispute in accordance with GCC Clause 46.

- 23.8 The Contractor shall afford the Employer and the Project Manager, at the Employer's expense, access at any reasonable time to any place where the Plant are being manufactured or the Facilities are being installed, in order to inspect the progress and the manner of manufacture or installation, provided that the Project Manager shall give the Contractor a reasonable prior notice.
- 23.9 The Contractor agrees that neither the execution of a test and/or inspection of Plant or any part of the Facilities, nor the attendance by the Employer or the Project Manager, nor the issue of any test certificate pursuant to GCC Sub-Clause 23.4, shall release the Contractor from any other responsibilities under the Contract.
- 23.10 No part of the Facilities or foundations shall be covered up on the Site without the Contractor carrying out any test and/or inspection required under the Contract. The Contractor shall give a reasonable notice to the Project Manager whenever any such parts of the Facilities or foundations are ready or about to be ready for test and/or inspection; such test and/or inspection and notice thereof shall be subject to the requirements of the Contract.
- 23.11 The Contractor shall uncover any part of the Facilities or foundations, or shall make openings in or through the same as the Project Manager may from time to time require at the Site, and shall reinstate and make good such part or parts.

If any parts of the Facilities or foundations have been covered up at the Site after compliance with the requirement of GCC Sub-Clause 23.10 and are found to be executed in accordance with the Contract, the expenses of uncovering, making openings in or through, reinstating, and making good the same shall be borne by the Employer, and the Time for Completion shall be reasonably adjusted to the extent that the Contractor has thereby been delayed or impeded in the performance of any of its obligations under the Contract.

The Employer/Nodal agency/ Third part inspecting agency may also deploy mobile vans with Testing facility to test the plants and facilities by selecting random samples from store or from site. In such a case if the material/ facility fails, the same shall be replaced with new material, and one more random sample would be selected from the same batch fortesting. If the material fails the test again, then the whole lot shall be replaced by the Contractor at its own risk and cost.

# 24. Precommissioning, Commissioning, Guarantee Tests and Completion of the Facilities

#### 24.1 Pre-Commissioning

- 24.1.1 As soon as the Facilities or any part thereof have, in the opinion of the Contractor/Bidder, been completed operationally and structurally and put in a tight and clean condition as specified in the Employer's Requirements, excluding minor items not materially affecting the operation or safety of the Facilities, the Contractor/Bidder shall so notify the Employer in writing.
- 24.1.2 Within seven (7) days after receipt of the notice from the Contractor/Bidder under GCC Sub-Clause 24.1.1, the Employer shall supply the operating and maintenance personnel specified in the Appendix to the Contract Agreement titled Scope of Works and Supply by the Employer for Precommissioning of the Facilities or any part thereof.

Pursuant to the Appendix to the Contract Agreement titled Scope of Works and Supply by the Employer, the Employer shall also provide, within the said seven (7) day period, the utilities, facilities, services and other matters required for Precommissioning of the Facilities or any part thereof.

24.1.3 As soon as reasonably practicable after the operating and maintenance personnel have been supplied by the Employer and the utilities, facilities, services and other matters have been provided by the Employer in accordance with GCC Sub-Clause 24.1.2, the Contractor shall commence Precommissioning of the Facilities or the relevant

- part thereof in preparation for Commissioning, subject to GCC Sub-Clause 24.8.
- 24.1.4 As soon as all works in respect of Precommissioning are completed and, in the opinion of the Contractor, the Facilities or any part thereof are ready for Commissioning, the Contractor/Bidder shall so notify the Project Manager in writing.
- 24.1.5 The Project Manager, within fourteen (14) days after receipt of the Contractor's notice under GCC Sub-Clause 24.1.4, either intimate in writing to commence Commissioning, or notify the defects and/or deficiencies to be rectified/ corrected by the Contractor pending which Commissioning cannot be commenced.
- 24.1.6 If the Project Manager notifies the Contractor of any defects and/or deficiencies, the Contractor shall then correct/ rectify such defects and/or deficiencies, and shall repeat the procedure described in GCC Sub-Clause 24.1.4.
- 24.1.7 If the Project Manager is satisfied that the Facilities or that part thereof are ready for Commissioning, the Project Manager shall, within seven (7) days after receipt of the Contractor's repeated notice, issue a communication in writing to the Contractor to commence Commissioning.
  - If the Project Manager is not so satisfied, then it shall notify the Contractor in writing of any defects and/or deficiencies within seven (7) days after receipt of the Contractor's repeated notice, and the above procedure shall be repeated.
- 24.1.8 If the Project Manager fails to issue any written communication/ intimation to the Contractor, and fails to inform the Contractor of any defects and/or deficiencies within fourteen (14) days after receipt of the Contractor's notice under GCC Sub-Clause 24.4.1 or within seven (7) days after receipt of the Contractor's repeated notice, then the Facilities or that part thereof shall be deemed to be ready for Commissioning as on expiry of the 14 days/ 7 days

period as aforesaid, as the case may be.

#### 24.2 Commissioning

- 24.2.1 Commissioning of the Facilities or any part thereof shall be commenced by the Contractor immediately after issue of the written intimation for the same by the Project Manager.
- 24.2.2 The Employer shall supply the operating and maintenance personnel and all utilities, facilities, services and other matters required for Commissioning.
- 24.2.3 In accordance with the requirements of the Contract, the Contractor's and Project Manager's advisory personnel shall attend the Commissioning, including the Guarantee Test, and shall advise and assist the Employer.

# 24.3 Guarantee Test

24.3.1 Subject to GCC Sub-Clause 24.8, the Guarantee Test and repeats thereof shall be conducted by the Contractor during Commissioning of the Facilities or the relevant part thereof to ascertain whether the Facilities or the relevant part can attain the Functional Guarantees specified in the Appendix to the Contract Agreement titled Functional Guarantees. The Employer shall promptly provide the Contractor with such information as the Contractor may reasonably require in relation to the conduct and results of the Guarantee Test and any repeats thereof.

#### 24.4 Completion

- 24.4.1As soon as all works in respect of Precommissioning, Commissioning, Guarantee Tests and geo-tagging of the assets on GIS portal, are completed in the opinion of the Contractor, the Facilities or any part thereof have achieved Completion, the Contractor shall so notify the Project Manager in writing.
- 24.4.2 The Project Manager shall, within fourteen (14) days after receipt of the Contractor's notice under

GCC Sub-Clause 24.4.1, either issue a Completion Certificate in the form specified in the Section 8, stating that the Facilities or that part thereof have reached Completion as of the date of the Contractor's notice under GCC Sub-Clause 24.4.1, or notify the Contractor in writing of any defects and/or deficiencies.

- 24.4.3 If the Project Manager notifies the Contractor of any defects and/or deficiencies, the Contractor shall then correct such defects and/or deficiencies, and shall repeat the procedure described in GCC Sub-Clause 24.4.1.
- 24.4.4 If the Project Manager is satisfied that the Facilities or that part thereof have reached Completion, the Project Manager shall, within seven (7) days after receipt of the Contractor's repeated notice, issue a Completion Certificate stating that the Facilities or that part thereof have reached Completion as of the date of the Contractor's repeated notice.

If the Project Manager is not so satisfied, then it shall notify the Contractor in writing of any defects and/or deficiencies within seven (7) days after receipt of the Contractor's repeated notice, and the above procedure shall be repeated.

- If the Project Manager fails to issue the Completion 24.4.5 Certificate and fails to inform the Contractor of any defects and/or deficiencies within fourteen (14) days after receipt of the Contractor's notice under GCC Sub-Clause 24.4.1 or within seven (7) days after receipt of the Contractor's repeated notice under GCC Sub-Clause 24.4.4, or if the Employer makes use of the Facilities or part thereof, then the Facilities or that part thereof shall be deemed to have reached Completion as of the date of the Contractor's notice or repeated notice, or as of the Employer's use of the Facilities, as the case may be. The Contractor shall accordingly issue written communication/ intimation on the same to the Project Manager.
- 24.5 As soon as possible after Completion, the Contractor shall complete all outstanding minor items so that the Facilities are fully in accordance with the

requirements of the Contract, failing which the Employer will undertake such completion and deduct the costs thereof from any monies owing to the Contractor.

24.6 Upon Completion, the Employer shall be responsible for the care and custody of the Facilities or the relevant part thereof, together with the risk of loss or damage thereto, and shall thereafter take over the Facilities or the relevant part thereof.

#### 24.7 Partial Acceptance

24.7.1 If the Contract specifies that Commissioning and Completion shall be carried out in respect of parts of the Facilities, the provisions relating to Commissioning and Completion including the Guarantee Test shall apply to each such part of the Facilities individually, and the Completion Certificate shall be issued accordingly for each such part of the Facilities.

# 24.8 Delayed Precommissioning, Commissioning and/or Guarantee Test

24.8.1 In the event that the Contractor is unable to proceed with the Precommissioning of the Facilities pursuant to GCC Sub-Clause 24.1, or the Commissiong/Guarantee with pursuant to GCC Sub-Clause 24.2/24.3, for reasons attributable to the Employer either on account of non availability of other facilities responsibilities under the of Contractor(s), or for reasons beyond the Contractor's control, the provisions leading to "deemed" completion of activities such as Completion, pursuant to GCC Sub-Clause 24.4, and Operational Acceptance, pursuant to Sub-Clause 25, and Contractor's obligations regarding Defect Liability Period, pursuant to GCC Sub-Clause 27.2, Functional Guarantee, pursuant to GCC Clause 28, and Care of Facilities, pursuant to GCC Clause 32, and GCC Clause 41.1, Suspension, shall not apply. In this case, the following provisions

shall apply.

- 24.8.2 When the Contractor is notified by the Project Manager that he will be unable to proceed with the activities and obligations pursuant to above Sub-Clause 24.8.1, the Contractor shall be entitled to the following:
  - (a) the Time of Completion shall be extended for the period of suspension without imposition of liquidated damages pursuant to GCC Sub-Clause 26.2;
  - payments due to the Contractor in (b) accordance with the provision specified Appendix to the Contract in the Agreement titled Terms and Procedures of Payment, which would not have been payable in normal circumstances due to non-completion of the subject activities, shall be released to the Contractor against submission of a security in the form of a bank guarantee of equivalent amount acceptable to the Employer, and which shall become null and void when the Contractor will have complied with its obligations regarding those payments, subject to the provision of Sub-Clause 24.8.3 below;
  - (c) the expenses towards the above security and extension of other securities under the contract, of which validity needs to be extended, shall be reimbursed to the Contractor by the Employer;
  - (d) the additional charges towards the care of the Facilities pursuant to GCC Sub-Clause 32.1 shall be reimbursed to the Contractor by the Employer for the period between the notification mentioned above and the notification mentioned in Sub-Clause 24.8.4 below. The provision of GCC Sub-Clause 33.2 shall apply to the Facilities during the

#### same period.

- 24.8.3 In the event that the period of suspension under above Sub-Clause 24.8.1 actually exceeds one hundred eighty (180) days, the Employer and Contractor shall mutually agree to any additional compensation payable to the Contractor.
- 24.8.4 When the Contractor is notified by the Project Manager that the plant is ready Precommissioning/ Commissioning/ Guarantee Tests, the Contractor shall proceed without delay in Precommissioning, performing Commissioning, Guarantee Tests and achieving Completion accordance with GCC Clause 24.

# 25. Operational Acceptance

# 25.1 Operational Acceptance

- 25.1.1 Subject to GCC Sub-Clause 24.7, Operational Acceptance shall occur in respect of the Facilities or any part thereof when
  - (a) the Guarantee Test has been successfully completed and the Functional Guarantees are met; or
  - (b) the Contractor has paid the liquidated damages specified in GCC Sub-Clause 28.3 hereof; and
  - (c) any minor items mentioned in GCC Sub-Clause 24.5 hereof relevant to the Facilities or that part thereof have been completed.
- 25.1.2 In case if the requirements of GCC 25.1.1 have been complied upon or before achieving the Completion, Operational Acceptance shall be deemd to have occurred upon Completion. In case if the requirements of GCC 25.1.1 have been not been complied upon on or before achieving the Completion, at any time after the same are complied, the Contractor may give a notice to the Project Manager requesting the issue of an Operational Acceptance Certificate in respect of the Facilities or the part thereof specified in such notice

as of the date of such notice.

- 25.3.3 The Project Manager shall, after consultation with the Employer, and within seven (7) days after receipt of the Contractor's notice, issue an Operational Acceptance Certificate.
- 25.3.4 If within seven (7) days after receipt of the Contractor's notice, the Project Manager fails to issue the Operational Acceptance Certificate or fails to inform the Contractor in writing of the justifiable reasons why the Project Manager has not issued the Operational Acceptance Certificate, the Facilities or the relevant part thereof shall be deemed to have been accepted as of the date of the Contractor's said notice. The Contract shall intimate the same to the Project Manager through awritten communication/intimation.

#### F. Guarantees and Liabilities

# **26.** Completion Time Guarantee

- 26.1 The Contractor guarantees that it shall attain Completion of the Facilities (or a part for which a separate time for completion is specified) within the Time for Completion specified in the SCC pursuant to GCC Sub-Clause 8.2, or within such extended time to which the Contractor shall be entitled under GCC Clause 40 hereof.
- 26.2 If the Contractor fails to attain Completion of the Facilities or any part thereof within the Time for Completion or any extension thereof under GCC Clause 40, the Contractor shall pay to the Employer liquidated damages in the amount specified in the SCC as a percentage rate of the Contract Price or the relevant part thereof. The aggregate amount of such liquidated damages shall in no event exceed the amount specified as "Maximum" in the SCC as a percentage rate of the Contract Price. Once the "Maximum" is reached, the Employer may consider termination of the Contract, pursuant to GCC Sub-Clause 42.2.2.

Such payment shall completely satisfy the Contractor's obligation to attain Completion of the Facilities or the relevant part thereof within the Time for Completion or any extension thereof under GCC Clause 40. The Contractor shall have no further liability whatsoever to the Employer in respect thereof.

However, the payment of liquidated damages shall not in any way relieve the Contractor from any of its obligations to complete the Facilities or from any other obligations and liabilities of the Contractor under the Contract.

Save for liquidated damages payable under this GCC Sub-Clause 26.2, the failure by the Contractor to attain any milestone or other act, matter or thing by any date specified in the Appendix to the Contract Agreement titled Time Schedule, and/or other program of work prepared pursuant to GCC Sub-Clause 18.2 shall not render the Contractor liable for any loss or damage thereby suffered by the Employer.

# 27. Defect Liability

- 27.1 The Contractor warrants that the Facilities or any part thereof shall be free from defects in the design, engineering, materials and workmanship of the Plant supplied and of the work executed. Further, in additions to the provisons contained herein, the provisons, if any, specified in **SCC** shall also apply.
- 27.2 The Defect Liability Period shall be Twelve (12) month from the date of Completion of the Facilities (or any part thereof) unless specified otherwise in the SCC pursuant to GCC Sub-Clause 27.10, and the duration of every extension applicable (as per GCC 27.8) should be same as the duration of the defect liability period above. The aggregate value of all extensions will be subject to the maximum extension permissible (as per GCC 27.8).

If during the Defect Liability Period any defect should be found in the design, engineering, materials and workmanship of the Plant supplied or of the Installation Services/ work executed by the Contractor, the Contractor shall promptly, in consultation and agreement with the Employer regarding appropriate remedying of the defects, and at its own cost, repair, replace or otherwise make good such defect as well as any damage to the Facilities caused by such defect, to the satisfaction of the Employer. The Contractor shall not be responsible for the repair, replacement or making good of any defect or of any damage to the Facilities arising out of or resulting from any of the following causes:

- (a) improper operation or maintenance of the Facilities by the Employer;
- (b) operation of the Facilities outside specifications provided in the Contract; or
- (c) normal wear and tear.
- 27.3 The Contractor's obligations under this GCC Clause 27 shall not apply to:
  - (a) any materials that are supplied by the Employer under GCC Sub-Clause 21.2, are normally consumed in operation, or have a normal life shorter than the Defect Liability Period stated herein;
  - (b) any designs, specifications or other data designed, supplied or specified by or on behalf of the Employer or any matters for which the Contractor has disclaimed responsibility herein; or
  - (c) any other materials supplied or any other work executed by or on behalf of the Employer, except for the work executed by the Employer under GCC Sub-Clause 27.7.
- 27.4 The Employer shall give the Contractor a notice stating the nature of any such defect together with all available evidence thereof, promptly following the discovery thereof. The Employer shall afford all reasonable opportunity for the Contractor to inspect any such defect.
- 27.5 The Employer shall afford the Contractor all necessary access to the Facilities and the Site to enable the

Contractor to perform its obligations under this GCC Clause 27.

The Contractor may, with the consent of the Employer, remove from the Site any Plant or any part of the Facilities that are defective if the nature of the defect, and/or any damage to the Facilities caused by the defect, is such that repairs cannot be expeditiously carried out at the Site.

27.6 If the repair, replacement or making good is of such a character that it may affect the efficiency of the Facilities or any part thereof, the Employer may give to the Contractor a notice requiring that tests of the defective part of the Facilities shall be made by the Contractor immediately upon completion of such remedial work, whereupon the Contractor shall carry out such tests.

If such part fails the tests, the Contractor shall carry out further repair, replacement or making good, as the case may be, until that part of the Facilities passes such tests. The tests shall be agreed upon by the Employer and the Contractor.

- 27.7 If the Contractor fails to commence the work necessary to remedy such defect or any damage to the Facilities caused by such defect within a reasonable time (which shall in no event be considered to be less than fifteen (15) days), the Employer may, following notice to the Contractor, proceed to do such work, and the reasonable costs incurred by the Employer in connection therewith shall be paid to the Employer by the Contractor or may be deducted by the Employer from any monies due the Contractor or claimed under the Performance Security.
- 27.8 If the Facilities or any part thereof cannot be used by reason of such defect and/or making good of such defect, the Defect Liability Period of the Facilities or such part, as the case may be, shall be extended by a period equal to the period during which the Facilities or such part cannot be used by the Employer because of any of the aforesaid reasons.

Upon correction of the defects in the Facilities or any part thereof by repair/replacement, the repaired/ replaced

item(s) shall have the Defect Liability Period extended by a period mentioned in GCC Sub-Clause 27.2 from the time of such replacement/repair of the facilities or any part thereof. However, such extension of Defect Liability Period, in aggregate, shall, not exceed the period specified in SCC.

- 27.8.1 At the end of the Defect Liability Period, the Contractor's Liability ceases except for latent defects. The Contractor's liability for latent defects warranty shall be limited to period specified in SCC, reckoned from the end of Defect Liability Period including extension thereof. For the purpose of this clause, the latent defects shall be the defects inherently lying within the material or arising out of design deficiency, which do not manifest themselves during the Defect Liability Period defined in this GCC Clause 27, but later. The bidder should submit an undertaking in non-judicial stamp paper (Rs.100/-) for providing Latent Defect Coverage support warranty against each equipments and it shall be limited to period specified in SCC/Technical Specifications, reckoned from the end of defect liability period including extension thereof and the related format is enclosed herewith as Form-21.
- 27.9 Except as provided in GCC Clauses 27 and 33, the Contractor shall be under no liability whatsoever and howsoever arising, and whether under the Contract or at law, in respect of defects in the Facilities or any part thereof, the Plant, design or engineering or work executed that appear after Completion of the Facilities or any part thereof, except where such defects are the result of the gross negligence, fraud, or criminal or willful action of the Contractor.
- 27.10 In addition, any such component of the Facilities, and during the period of time as may be specified in the SCC, shall be subject to an extended defect liability period. Such obligation of the Contractor shall be in addition to the defect liability period specified under GCC Sub-Clause 27.2.

### 28. Functional Guarantees

28.1 The Contractor guarantees that during the Guarantee Test, the Facilities and all parts thereof shall attain the Functional Guarantees specified in the Appendix to the

- Contract Agreement titled Functional Guarantees, subject to and upon the conditions therein specified.
- 28.2 If, for reasons attributable to the Contractor, the minimum level of the Functional Guarantees specified in the Appendix to the Contract Agreement titled Functional Guarantees, are not met either in whole or in part, the Contractor shall at its cost and expense make such changes, modifications and/or additions to the Plant or any part thereof as may be necessary to meet at least the minimum level of such Guarantees. The Contractor shall notify the Employer upon completion of the necessary changes, modifications and/or additions, and shall request the Employer to repeat the Guarantee Test until the minimum level of Guarantees has been met. If the Contractoreventually fails to meet the minimum level of Functional Guarantees, the Employer may consider termination of the Contract, pursuant to GCC Sub-Clause 42.2.2 subject to all other actions as deemed fit by the Employer including but not limited to legal recourse
- 28.3 If, for reasons attributable to the Contractor, the Functional Guarantees specified in the Appendix to the Contract Agreement titled Functional Guarantees, are not attained either in whole or in part, but the minimum level of the Functional Guarantees specified in the said Appendix to the Contract Agreement is met, the Contractor shall, at the Contractor's option, either
  - (a) make such changes, modifications and/or additions to the Facilities or any part thereof that are necessary to attain the Functional Guarantees at its cost and expense, and shall request the Employer to repeat the Guarantee Test or
  - (b) pay liquidated damages to the Employer in respect of the failure to meet the Functional Guarantees in accordance with the provisions in the Appendix to the Contract Agreement titled Functional Guarantees.
- 28.4 The payment of liquidated damages under GCC Sub-Clause 28.3, up to the limitation of liability specified in the Appendix to the Contract Agreement titled Functional Guarantees, shall completely satisfy the

Contractor's guarantees under GCC Sub-Clause 28.3, and the Contractor shall have no further liability whatsoever to the Employer in respect thereof. Upon the payment of such liquidated damages by the Contractor, the Project Manager shall issue the Operational Acceptance Certificate for the Facilities or any part thereof in respect of which the liquidated damages have been so paid.

### 29. Patent Indemnity

29.1 The Contractor shall, subject to the Employer's compliance with GCC Sub-Clause 29.2, indemnify and hold harmless the Employer and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney's fees and expenses, which the Employer may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright or other intellectual property right registered or otherwise existing at the date of the Contract by reason of: (a) the installation of the Facilities by the Contractor or the use of the Facilities in the country where the Site is located; and (b) the sale of the products produced by the Facilities in any country.

Such indemnity shall not cover any use of the Facilities or any part thereof other than for the purpose indicated by or to be reasonably inferred from the Contract, any infringement resulting from the use of the Facilities or any part thereof, or any products produced thereby in association or combination with any other equipment, plant or materials not supplied by the Contractor, pursuant to the Contract Agreement.

29.2 If any proceedings are brought or any claim is made against the Employer arising out of the matters referred to in GCC Sub-Clause 29.1, the Employer shall promptly give the Contractor a notice thereof, and the Contractor may at its own expense and in the Employer's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

If the Contractor fails to notify the Employer within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Employer shall be free to conduct the same on its own behalf. Unless the Contractor has so failed to notify the Employer within the twenty-eight (28) day period, the Employer shall make no admission that may be prejudicial to the defense of any such proceedings or claim.

The Employer shall, at the Contractor's request, afford all available assistance to the Contractor in conducting such proceedings or claim, and shall be reimbursed by the Contractor for all reasonable expenses incurred in so doing.

29.3 The Employer shall indemnify and hold harmless the employees, Contractor and its officers SubContractors from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney's fees and expenses, which the Contractor may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright or other intellectual property right registered or otherwise existing at the date of the Contract arising out of or in connection with any design, data, drawing, specification, or other documents or materials provided or designed by or on behalf of the Employer.

### **30. Limitation of Liability**

- 30.1 Except in cases of criminal negligence or willful misconduct,
  - (a) neither Party shall be liable to the other Party, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, which may be suffered by the other Party in connection with the Contract, other than specifically provided as any obligation of the Party in the Contract, and
  - (b) the aggregate liability of the Contractor to the Employer, whether under the Contract, in tort or otherwise, shall not exceed the amount resulting from the application of the multiplier specified in the SCC, to the Contract Price or, if a multiplier is not so specified, the total Contract Price including

any price adjustment pursuant to the Contract, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the Contractor to indemnify the Employer with respect to patent infringement.

## G. Risk Distribution

## 31. Transfer of Ownership

- 31.1 Ownership of the Plant (including spare parts) shall be transferred to the Employer when the Plant are brought on to the Site.
- 31.2 Ownership of the Contractor's Equipment used by the Contractor and its SubContractors in connection with the Contract shall remain with the Contractor or its SubContractors.
- 31.3 Ownership of any Plant in excess of the requirements for the Facilities shall revert to the Contractor upon Completion of the Facilities or at such earlier time when the Employer and the Contractor agree that the Plant in question are no longer required for the Facilities.
- 31.5 Notwithstanding the transfer of ownership of the Plant, the responsibility for care and custody thereof together with the risk of loss or damage thereto shall remain with the Contractor pursuant to GCC Clause 32 (Care of Facilities) hereof until Completion of the Facilities or the part thereof in which such Plant are incorporated.
- 31.6 For the Plant/ goods/ equipment/material to be supplied by the Contractor under the Contract, it will be the responsibility of the Contractor to take delivery, unload and store the materials at Site and execute an Indemnity Bond and obtain authorisation letter from Employer as per specified proforma, in favour of the Employer against loss, damage and any risks involved for the full value of the Plant/ goods/ equipment/material. This Indemnity Bond, as provided in Section-8, shall be furnished by the Contractor before commencement of the supplies and shall be valid till the Completion of the Facilities.
- 31.7 Under the Contract, where the Employer hands over Employer supplied plant/ goods/ equipment/material to

the Contractor for executing the Contract, then the Contractor shall, at the time of taking delivery of the equipment through Bill of Lading or other despatch documents, furnish trust Receipt for such plant/ goods/ equipment/material and also execute an Indemnity Bond, as provided in Section-8, in favour of the Employer in the form acceptable to the Employer for keeping the plant/ goods/ equipment/material in safe custody and to utilize the same exclusively for the purpose of the Contract as per the specified proforma for the Trust receipt and Indemnity Bond. The Employer shall also issue a separate Authorization Letter to the Contractor to enable him to take physical delivery of plant/ goods/ equipment/material from the Employer as per specified proforma.

### 32. Care of Facilities

- 32.1 The Contractor shall be responsible for the care and custody of the Facilities or any part thereof until the date of Completion of the Facilities pursuant to GCC Clause 24 or, where the Contract provides for Completion of the Facilities in parts, until the date of Completion of the relevant part, and shall make good at its own cost any loss or damage that may occur to the Facilities or the relevant part thereof from any cause whatsoever during such period. The Contractor shall also be responsible for any loss or damage to the Facilities caused by the Contractor or its SubContractors in the course of any work carried out, pursuant to GCC Clause 27. Notwithstanding the foregoing, the Contractor shall not be liable for any loss or damage to the Facilities or that part thereof caused by reason of any of the matters specified or referred to in paragraphs (a), (b) and (c) of GCC Sub-Clauses 32.2 and 38.1.
- 32.2 If any loss or damage occurs to the Facilities or any part thereof by reason of
  - (a) insofar as they, in relatation to Site, relate to nuclear reaction, nuclear radiation, radioactive contamination, pressure wave caused by aircraft or other aerial objects, or any other occurrences that an experienced Contractor could not reasonably foresee, or if reasonably foreseeable could not reasonably make provision for or insure against, insofar as such risks are not normally insurable on the insurance market and are in the general

- excluded of the policy of insurance, including War Risks and Political Risks, taken out under GCC Clause 34 hereof; or
- (b) any use or occupation by the Employer or any third Party other than a SubContractor, authorized by the Employer of any part of the Facilities; or
- (c) any use of or reliance upon any design, data or specification provided or designated by or on behalf of the Employer, or any such matter for which the Contractor has disclaimed responsibility herein,

the Employer shall pay to the Contractor all sums payable in respect of the Facilities executed, notwithstanding that the same be lost, destroyed or damaged. If the Employer requests the Contractor in writing to make good any loss or damage to the Facilities thereby occasioned, the Contractor shall make good the same at the cost of the Employer in accordance with GCC Clause 39. If the Employer does not request the Contractor in writing to make good any loss or damage to the Facilities thereby occasioned, the Employer shall either request a change in accordance with GCC Clause 39, excluding the performance of that part of the Facilities thereby lost, destroyed or damaged, or, where the loss or damage affects a substantial part of the Facilities, the Employer shall terminate the Contract pursuant to GCC Sub-Clause 42.1 hereof.

- 32.3 The Contractor shall be liable for any loss of or damage to any Contractor's Equipment, or any other property of the Contractor used or intended to be used for purposes of the Facilities.
- 32.4 With respect to any loss or damage caused to the Facilities or any part thereof by reason of any of the matters specified in GCC Sub-Clause 38.1, the provisions of GCC Sub-Clause 38.3 shall apply.
- 33. Loss of or Damage to Property; Accident or Injury to Workers;
- 33.1 Subject to GCC Sub-Clause 33.3, the Contractor shall indemnify and hold harmless the Employer and its employees and officers from and against any and all suits, actions or administrative proceedings, claims,

### Indemnification

demands, losses, damages, costs, and expenses of whatsoever nature, including attorney's fees and expenses, in respect of the death or injury of any person or loss of or damage to any property other than the Facilities whether accepted or not, arising in connection with the supply and installation of the Facilities and by reason of the negligence of the Contractor or its SubContractors, or their employees, officers or agents, except any injury, death or property damage caused by the negligence of the Employer, its Contractors, employees, officers or agents.

33.2 If any proceedings are brought or any claim is made against the Employer that might subject the Contractor to liability under GCC Sub-Clause 33.1, the Employer shall promptly give the Contractor a notice thereof and the Contractor may at its own expense and in the Employer's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

If the Contractor fails to notify the Employer within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Employer shall be free to conduct the same on its own behalf. Unless the Contractor has so failed to notify the Employer within the twenty-eight (28) day period, the Employer shall make no admission that may be prejudicial to the defense of any such proceedings or claim.

- 33.3 The Employer shall indemnify and hold harmless the Contractor and its employees, officers and SubContractors from any liability for loss of or damage to property of the Employer, other than the Facilities not yet taken over, that is caused by fire, explosion or any other perils, in excess of the amount recoverable from insurances procured under GCC Clause 34, provided that such fire, explosion or other perils were not caused by any act or failure of the Contractor.
- 33.4The Party entitled to the benefit of an indemnity under this GCC Clause 33 shall take all reasonable measures to mitigate any loss or damage which has occurred. If the Party fails to take such measures, the other Party's liabilities shall be correspondingly reduced.

### 34. Insurance

- 34.1 To the extent specified in the Appendix to the Contract Agreement titled Insurance Requirements, the Contractor shall at its expense take out and maintain in effect, or cause to be taken out and maintained in effect, during the performance of the Contract, the insurances set forth below in the sums and with the deductibles and other conditions specified in the said Appendix. The identity of the insurers and the form of the policies shall be subject to the approval of the Employer, who should not unreasonably withhold such approval.
- a) Marine Cargo Policy/Transit Insurance Policy:
  - I. (i) Marine Cargo policy for imported equipment
     Since imported finished materials are not permitted
     under the contract, this policy shall not be applicable,
     (ii) Transit Insurance Policy for indigenous
    - equipment Transit Insurance Policy shall be taken wherein only inland transit is involved for the movement of Plant and Equipment supplied from within India. policy shall cover movement of Plant and Equipment from the manufacturer's works to the project's warehouse at final destination site. Inland Transit Clause (ITC) 'A' along with war & Strike Riots & Civil Commotion (SRCC) extension cover shall be taken. The policy shall cover movement of Plant and Equipment from the manufacturer's works to the project's warehouse at final destination site. The policy shall cover all risk for loss or damage that may occur during transit of Plant and Equipment from the Contractor/sub-Contractor's works or stores until arrival at project's warehouse/ store at final destination. Institute Cargo Clause (ICC) 'A' along with war & Strike Riots & Civil Commotion (SRCC) cover shall be taken.
- II. If during the execution of Contract, the Employer requests the Contractor to take any other add-on cover(s)/ supplementary cover(s) in aforesaid insurance, in such a case, the Contractor shall promptly take such add-on cover(s)/ supplementary cover(s) and the charges towards such premium for such add-on cover(s)/ supplementary cover(s) shall be reimbursed to the Contractor on submission documentary evidence of payment to the Insurance company. Therefore, charges towards premium for

- such add-on cover(s)/ supplementary cover(s) are not included in the Contract Price.
- III. The Contractor shall take the policy in the joint names of Employer and the Contractor. The policy shall indicate the Employer as the beneficiary. However, if the Contractor is having an open policy for its line of business, it should obtain an endorsement of the open cover policy from the insurance company indicating that the dispatches against this Contract are duly covered under its open policy and include the name of the Employer as jointly Insured in the endorsements to the open policy.
- b) Erection All Risk Policy/Contractor All Risk Policy:
  - I. The policy should cover all physical loss or damage to the facility at site during storage, erection and commissioning covering all the perils as provided in the policy as a basic cover and the add on covers as mentioned at Sl. No. (III) below.
- II. The Contractor shall take the policy in the joint name of Employer and the Contractor. All these policies shall indicate Employer as the beneficiary. The policy shall be kept valid till the date of the Operational Acceptance of the project and the period of the coverage shall be determined with the approval of the Employer.
- If the work is completed earlier than the period of policy considered, the Contractor shall obtain the refund as per provisions of the policy and pass on the benefit to Employer. In case no refund is payable by the insurance company then the certificate to that effect shall be submitted to Employer at the completion of the project.
- III. The following add-on covers shall also be taken by the Contractor:
  - i. Earthquake
- ii. Terrorism
- iii. Escalation cost (approximately @10% of sum insured on annual basis)
- iv. Extended Maintenance cover for Defect Liability

Period

- v. Design Defect
- vi. Other add-on covers viz., 50-50 clause, 72 hours clause, loss minimization clause, waiver of subrogation clause (for projects of more than Rs. 100 crores, cover for offsite storage/fabrication (over Rs. 100 crores).
- IV. Third Party Liability cover with cross Liability within Geographical limits of India as on ADD-on cover to the basic EAR cover:
- The third party liability add-on cover shall cover bodily injury or death suffered by third parties (including the Employer's personnel) and loss of or damage to property (including the Employer's property and any parts of the Facilities which have been accepted by the Employer) occurring in connection with supply and installation of the Facilities.
  - V. The cost of insurance premium is to be reimbursed to the Contractor for Employer Supplied Materials (OSM) for which the insurer is to be finalized by the Contractor as detailed therein. Alternatively, the Contractor may take a single policy covering the entire cost of the project including the cost of OSM. For this purpose, the Contractor shall submit documentary evidence for the premium paid for the entire project to the Employer and Employer shall reimburse to the Contractor the proportion of premium equal to value of OSM to total sum insured.
- VI. If during the execution of Contract, the Employer requests the Contractor to take any other add-on cover(s)/ supplementary cover(s) in aforesaid insurance, in such a case, the Contractor shall promptly take such add-on cover(s)/ supplementary cover(s) and the charges towards such premium for such add-on cover(s)/ supplementary cover(s) shall be reimbursed to the Contractor on submission documentary evidence of payment to the Insurance company. Therefore, charges towards premium for such add-on cover(s)/ supplementary cover(s) are not

included in the Contract Price.

# c) Automobile Liability Insurance

The Contractor shall ensure that all the vehicles deployed by the Contractor or its SubContractors (whether or not owned by them) in connection with the supply and installation of the Facilities in the project are duly insured as per RTA act. Further the Contractor or its SubContractors may also take comprehensive policy (own damage plus third party liability) of each individual vehicles deployed in the project on their own discretion in their own name to protect their own interest.

### d) Workmen Compensation Policy:

- I. Workmen Compensation Policy shall be taken by the Contractor in accordance with the statutory requirement applicable in India. The Contractor shall ensure that all the workmen employed by the Contractor or its SubContractors for the project are adequately covered under the policy.
- II. The policy may either be project specific covering all men of the Contractor and its SubContractors. The policy shall be kept valid till the date of Operational Acceptance of the project.

Alternatively, if the Contractor has an existing 'Workmen Compensation Policy' for all its employees including that of the SubContractor(s), the Contractor must include the interest of the Employer for this specific Project in its existing 'Workmen Compensation Policy'.

III. Without relieving the Contractor of its obligations and responsibilities under this Contract, before commencing work the Contractor shall insure against liability for death of or injury to persons employed by the Contractor including liability by statute and at common law. The insurance cover shall be maintained until all work including remedial work is completed including the Defect Liability Period. The insurance shall be extended to indemnify the Principal for the Principal's statutory liability to persons employed by the Contractor.

The Contractor shall also ensure that each of its SubContractors shall effect and maintain insurance on the same basis as the 'Workmen Compensation Policy' effected by the Contractor.

e) Contractor's Plant and Machinery (CPM) Insurance

The Employer (including without limitation any consultant, servant, agent or employee of the Employer) shall not in any circumstances be liable to the Contractor for any loss of or damage to any of the Contractor's Equipment or for any losses, liabilities, costs, claims, actions or demands which the Contractor may incur or which may be made against it as a result of or in connection with any such loss or damage.

### f) Other Insurances

Such other insurances as may be specifically agreed upon by the Parties hereto as listed in the Appendix to the Contract Agreement titled Insurance Requirements.

34.2 The Employer shall be named as co-insured under all insurance policies taken out by the Contractor pursuant to GCC Sub-Clause 34.1, except for the Third Party Liability, Workers' Compensation and Employer's Liability Insurances, and the Contractor's

SubContractors shall be named as co-insureds underall insurance policies taken out by the Contractor pursuant to GCC Sub-Clause 34.1 except for the Cargo Insurance During Transport, Workers' Compensation and Employer's Liability Insurances. All insurer's rights of subrogation against such co-insureds for losses or claims arising out of the performance of the Contract shall be waived under such policies.

- 34.3 The Contractor shall, in accordance with the provisions of the Appendix to the Contract Agreement titled Insurance Requirements, deliver to the Employer certificates of insurance or copies of the insurance policies as evidence that the required policies are in full force and effect. The certificates shall provide that no less than twenty-one (21) days' notice shall be given to the Employer by insurers prior to cancellation or material modification of a policy.
- 34.4 The Contractor shall ensure that, where applicable, its SubContractor(s) shall take out and maintain in effect adequate insurance policies for their personnel and vehicles and for work executed by them under the Contract, unless such SubContractors are covered by the policies taken out by the Contractor.
- 34.5 If the Contractor fails to take out and/or maintain in effect the insurances referred to in GCC Sub-Clause 34.1, the Employer may take out and maintain in effect any such insurances and may from time to time deduct from any amount due the Contractor under the Contract any premium that the Employer shall have paid to the insurer, or may otherwise recover such amount as a debt due from the Contractor
- 34.6 Unless otherwise provided in the Contract, the Contractor shall prepare and conduct all and any claims made under the policies effected by it pursuant to this GCC Clause 34, and all monies payable by any insurers shall be paid to the Contractor. The Employer shall give to the Contractor all such reasonable assistance as may be required by the Contractor. With respect to insurance claims in which the Employer's interest is involved, the Contractor shall not give any release or make any compromise with the insurer without the prior written consent of the Employer. With respect to insurance

claims in which the Contractor's interest is involved, the Employer shall not give any release or make any compromise with the insurer without the prior written consent of the Contractor.

### 35. Unforeseen Conditions

- 35.1 If, during the execution of the Contract, the Contractor shall encounter on the Site any physical conditions other than climatic conditions, or artificial obstructions that could not have been reasonably foreseen prior to the date of the Contract Agreement by an experienced Contractor on the basis of reasonable examination of the data relating to the Facilities including any data as to boring tests, provided by the Employer, and on the basis of information that it could have obtained from a visual inspection of the Site if access thereto was available, or other data readily available to it relating to the Facilities, and if the Contractor determines that it will in consequence of such conditions or obstructions incur additional cost and expense or require additional time to perform its obligations under the Contract that would not have been required if such physical conditions or artificial obstructions had not been encountered, the Contractor shall promptly, and before performing additional work or using additional Plant or Contractor's Equipment, notify the Project Manager in writing of
  - (a) the physical conditions or artificial obstructions on the Site that could not have been reasonably foreseen:
  - (b) the additional work and/or Plant and/or Contractor's Equipment required, including the steps which the Contractor will or proposes to take to overcome such conditions or obstructions;
  - (c) the extent of the anticipated delay; and
  - (d) the additional cost and expense that the Contractor is likely to incur.

On receiving any notice from the Contractor under this GCC Sub-Clause 35.1, the Project Manager shall promptly consult with the Employer and Contractor and decide upon the actions to be taken to overcome the physical conditions or artificial obstructions

encountered. Following such consultations, the Project Manager shall instruct the Contractor, with a copy to the Employer, of the actions to be taken.

35.2 Any reasonable additional cost and expense incurred by the Contractor in following the instructions from the Project Manager to overcome such physical conditions or artificial obstructions referred to in GCC Sub-Clause 35.1 shall be paid by the Employer to the Contractor as an addition to the Contract Price. However the Employer's decision in this regard shall be final and binding.

If the Contractor is delayed or impeded in the performance of the Contract because of any such physical conditions or artificial obstructions referred to in GCC Sub-Clause 35.1, the Time for Completion shall be extended in accordance with GCC Clause 40.

# 36. Change in Laws and Regulations

36.1If, after the date twenty-eight (28) days prior to the date of Bid submission, in India, any law, regulation, ordinance, order or by-law having the force of law is enacted, promulgated, abrogated or changed which shall be deemed to include any change in interpretation or application by the competent authorities, subsequently affects the costs and expenses of the Contractor and/or the Time for Completion, the Contract Price shall be correspondingly increased or decreased, and/or the Time for Completion shall be reasonably adjusted to the extent that the Contractor has thereby been affected in the performance of any of its obligations under the Contract. Notwithstanding the foregoing, such additional or reduced costs shall not be separately paid or credited if the same has already been accounted for in the price adjustment provisions where applicable, in accordance with the SCC pursuant to GCC Sub-Clause 11.2 or under other provisions of the Contract.

### 37. Force Majeure

- 37.1 "Force Majeure" shall mean any event beyond the reasonable control of the Employer or of the Contractor, as the case may be, and which is unavoidable notwithstanding the reasonable care of the Party affected, and shall include, without limitation, the following:
  - (a) war, hostilities or warlike operations whether a

- state of war be declared or not, invasion, act of foreign enemy and civil war
- (b) rebellion, revolution, insurrection, mutiny, usurpation of civil or military government, conspiracy, riot, civil commotion and terrorist acts
- (c) confiscation, nationalization, mobilization, commandeering or requisition by or under the order of any government or de jure or de facto authority or ruler or any other act or failure to act of any local state or national government authority
- (d) strike, sabotage, lockout, embargo, import restriction, port congestion, lack of usual means of public transportation and communication, industrial dispute, shipwreck, shortage or restriction of power supply, epidemics, quarantine and plague
- (e) earthquake, landslide, volcanic activity, fire, flood or inundation, tidal wave, typhoon or cyclone, hurricane, storm, lightning, or other inclement weather condition, nuclear and pressure waves or other natural or physical disaster
- (f) shortage of labor, materials or utilities where caused by circumstances that are themselves Force Majeure.
- 37.2 If either Party is prevented, hindered or delayed from or in performing any of its obligations under the Contract by an event of Force Majeure, then it shall notify the other in writing of the occurrence of such event and the circumstances thereof within fourteen (14) days after the occurrence of such event.
- 37.3 The Party who has given such notice, unless disputed by the other Party, shall be excused from the performance or punctual performance of its obligations under the Contract for so long as the relevant event of Force Majeure continues and to the extent that such Party's performance is prevented, hindered or delayed. The Time for Completion shall be extended in accordance with GCC Clause 40.

- 37.4 The Party or Parties affected by the event of Force Majeure shall use reasonable efforts to mitigate the effect thereof upon its or their performance of the Contract and to fulfill its or their obligations under the Contract, but without prejudice to either Party's right to terminate the Contract under GCC Sub-Clauses 37.6 and 38.5.
- 37.5 No delay or nonperformance by either Party hereto caused by the occurrence of any event of Force Majeure shall
  - (a) constitute a default or breach of the Contract, or
  - (b) give rise to any claim for damages or additional cost or expense occasioned thereby, subject to GCC Sub-Clauses 32.2, 38.3 and 38.4

if and to the extent that such delay or nonperformance is caused by the occurrence of an event of Force Majeure.

- 37.6 If the performance of the Contract is substantially prevented, hindered or delayed for a single period of more than ninety (90) days or an aggregate period of more than one hundred and eighty (180) days on account of one or more events of Force Majeure during the currency of the Contract, the Parties will attempt to develop a mutually satisfactory solution, failing which either Party may terminate the Contract by giving a notice to the other, but without prejudice to either Party's right to terminate the Contract under GCC Sub-Clause 38.5.
- 37.7 In the event of termination pursuant to GCC Sub-Clause 37.6, the rights and obligations of the Employer and the Contractor shall be as specified in GCC Sub-Clauses 42.1.2 and 42.1.3.
- 37.8 Notwithstanding GCC Sub-Clause 37.5, Force Majeure shall not apply to any obligation of the Employer to make payments to the Contractor herein.
- 38.1 "War Risks" shall mean any event specified in paragraphs (a) and (b) of GCC Sub-Clause 37.1 and any explosion or impact of any mine, bomb, shell, grenade or other projectile, missile, munitions or

38. War Risks

- explosive of war, occurring or existing in the India impacting the Site.
- 38.2 Notwithstanding anything contained in the Contract, the Contractor shall have no liability whatsoever for or with respect to
  - (a) destruction of or damage to Facilities, Plant, or any part thereof;
  - (b) destruction of or damage to property of the Employer or any third Party; or
  - (c) injury or loss of life

if such destruction, damage, injury or loss of life is caused by any War Risks, and the Employer shall indemnify and hold the Contractor harmless from and against any and all claims, liabilities, actions, lawsuits, damages, costs, charges or expenses arising in consequence of or in connection with the same.

- 38.3 If the Facilities or any Plant shall sustain destruction or damage by reason of any War Risks, the Employer shall pay the Contractor for
  - (a) any part of the Facilities or the Plant so destroyed or damaged to the extent not already paid for by the Employer
    - and so far as may be required by the Employer, and as may be necessary for completion of the Facilities; and
  - (b) replacing or making good any such destruction or damage to the Facilities or the Plant or any part thereof.

If the Employer does not require the Contractor to replace or make good any such destruction or damage to the Facilities, the Employer shall either request a change in accordance with GCC Clause 39, excluding the performance of that part of the Facilities thereby destroyed or damaged or, where the loss, destruction or damage affects a substantial part of the Facilities, shall terminate the Contract, pursuant to GCC Sub-Clause 42.1.

- If the Employer requires the Contractor to replace or make good on any such destruction or damage to the Facilities, the Time for Completion shall be extended in accordance with GCC 40.
- 38.4 Notwithstanding anything contained in the Contract, the Employer shall pay the Contractor for any increased costs or incidentals to the execution of the Contract, to the extent reasonable, that are in any way attributable to, consequent on, resulting from, or in any way connected with any War Risks, provided that the Contractor shall as soon as practicable notify the Employer in writing of any such increased cost.
- 38.5 If during the performance of the Contract any War Risks shall occur that financially or otherwise materially affect the execution of the Contract by the Contractor, the Contractor shall use its reasonable efforts to execute the Contract with due and proper consideration given to the safety of its and its SubContractors' personnel engaged in the work on the Facilities, provided, however, that if the execution of the work on the Facilities becomes impossible or is substantially prevented for a single period of more than ninety (90) days or an aggregate period of more than one hundred and eighty (180) days on account of any War Risks, the Parties will attempt to develop a mutually satisfactory solution, failing which either Party may terminate the Contract by giving a notice to the other.
- 38.6In the event of termination pursuant to GCC Sub-Clauses 38.3 or 38.5, the rights and obligations of the Employer and the Contractor shall be specified in GCC Sub-Clauses 42.1.2 and 42.1.3.

# H. Change in Contract Elements

### 39. Change in the Facilities

39.1 The Employer shall have the right to propose, and subsequently require, that the Project Manager order the Contractor from time to time during the performance of the Contract to make any change, modification, addition or deletion to, in or from the Facilities hereinafter called "Change", provided that such Change falls within the general scope of the Facilities and does not constitute unrelated work and

- that it is technically practicable, taking into account both the state of advancement of the Facilities and the technical compatibility of the Change envisaged with the nature of the Facilities as specified in the Contract.
- 39.2 Notwithstanding GCC Sub-Clauses 39.1, no change made necessary because of any default of the Contractor in the performance of its obligations under the Contract shall be deemed to be a Change, and such change shall not result in any adjustment of the Contract Price or the Time for Completion.
- 39.3 The pricing of any Change shall, as far as practicable, be calculated in accordance with the rates and prices included in the Contract.
- 39.4 Employer has the right to intoduce a Change by issuing an amendment to the Contract and amending the Contract Price, by varying the quanties of items originally included in the priced Schedule of Items and Bill of Quantities forming part of the Contract, within the limit as specified in **SCC** at the unit rates of the items specified in the Contact.

# 40. Extension of Time for Completion

- 40.1 The Time(s) for Completion specified in the **SCC** pursuant to GCC Sub-Clause 8.2 shall be extended if the Contractor is delayed or impeded in the performance of any of its obligations under the Contract by reason of any of the following:
  - (a) any Change in the Facilities as provided in GCC Clause 39 except if otherwise stated therein.
  - (b) any occurrence of Force Majeure as provided in GCC Clause 37, unforeseen conditions as provided in GCC Clause 35, or other occurrence of any of the matters specified or referred to in paragraphs (a), (b) and (c) of GCC Sub-Clause 32.2
  - (c) any suspension order given by the Employer under GCC Clause 41 hereof or reduction in the rate of progress pursuant to GCC Sub-Clause 41.2 or

- (d) any changes in laws and regulations as provided in GCC Clause 36 or
- (e) any default or breach of the Contract by the Employer, or any activity, act or omission of the Employer, or the Project Manager, or any other Contractors employed by the Employer, or
- (f) any delay on the part of a SubContractor, provided such delay is due to a cause for which the Contractor himself would have been entitled to an extension of time under this sub-clause, or
- (g) delays attributable to the Employer or caused by customs, or
- (h) any other matter specifically mentioned in the Contract

by such period as shall be fair and reasonable in all the circumstances and as shall fairly reflect the delay or impediment sustained by the Contractor.

- 40.2 Except where otherwise specifically provided in the Contract, the Contractor shall submit to the Project Manager a notice of a claim for an extension of the Time for Completion, together with particulars of the event or circumstance justifying such extension as soon reasonably practicable as after the commencement of such event or circumstance. As soon as reasonably practicable after receipt of such notice and supporting particulars of the claim, the Employer and the Contractor shall agree upon the period of such extension. In the event that the Contractor does not accept the Employer's estimate of a fair and reasonable time extension, the Contractor shall be entitled to refer the matter for settlement of dispute in acordance with GCC Sub-Clause 46.
- 40.3 The Contractor shall at all times use its reasonable efforts to minimize any delay in the performance of its obligations under the Contract.
- 40.4 In all cases where the Contractor has given a notice of a claim for an extension of time under GCC 40.2, the Contractor shall consult with the Project Manager in order to determine the steps (if any) which can be taken to overcome or minimize the actual or

anticipated delay. The Contractor shall there after comply with all reasonable instructions which the Project Manager shall give in order to minimize such delay. If compliance with such instructions shall cause the Contractor to incur extra costs and the Contractor is entitled to an extension of time under GCC 40.1, the amount of such extra costs shall be added to the Contract Price.

### 41. Suspension

41.1 The Employer may request the Project Manager, by notice to the Contractor, to order the Contractor to suspend performance of any or all of its obligations under the Contract. Such notice shall specify the obligation of which performance is to be suspended, the effective date of the suspension and the reasonstherefor. The Contractor shall thereupon suspend performance of such obligation, except those obligations necessary for the care or preservation of the Facilities, until ordered in writing to resume such performance by the Project Manager.

If, by virtue of a suspension order given by the Project Manager, other than by reason of the Contractor's default or breach of the Contract, the Contractor's performance of any of its obligations is suspended for an aggregate period of more than ninety (90) days, then at any time thereafter and provided that at that time such performance is still suspended, the Contractor may give a notice to the Project Manager requiring that the Employer shall, within twenty-eight (28) days of receipt of the notice, order the resumption of such performance or request and subsequently order a change in accordance with GCC Clause 39, excluding the performance of the suspended obligations from the Contract.

If the Employer fails to do so within such period, the Contractor may, by a further notice to the Project Manager, elect to treat the suspension, where it affects a part only of the Facilities, as a deletion of such part in accordance with GCC Clause 39 or, where it affects the whole of the Facilities, as termination of the Contract under GCC Sub-Clause 42.1.

### 41.2 If

(a) the Employer has failed to pay the Contractor

any sum due under the Contract for considerable period beyond the specified period, has failed to approve any invoice or supporting documents without just cause pursuant to the Appendix to the Contract Agreement titled Terms and Procedures of Payment, or commits a substantial breach of the Contract, the Contractor may give a notice to the Employer that requires payment of such sum, with interest thereon as stipulated in GCC Sub-Clause 12.3, requires approval of such invoice or supporting documents, or specifies the breach and requires the Employer to remedy the same, as the case may be. If the Employer fails to pay such sum together with such interest, fails to approve such invoice or supporting documents or give its reasons for withholding such approval, or fails to remedy the breach or take steps to remedy the breach within fourteen (14) days after receipt of the Contractor's notice or

(b) the Contractor is unable to carry out any of its obligations under the Contract for any reason attributable to the Employer, including but not limited to the Employer's failure to provide possession of or access to the Site or other areas in accordance with GCC Sub-Clause 10.2, or failure to obtain any governmental permit necessary for the execution and/or completion of the Facilities.

then the Contractor may by fourteen (14) days' notice to the Employer suspend performance of all or any of its obligations under the Contract, or reduce the rate of progress.

41.3 If the Contractor's performance of its obligations is suspended or the rate of progress is reduced pursuant to this GCC Clause 41, then the Time for Completion shall be extended in accordance with GCC Sub-Clause 40.1, and any and all additional costs or expenses incurred by the Contractor as a result of such suspension or reduction, provided that the Contractor's performance of any of its obligations is suspended for an aggregate period of more than ninety (90) days, then for the time of suspension thereafter and provided that at that time such performance is still suspended,

shall be paid by the Employer to the Contractor in addition to the Contract Price, except in the case of suspension order or reduction in the rate of progress by reason of the Contractor's default or breach of the Contract.

41.4 During the period of suspension, the Contractor shall not remove from the Site any Plant, any part of the Facilities or any Contractor's Equipment, without the prior written consent of the Employer.

### 42. Termination

# 42.1 Termination for Employer's Convenience

- 42.1.1 The Employer may at any time terminate the Contract for any reason by giving the Contractor a notice of termination that refers to this GCC Sub-Clause 42.1.
- 42.1.2 Upon receipt of the notice of termination under GCC Sub-Clause 42.1.1, the Contractor shall either immediately or upon the date specified in the notice of termination
  - (a) cease all further work, except for such work as the Employer may specify in the notice of termination for the sole purpose of protecting that part of the Facilities already executed, or any work required to leave the Site in a clean and safe condition
  - (b) terminate all subcontracts, except those to be assigned to the Employer pursuant to paragraph (d) (ii) below
  - (c) remove all Contractor's Equipment from the Site, repatriate the Contractor's and its SubContractors' personnel from the Site, remove from the Site any wreckage, rubbish and debris of any kind, and leave the whole of the Site in a clean and safe condition, and
  - (d) subject to the payment specified in GCC Sub-Clause 42.1.3,
    - (i) deliver to the Employer the parts of the Facilities executed by the

- Contractor up to the date of termination
- (ii) to the extent legally possible, assign to the Employer all right, title and benefit of the Contractor to the Facilities and to the Plant as of the date of termination, and, as may be required by the Employer, in any subcontracts concluded between the Contractor and its SubContractors; and
- (iii) deliver to the Employer all nonproprietary drawings, specifications and other documents prepared by the Contractor or its SubContractors as at the date of termination in connection with the Facilities.
- 42.1.3 In the event of termination of the Contract under GCC Sub-Clause 42.1.1, the Employer shall pay to the Contractor the following amounts:
  - (a) the Contract Price, properly attributable to the parts of the Facilities executed by the Contractor as of the date of termination
  - (b) the costs reasonably incurred by the Contractor in the removal of the Contractor's Equipment from the Site and in the repatriation of the Contractor's and its SubContractors' personnel
  - (c) any amounts to be paid by the Contractor to its SubContractors in connection with the termination of any subcontracts, including any cancellation charges
  - (d) costs incurred by the Contractor in protecting the Facilities and leaving the Site in a clean and safe condition pursuant to paragraph (a) of GCC Sub-Clause 42.1.2
  - (e) the cost of satisfying all other obligations, commitments and claims that the

Contractor may in good faith have undertaken with third Parties in connection with the Contract and that are not covered by paragraphs (a) through (d) above.

# 42.2 <u>Termination for Contractor's Default</u>

- 42.2.1 The Employer, without prejudice to any other rights or remedies it may possess, may terminate the Contract forthwith in the following circumstances by giving a notice of termination and its reasons therefor to the Contractor, referring to this GCC Sub-Clause 42.2:
  - if the Contractor becomes bankrupt or (a) insolvent, has a receiving order issued against it, compounds with its creditors, or, if the Contractor is a corporation, a resolution is passed or order is made for its winding up, other than a voluntary liquidation for the purposes amalgamation or reconstruction, a receiver is appointed over any part of its undertaking or assets, or if the Contractor takes or suffers any other analogous action in consequence of debt
  - (b) if the Contractor assigns or transfers the Contract or any right or interest therein in violation of the provision of GCC Clause 43.
  - (c) if the Contractor, in the judgment of the Employer has engaged in Fraud and Corruption, as defined in Attachment 1 to the GCC, in competing for or in executing the Contract.

### 42.2.2 If the Contractor

- (a) has abandoned or repudiated the Contract
- (b) has without valid reason failed to commence work on the Facilities promptly or has suspended, other than pursuant to GCC Sub-Clause 41.2, the progress of Contract performance for more than twenty-eight (28) days after receiving a

- written instruction from the Employer to proceed
- (c) persistently fails to execute the Contract in accordance with the Contract or persistently neglects to carry out its obligations under the Contract without just cause
- (d) refuses or is unable to provide plant, equipment, goods, materials, services or labor sufficient to execute and complete the Facilities in the manner specified in the program furnished under GCC Sub-Clause 18.2 at rates of progress that give reasonable assurance to the Employer that the Contractor can attain Completion of the Facilities by the Time for Completion as extended,

then the Employer may, without prejudice to any other rights it may possess under the Contract including encashment of Performance and other securities, give a notice to the Contractor stating the nature of the default and requiring the Contractor to remedy the same. If the Contractor fails to remedy or to take steps to remedy the same within fourteen (14) days of its receipt of such notice, then the Employer may terminate the Contract forthwith by giving a notice of termination to the Contractor that refers to this GCC Sub-Clause 42.2.

- 42.2.3 Upon receipt of the notice of termination under GCC Sub-Clauses 42.2.1 or 42.2.2, the Contractor shall, either immediately or upon such date as is specified in the notice of termination.
  - (a) cease all further work, except for such work as the Employer may specify in the notice of termination for the sole purpose of protecting that part of the Facilities already executed, or any work required to leave the Site in a clean and safe condition
  - (b) terminate all subcontracts, except those to

- be assigned to the Employer pursuant to paragraph (d) below
- (c) deliver to the Employer the parts of the Facilities executed by the Contractor up to the date of termination
- (d) to the extent legally possible, assign to the Employer all right, title and benefit of the Contractor to the Facilities and to the Plant as of the date of termination, and, as may be required by the Employer, in any subcontracts concluded between the Contractor and its SubContractors
- (e) deliver to the Employer all drawings, specifications and documents other prepared by the Contractor or **SubContractors** as of the date of termination in connection with the Facilities.
- 42.2.4 The Employer may enter upon the Site, expel the Contractor, and complete the Facilities itself or by employing any third Party. The Employer may, to the exclusion of any right of the Contractor over the same, take over and use with the payment of a fair rental rate to the Contractor, with all the maintenance costs to the account of the Employer and with indemnification by the Employer for all liability including damage or injury to persons arising out of the Employer's use of such equipment, any Contractor's Equipment owned by Contractor and on the Site in connection with the Facilities for such reasonable period as the Employer considers expedient for the supply and installation of the Facilities.

Upon completion of the Facilities or at such earlier date as the Employer thinks appropriate, the Employer shall give notice to the Contractorthat such Contractor's Equipment will be returned to the Contractor at or near the Site and shall return such Contractor's Equipment to the Contractor in accordance with such notice. The Contractor shall thereafter without delay and

at its cost remove or arrange removal of the same from the Site.

- 42.2.5 Subject to GCC Sub-Clause 42.2.6, the Contractor shall be entitled to be paid the Contract Price attributable to the Facilities executed as of the date of termination, the value of any unused or partially used Plant on the Site, and the costs, if any, incurred in protecting the Facilities and in leaving the Site in a clean and safe condition pursuant to paragraph (a) of GCC Sub-Clause 42.2.3. Any sums due the Employer from the Contractor accruing prior to the date of termination shall be deducted from the amount to be paid to the Contractor under this Contract.
- 42.2.6 If the Employer completes the Facilities, the cost of completing the Facilities by the Employer shall be determined.

If the sum that the Contractor is entitled to be paid, pursuant to GCC Sub-Clause 42.2.5, plus the reasonable costs incurred by the Employer in completing the Facilities, exceeds the Contract Price, the Contractor shall be liable for such excess.

If such excess is greater than the sums due the Contractor under GCC Sub-Clause 42.2.5 and any other monies otherwise due to the Contractor under the Contract, and including remittances, if any, received by the Employer through securities furnished by the Contractor, the Contractor shall pay the balance to the Employer, and if such excess is less than the sums as aforesaid, the Employer shall pay the balance to the Contractor.

The Employer and the Contractor shall agree, in writing, on the computation described above and the manner in which any sums shall be paid.

## 42.3 <u>Termination by the Contractor</u>

42.3.1 The Contractor may terminate the Contract forthwith by giving a notice to the Employer to that effect, referring to this GCC Sub-Clause

- 42.3.1, if the Employer becomes bankrupt or insolvent, has a receiving order issued against it, compounds with its creditors, or, being a corporation, if a resolution is passed or order is made for its winding up (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), a receiver is appointed over any part of its undertaking or assets, or if the Employer takes or suffers any other analogous action in consequence of debt.
- 42.3.2 If the Contract is terminated under GCC Sub-Clauses 42.3.1, then the Contractor shall immediately
  - (a) cease all further work, except for such work as may be necessary for the purpose of protecting that part of the Facilities already executed, or any work required to leave the Site in a clean and safe condition
  - (b) terminate all subcontracts, except those to be assigned to the Employer pursuant to paragraph (d) (ii)
  - (c) remove all Contractor's Equipment from the Site and repatriate the Contractor's and its SubContractors' personnel from the Site, and
  - (d) subject to the payment specified in GCC Sub-Clause 42.3.3,
    - (i) deliver to the Employer the parts of the Facilities executed by the Contractor up to the date of termination
    - (ii) to the extent legally possible, assign to the Employer all right, title and benefit of the Contractor to the Facilities and to the Plant as of the date of termination, and, as may be required by the Employer, in any subcontracts concluded between the Contractor and its SubContractors,

and

- (iii) deliver to the Employer all drawings, specifications and other documents prepared by the Contractor or its SubContractors as of the date of termination in connection with the Facilities.
- 42.3.3 If the Contract is terminated under GCC Sub-Clauses 42.3.1, the Employer shall pay to the Contractor all payments specified in GCC Sub-Clause 42.1.3, and reasonable compensation for all loss, except for loss of profit, or damage sustained by the Contractor arising out of, in connection with or in consequence of such termination.
- 42.3.4 Termination by the Contractor pursuant to this GCC Sub-Clause 42.3 is without prejudice to any other rights or remedies of the Contractor that may be exercised in lieu of or in addition to rights conferred by GCC Sub-Clause 42.3.
- 42.4 In this GCC Clause 42, the expression "Facilities executed" shall include all work executed, Installation Services provided, and all Plant acquired, or subject to a legally binding obligation to purchase, by the Contractor and used or intended to be used for the purpose of the Facilities, up to and including the date of termination.
- 42.5 In this GCC Clause 42, in calculating any monies due from the Employer to the Contractor, account shall be taken of any sum previously paid by the Employer to the Contractor under the Contract, including any advance payment paid pursuant to the Appendix to the Contract Agreement titled Terms and Procedures of Payment.
- 43.1 Neither the Employer nor the Contractor shall, without the express prior written consent of the other Party, which consent shall not be unreasonably withheld, assign to any third Party the Contract or any part thereof, or any right, benefit, obligation or interest therein or thereunder.

43. Assignment

# I. Claims, Disputes and Arbitration

### 44. Contractor's Claims

44.1 If the Contractor considers himself to be entitled to any extension of the Time for Completion and/or any additional payment, under any Clause of these Conditions or otherwise in connection with the Contract, the Contractor shall submit a notice to the Project Manager, describing the event or circumstance giving rise to the claim. The notice shall be given as soon as practicable, and not later than 28 days after the Contractor became aware, or should have become aware, of the event or circumstance.

If the Contractor fails to give notice of a claim within such period of 28 days, the Time for Completion shall not be extended, the Contractor shall not be entitled to additional payment, and the Employer shall be discharged from all liability in connection with the claim. Otherwise, the following provisions of this Sub-Clause shall apply.

The Contractor shall also submit any other notices which are required by the Contract, and supporting particulars for the claim, all as relevant to such event or circumstance.

The Contractor shall keep such contemporary records as may be necessary to substantiate any claim, either on the Site or at another location acceptable to the Project Manager. Without admitting the Employer's liability, the Project Manager may, after receiving any notice under this Sub-Clause, monitor the record-keeping and/or instruct the Contractor to keep further contemporary records. The Contractor shall permit the Project Manager to inspect all these records, and shall (if instructed) submit copies to the Project Manager.

Within 42 days after the Contractor became aware (or should have become aware) of the event or circumstance giving rise to the claim, or within such other period as may be proposed by the Contractor and approved by the Project Manager, the Contractor shall send to the Project Manager a fully detailed claim which includes full supporting particulars of the basis of the claim and of the extension of time and/or

additional payment claimed. If the event or circumstance giving rise to the claim has a continuing effect:

- (a) this fully detailed claim shall be considered as interim;
- (b) the Contractor shall send further interim claims at monthly intervals, giving the accumulated delay and/or amount claimed, and such further particulars as the Project Manager may reasonably require; and
- (c) the Contractor shall send a final claim within 28 days after the end of the effects resulting from the event or circumstance, or within such other period as may be proposed by the Contractor and approved by the Project Manager.

Within 42 days after receiving a claim or any further particulars supporting a previous claim, or within such other period as may be proposed by the Project Manager and approved by the Contractor, the Project Manager shall respond with approval, or with disapproval and detailed comments. He may also request any necessary further particulars, but shall nevertheless give his response on the principles of the claim within such time.

The requirements of this Sub-Clause are in addition to those of any other Sub-Clause which may apply to a claim. If the Contractor fails to comply with this or another Sub-Clause in relation to any claim, any extension of time and/or additional payment shall take account of the extent (if any) to which the failure has prevented or prejudiced proper investigation of the claim, unless the claim is excluded under the second paragraph of this Sub-Clause.

In the event that the Contractor and the Employer cannot agree on any matter relating to a claim, either Party may refer the matter for settlement of dispute pursuant to GCC 46 hereof.

# 45. Disputes and Arbitration

45.1 The Parties shall seek to resolve any dispute amicably by mutual consultation. If either Party objects to any action or inaction of the other Party, the objecting Party may

file a written Notice of Dispute to the other Party providing in detail the basis of the dispute. The Party receiving the Notice of Dispute will consider it and respond in writing within fourteen (14) days after receipt. If that Party fails to respond within fourteen (14) days, or the dispute cannot be amicably settled within fourteen (14) days following the response of that Party, Clause GCC 45.2shall apply. The Parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or its interpretation.

- 45.2 If, the parties have failed to resolve their dispute or difference by such mutual consultation as per Clause GCC 45.1, then either the Employer or the Contractor may give notice to the other party of its intention to commence conciliation/ arbitration, as hereinafter provided, as to the matter in dispute, and no conciliation/ arbitration in respect of this matter may be commenced unless such notice is given. Any dispute or difference in respect of which a notice of intention to commence conciliation/ arbitration has been given in accordance with this Clause shall be finally settled in accordance with the following provisions:
  - (i) Disputes shall be settled through conciliation or arbitration in accordance with Arbitration and Conciliation Act, 1996 including amendments thereto, as applicable from time to time, in accordance with the rules thereto and the Applicable Law.

In any arbitration proceeding hereunder:

- (a) proceedings shall be held in the place mentioned in **SCC** which shall be the seat as well as the venue of arbitration except otherwise agreed by the Parties.
- (b) English language shall be the official language for all purposes; and
- (c) the decision of the sole arbitrator or of a majority of the arbitrators (or of the third arbitrator if there is no such majority) shall be final and binding and shall be enforceable in the court of

- competent jurisdiction in India, as per the Applicable Law
- 45.3 Notwithstanding any dispute and/or reference to conciliation/arbitration herein.
  - (a) the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and
    - the Purchaser shall pay the Supplier any monies due to the Supplier.

### J. Additional

46. Up-front intimation of approved manufacturers and criterion for Fresh Vendor approval

46.1 Employer shall up-front intimate list containing name of already approved vendors/manufacturers of various sub-transmission and distribution materials. Employer shall up-load the list on their web portal. The turnkey Contractor shall choose one or more than one vendors from the pre-approved lists depending upon capacity and capability of vendors to supply the materials for RDSS works. No separate approval for vendor shall be required from Employer.

Also, normal procedure being followed for empanelment of new vendors shall be uploaded and up-front intimated to all turnkey Contractors. In case turnkey Contractor desires to add new vendor, up-front intimation shall be available on criterion and procedure for selection of vendors.

# 47. Up-front intimation of Guaranteed Technical Particulars

- 47.1 Technical Specifications are enclosed with the bid documents. Employer shall up-front intimate acceptable Guaranteed Technical Particulars of various materials through their web portal.
- 47.2 The turnkey Contractor will examine these documents and supply only those materials which meets the above acceptable criterion. In case there are Employer's approved vendor(s) (one or more) through which turnkeyContractor wish to procure the materials and are complying with the acceptable GTP parameters of Employer as available on their web

portal, there would not be any formality needed like approval of sub-vendor or approval of GTP again.

47.3 In event of change in name of vendor or change in GTP parameter, separate approval of Employer shall be sought by successful turnkey Contractor.

### 48. Turnkey Contractor's Store at Project site

48.1 "Project wise separate Site Stores shall be maintained and manned by turnkey Contractor. Same store shall not be used for more than one projects even if neighboring districts' projects are awarded to the same agency. The turnkey Contractor shall deploy his own manpower in stores for round the clock security and for its day to day operation through trained Storekeeper.

Since materials received in this stores are owned by Employer (including owner's free issued material) and are pre-dispatch inspected by Employer's representative/ or NABL lab inspected, materials in a lot shall not be issued to the sub-Contractor for physical execution by turnkey Contractor. Instead, day to day requirements shall be issued to the working teams of sub-vendors by authorized store keeper. In exceptional cases, on prior written permission of Employer, materials for a week time may be issued to working team of sub-vendor. Daily accounting of materials receipt, materials issues, materials in custody of sub-vendors are to be maintained by turnkey Contractor. Handing of Stores shall, in no circumstances, be off loaded.

In no case, inter-project transfer of materials shall be permitted.

### 49. Handing over of assets

49.1 On completion of erection and testing of a section of line, DTR substation, power substation, contracting agency shall submit digital photographs in soft copies of each and every support structures along with submission of completion report in support of their claim for energisation and handing over of assets. In addition, Contractor shall also ensure 100% tagging of assets on GIS portal provided by Employer. The Mobile App for GIS asset tagging shall be provided by the Employer. Project Manager within a week time, shall review the photographs for acceptance of

quality of works and shall immediately deploy officials for joint measurement and inspection of executed works for energisation. In parallel, a requisition to State Electrical Inspectorate shall also be submitted by Project Manager. Fee/Charges for inspection by electrical inspector shall be paid by Project Manager (Employer).

While offering section of work / substation for commissioning and handing over, turnkeyContractor shall provide pre-commissioning test reports and detailed checklist (format provided along with quality guidelines at Part 2: Section 6).

### 50. Supply of Materials in lots

50.1 Item wise mobilization of materials shall be planned in [6 lots or as decided by the Employer]. Employer shall arrange pre-dispatch inspections foratleast[6 lots or as decided by the Employer] at his own expenditure. However, in case of approved quantity variation, employer may consider toincrease the number of Lots. In addition, Employer shall also ensure that samples (as per IS Sampling standard) from 01st lot and one other lot randomly selected by the Employer will be sent to nearest NABL accredited lab approved by the employer for testing directly from the manufacturing unit. TkC shall incur the expenses of testing. During the Pre-Dispatch inspection of materials, Contractor shall also mandatorily send its authorized person in the manufacturing facility. The authorized person of Contractor shall also sign the joint inspection report along with the Employer. All such cost shall be borne by the Contractor.

### 51. Contract Closing

- 51.1 On completion of handing over formality and successfully completion of defect liability / guarantee period, the contract shall be closed on completion of following formality:
  - I. Material reconciliation of owner free issued materials as well as material supplied by turnkeyContractor,
  - II. Payment reconciliations, submission and verifications that reconciliation of payment toward

- statutory provisions like GST, any other dues etc. Reconciliation statement shall be verified and vetted by chartered accountant.
- III. Approval for extension of Completion period, with or without compensation, as required.
- IV. Certification from agency regarding payment of dues to its
  - i. Sub-vendors
  - ii. Workers/ contract laborers,
  - iii. Payment of statutory dues toward Provident Funds, wages etc. as required.
- V. Certification of Project Manager & agency to the effect that erection, testing and commissioning of the equipment have been completed as per specifications laid down in the contract and defects noted at the time of commissioning and notified to the agency have been liquidated to the satisfaction of Employer.
- VI. Removal of construction meant for site stores, hutment, labour colony etc. in the premises of EMPLOYER.
- VII. Certificate from Project Manager in charge regarding final amendment of drawings and detailed of such amendments,
- VIII. Drawing receipt certificate by the Project Manager,
- IX. Receipt of compliance report on Quality Assurance Mechanism along with photograph, Assurance documents by Project Manager
- X. Shortfall in equipment / Line performance Certificate issued by Project Manager,
- XI. No demand certificate issued by Contractor,
- XII. Certificate about completion of Defect Liability Period of the package by Project Manager,
- XIII. Certificate regarding return of Performance Security / Indemnity Bond by Project Manager/Employer.
- **52. Suspension of business dealings**
- 52.1 Employer shall suspend business dealings with Contractor on following grounds for the period as decided by Project Manager:
  - a. If the Contractor fails to submit Performance Security after issuance of Letter of Intent (LoI) within 28 days.

- If the Contractor fails to accept the award of contract or has abandoned or repudiated the Contract.
- c. If the Contractor is found to be nonperforming in execution of contract by the Employer.
- d. If a disaster / major failure / accident / collapse of a structure / system is caused during erection or during defect liability period due to negligence of Contractor or design deficiency or poor quality of execution.
- e. Misbehavior or physical manhandling by the Contractor or his representative or any person acting on his behalf with any official of the Company dealing with the concerned contract is established.
- f. If the Director / Owner of the Contractor, proprietor or partner of the Contractor, is convicted by a court of law for offences involving corrupt and fraudulent practices including moral turpitude in relation to its business dealings with the government or State Public Sector Undertakings or Central Public Sector Undertakings or Employer or Employer's group companies, during the last five years.
- g. If the proprietors of the Contractor have been guilty of malpractices such as bribery, corruption, fraud, substitution of the tenders, interpolations, etc.
- h. If the Contractor continuously refuses to return / refund the dues of Employer or Employer's group companies, without showing adequate reason and this is not due to any reasonable dispute which would attract

proceedings in arbitration or court of Law;

- i. If the Contractor employs a public servant dismissed / removed or employs a person convicted for an offence involving corruption or abetment of such offences;
- j. If business dealings with the Contractor have been banned by the Ministry of Power or Government of India or any Government from any foreign country listed by ADB and the ban is still in force,
- k. If it is established that Contractor has resorted to corrupt, fraudulent practices including misrepresentation of facts;
- If the Contractor uses intimidation/threatening or brings undue outside pressure on the Project Manager or his authorised representatives or its officials in acceptance / performance of the job under the contract.
- m. If the Contractor indulges in repeated and / or deliberate use of delay tactics in complying with contractual stipulations;
- n. If the Contractor is found to be involved in cartel formation during bidding.
- On willful indulgence by the Contractor in supplying sub-standard material with respect to Technical Specifications under the Contract irrespective of whether pre-dispatch inspection was carried out by Employer or not;
- p. If the Contractor is declared bankrupt or insolvent or its financial position has become unsound, and in the case of a limited company, it is wound up or liquidated.
- q. Established litigant nature of the Contractor

to derive undue benefit;

- r. Continued poor performance of the Contractor;
- s. If the Contractor violates the provisions of the Integrity Pact provided in the Contract.
- t. If the Contractor commits fraud as defined under the Fraud Prevention Policy of Employer.
- u. If the Contractor has assigned or transferred the contract or engaged subcontractor(s) without the prior approval of the Competent Authority in violation of the provisions of the contract.
- v. If the Contractor misuses the premises or facilities of the Employer, forcefully occupies, tampers or damages the Employer's properties including land, water resources, forests / trees, etc.
- w. If the security consideration, including questions of loyalty of the Contractor to the state, so warrants;

# **ATTACHMENT 1 to GCC Fraud and Corruption**

### 1. Purpose

1.1 Government's/ WBSEDCL'sAnti-Corruption Laws/ Guidelines apply with respect to procurement.

### 2. Requirements

2.1 WBSEDCL requires that bidders (applicants/proposers), consultants, Contractors and suppliers; any sub-Contractors, sub-consultants, service providers or suppliers; any agents (whether declared or not); and any of their personnel, observe the highest standard of ethics during the procurement process, selection and contract execution, and refrain from Fraud and Corruption.

### 2.2 To this end, WBSEDCL:

- I. Defines, for the purposes of this provision, the terms set forth below as follows:
  - i. "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
  - ii. "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;
  - iii. "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
  - iv. "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
  - v. "obstructive practice" is:
    - (a) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede investigation into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
- II. Rejects a proposal (also referred to as the bid) for award if the WBSEDCL determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, sub-Contractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question.

- III. In addition to the legal remedies set out in the relevant Legal Agreement, may take other appropriate actions,;
- IV. Pursuant to the Anti- Corruption Laws/ Guidelines and in accordance with due process, WBSEDCL, may sanction a firm or individual, either indefinitely or for a stated period of time, including by publicly declaring such firm or individual ineligible (i) to be awarded or otherwise benefit from contract awarded by WBSEDCLor its subsidiaries/ affiliates, financially or in any other manner; (ii) to be a nominated sub-Contractor, consultant, manufacturer or supplier, or service provider of an otherwise eligible firm being awarded a contract WBSEDCL or its subsidiaries/ affiliates; and (iii) to receive the proceeds of any loan made by the WBSEDCL or otherwise to participate further in the preparation or implementation of anyWBSEDCL project.
- V. And the bidders (applicants/proposers), Consultants, Contractors, service providers and suppliers have entered into**Integrity Pact** which shall also apply in addition to the aforesaid.

### **Special Conditions of Contract**

Number of GCC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract (GCC)
GCC 1.1	Mode of contracting is as under:
	1. The Contracts is entered into between the Employer and the Contractoras under:
	(i) Contract Part I (Supply of Plant Contract): for Supply ofPlanton FOR (final place of destination Site/ Project Site) basis interaliain cluding design, engineering, manufacture, testing, transportation, insurance etc. and other services, incidental thereto, as applicable,
	(ii)Contract Part II((Supply of Services Contract): For providing all servicesinteralia, including unloading and handling of Plant, all labor, Contractor's equipment, temporary works, materials, consumables, design and preparation of layout, engineering drawings, and all matters and things of whatsoever nature, including testing, pre-commissioning and commissioning, operations and maintenance services, the provision of as-built drawings, operations and maintenance manuals, training, etc., as specified in Contract and applicable and necessary for the proper execution of the Installation Services (but excluding the incidental to supply under Contract Part I) and other services, related to and incidental to successful installation of the Plant supplied under the "Contract Part I", at final destination (Site/ Project Site).
	2. The award of two separate Contract parts shall not in any way dilute the responsibility of the Contractor for the successful completion of the Facilities as per Contract and Specification and a breach in one part of the Contract shall automatically be construed as a breach of the other part of the Contract which will confer a right on the Employer to terminate the Contract at the risk and the cost of the Contractor.
	3 The Contract will be signed in two originals and the Contractor shall be provided with one signed original and the other will be retained by the Employer.
	4. If required by the Employer, theContractor shall provide free of cost to the Employer all the engineering data, drawing and descriptive materials etc. submitted with the its Bid, in at least two (2) copies to form a part of the Contract.
GCC 1.1	The Employer is: WEST BENGAL STATE ELECTRICITY DISTRIBUTION COMPANY LTD. (WBSEDCL).
GCC 1.1	The Project Manager is: The details are tabulated below:-

GCC 1.1	Name	Utility	WBSEDCL Project Manager Office Address	
	Implementaton of OMS in WBSEDCL	WBSEDCL	Office of the Chief Engineer IT&C Cell, 3 <sup>rd</sup> Floor, Block-C&D Vidyut Bhavan, Salt Lake. Kolkata	
GCC 6.1	Integrity Deat is smaller		Attachment 1 to the CCC	
GCC 0.1			Attachment 1 to the GCC.	
GCC 7.3	drawing	ve to be followed	d as per WBSEDCL approved GTP &	
GCC 8.1	Commencement of work from the date of issuance of Notification of Awardi.e. <b>Zero Date.</b>			
GCC 8.2	24 Months			
GCC 11.2	The Contract Price is subject to adjustment during performance of the contract to reflect changes in the cost elements such as labor, material, transport and Contractor's equipment in accordance with the procedures specified in the corresponding <b>Appendix to the Contract Agreement</b> as per which the contract pricefor specified goods/ equipment/ material shall be adjustable as per the method and procedures for the price adjustment specified therein. {Appendix 2 of Form 5 in Section – 8 of the RFB/ bidding documents}.			
	The Contract Price is subject to alteration in the event of a Change in the Facilities as per GCC 39, through an amendment to the Contract.			

GCC 13.3.1	1. The Performance Security amount is 10% of Contract Price, and the Standard
GCC 13.3.1	Form of Performance Security acceptable to the Employer shall be as
	specified in <b>Section 8</b> . Contract Forms.
	2. The Additional Performance Security amount is 10% of the level of
	unbalancing, pursuant to ITB clause 37.1 and 44.1e.g.,the percentage of
	the supply price more than the percentage specified in the said clause limited
	to 70% (Seventy Percent) of the total Contract Price including supply and
	erection, and the Standard Form of Performance Security acceptable to the Employer shall be as specified in <b>Section 8</b> . Contract Forms.
	3. Validity of additional performace security related to level of unbalancing as
	defines in ITB-37 under BDS should be 180 days beyond defect liability
	period. The validity and methodology of additional performance security will
	be same as performance security.
	4. The Contractor/Bidder shall, within twenty-eight (28) days of the notification
	of contract award, provide a security in an amount equal to 100% of the advance payment calculated in accordance with the Appendix to the Contract
	Agreement titled Terms and Procedures of Payment, and in the same
	currency or currencies.
GCC 13.3.2	
GCC 13.3.2	The Bank Guarantee towards Performance Security shall be issued by a Bank
	mentioned below:
	Any Scheduled Bank in India
GCC 14.2	Only GST applicable in India, on the Plant and Installation Services provided/ supplied by the Contractor to the Employer under the Contract shall be paid/ reimbursed by Employer against requisite documents, at actuals. BOCW Cess will be applicable as per act. GST will be applicable as per GST Act in India.
GCC 19.3	Any subcontract of value equal to more than 5%shall necessarily require prior
	approval of the Employer. However, sub-contract for engagement of labour shall
	not require prior approval of the Employer.
GCC 23	1) Category - A (Pre-Dispatch Inspection & Testing at NABL accredited
	Labs):
	a) This category shall include high ticket materials (Power Transformers,
	Distribution Transformers, Circuit Breakers, AB/XLPE Cables, Overhead
	Conductor (AAAC/ACSR), Insulator which involves more and important
	testing procedures and hence the inspection of these materials will be carried
	out in the factory before the dispatch of the material.
	b) In addition, Employer shall also ensure that for major materials as discussed
	above, samples from 1stlot and one other lot randomly selected by the
	Employer shall be directly sent to NABL accredited test labs for third party
	testing. It is also to be noted that material clearance of the lots under testing

shall only be given post receipt of successful test results. Contractorshall also mandatorily depute its authorized official for pre—dispatch inspection at manufacturing facility along with the Employer officials. The inspection and testing report would be jointly signed by the Employer and the Contractor. All the expenses related to testing would be borne by the Contractor.

- e) Apart from the above-mentioned protocol any one power transformer shall be selected by Employer from the supply schedule from the vendor, which shall be jointly sealed and tested for short circuit testing on turnkey Contractor's expenses.
- 2) Category B (On-site inspection): This category includes the materials for which a factory inspection is not warranted and the material can be inspected upon arrival at the site before the installation. In case the Employer is apprehensive about the quality of the material supplied it reserves the right to send the selected lot to the NABL accredited testing lab for third party testing.
- 3) Employer also reserves the right to send any installed equipment / materials to the NABL accredited testing lab for testing. The Employer would have to reimburse the expenses related to transportation of material from site to testing lab and all testing expenses in this regard.
- 4) The material which has to be tested at laboratory shall be sealed in the presence of authorized official of Employer and Contractor.
- 5) If the materials tested at Laboratory fails then the entire lot would be rejected. Contractor shall bear the responsibility of sending—back such failed materials from site. Any subsequent delay in contract performance due to failure of materials in the test laboratory would be on account of Contractor and no time extension would be provided by the Employer in this regard. Any LD levies in this regard would be borne by the Contractor.

### **Pre-dispatch Inspection:**

Pre dispatch inspection shall be performed on various materials at manufacturer's work place for which Contractor shall be required to raise requisition giving at least 10-day time to employer for allocating inspection team. Depending on requirement, inspection shall be witnessed by representatives of Employer, TPIA and Contractor/Bidder.

The Contractor shall ensure receipt of material at site within 21 days from date of receipt of dispatch instructions. In case materials are not received within 21 days from date of issue of dispatch instruction, the dispatch instruction shall stand cancelled and a fresh pre—dispatch would be required to issue dispatch instruction. All expenditure incurred by Employer in performance of dispatch instruction shall be recovered from turnkey Contractor.

The turnkey Contractor shall ensure that pre-dispatch inspection for materials is intimated only when the material is completely ready for inspection. On due date of inspection, if it is found that materials are not ready in required quantities or the inspection could not be carried out due to non availability of requisite calibrated certificate of instruments with manufacturer, closing of works on scheduled date of inspection, non-availability of sufficient testing/material handling staff at manufacturer works etc., all expenditures incurred on deployment of various inspecting officials along with a fine of Rs 50,000/ inclusive of GST shall be recovered from the bills of the agency and re inspection shall be carried out on expense of Contractor.

2nd such situation at same manufacturer/supplier shall result in rejection of name of manufacturer from list of approved vendors/sub vendors. In case sub standard materials (old component, re-cycled materials, re-used core material, re-used transformer coil material etc.) offered for inspection and are noticed during the inspection, materials shall be rejected, and approval of sub-vendor shall also be cancelled for all RDSS projects.

In case, a material failsthe pre-dispatch inspection as per GCC Clause 23, and also fails the subsequent repeat inspection of the rectified/replaced material, the complete lot of material under inspection will be required to be replaced by the manufacturer/supplier. If in subsequent inspection of the new lot, the material again fails the inspection, then materials shall be rejected and approval of vendor/subvendor shall also be cancelled for all RDSS projects.

Third Party Inspection at NABL accredited lab:Employer shall also ensure that for major materials as discussed above samples from 1st lot and one other lot randomly selected by the Employer shall be directly sent to nearest NABL accredited lab for third party testing. In case a material fails in the test, the whole offered lot would be rejected and complete lot of material under inspection will be required to be replaced by the manufacturer/supplier. If in subsequent inspection of the new lot, the material again fails the inspection, then materials shall be rejected and thevendor/sub vendor shall also be debarredfor all RDSS projects. In case of default by vendors/manufacturers, Contractor/ Bidder shall also be penalized as per below table:

Sr. No.	No. of Material/lot rejected in a project/district	% Penalty imposed on contract price of that particular material, line item of LOA.
1	<b>&gt;</b> 5	<del>5%</del>
2	<del>&gt;3</del>	2.5%
3	<del>&gt;1</del>	1%

### **Penalty provision for defects found in Field inspection:**

There are three categories of defects if be found against erection of electrical items during field inspection shall be categorized as **critical**, **major and minor** defects. There should be a provision to impose penalty on Contractor based on the

percentage of	major	/critical	defects	observed	hw	TDOMA	
percentage of	major	criticar	ucrects	<del>obsci ved</del>	υy	$\frac{11  \text{QMM}}{1}$	•

Sr. No.	Defect criteria	% Penalty imposed onSanctioned Cost
1	Critical Defects	1%
2	Major Defects	0.5%
3	Minor Defects	0% if rectified within 30 days

### **Electrical Inspector inspection:**

After successful completion of the work permission from State Electrical Inspectorate is required. Necessary fee etc. shall be paid by the Employer. However if Contractor pays such fee it shall be reimbursed on actual basis on documentary evidence.

Defects / in complete works notified by Electrical Inspectorate shall be completed by the agency at no extra cost implication to Employer.

### **GCC 26.2**

If the Contractor fails to attain Completion of the Facilities or any part thereof within the Time for Completion or any extension thereof under GCC Clause 40, the Contractor shall pay to the Employer liquidated damages at 0.15% for each week or part thereof, of the value of unexecuted works. The value of unexecuted works shall be equal to the difference of 1. The approved value of the surveyed & approved BOQ (inclusive of GST) and 2. The value of executed works (total billed amount only, inclusive of GST). till the time for completion or any extension thereof under GCC clause 40. The aggregate amount of such liquidated damages shall in no event exceed 5% of the value of unexecuted works (inclusive of GST). Once the "Maximum" is reached, the Employer may consider termination of the Contract, pursuant to GCC Sub-Clause 42.2.2.

### (a) Volume of concreting: If it was observed by employer, quality monitoring GCC 27.1 agencies and/or REC/MoP that volume and quality of concreting used in foundation of support, equipment foundation, gantry structure foundation, stay set etc. are not as per requirement specified in the scope of work/technical specifications, the Contractor has to dismantle the supports, foundation and redo the concreting of all the supports in that particular section of line/redo all the foundations in that particular substation at his own cost. To ensure this, the employer reserves the right to withhold the payment of Contractor for such defective works till such time the Contractor conforms to scope of works, technical specification and tender drawings. (b) Galvanization of metallic structure: All Metallic structures & fabricated items excluding metallic supports (Steel tubular poles/H-Beam) must be galvanized. In case any metallic item found rusted during execution of works, the Contractor has to replace the item used at all places. To ensure this, the employer reserves the right to withhold the payment of Contractor for such works till such time the Contractor conforms to scope of works, technical specification and tender drawings. (c) Painting of metallic supports (Steel tubular poles/H-Beam): Painting of metallic supports in overhead lines, distribution transformer substation and Power substation shall be ensured as per specifications. In case metallic supports found rusted during execution of works, the Contractor has to remove inferior painting, clean the surface and re-paint it as per given specifications. To ensure this, the employer reserves the right to withhold the payment of Contractor for such works till such time the Contractor conforms to scope of works, technical specification and tender drawings. GCC 27.8 The extension of Defect Liability Period, in aggregate, shall, not exceed **36 months**. The bidder should submit an undertaking in non-judicial stamp paper (Rs.100/-) for providing Latent Defect Coverage support warranty against each equipments and it shall be limited to period specified in SCC/Technical Specifications, reckoned from the end of defect liability period including extension thereof and the related format is enclosed herewith as Form-21. The Contractor's liability for latent defects warranty shall be limited to 5 years GCC 27.8.1 reckoned from the end of Defect Liability Period including extension thereof.

GCC 39.4	The quantity of items given in the Price Schedules forming part of the Contract are provisional. The variation in quantity of the items shall be within the limit of plus/minus (+/-) fifty percent (50%) for individual items. In case the quantity variation of the individual items is beyond the limit specified above, the unit rates for the quantity beyond the said limit, shall be mutually agreed based on prevailing market rates as may be fair and reasonable.
	It is to be noted that Employer may choose to approve a variation of upto 20% of contract value (calculated using the rates quoted at the time of bidding) which has been caused due to quantity variation. For variation of greater than 20% but less than 50% of contract value(calculated using the rates quoted at the time of bidding), Employer will need to take DRC approval for approving the said quantity variation.
GCC 45.2 (a)	Hon'ble Calcutta High Court.
Additional Clause	<b>The predefined phasing of works -</b> As per mutually approved L1 & L2 PERT Chart between EPC Contractor & Employer.

### **Section - 8 : Contract Forms**

### 2. BID SECURITY FORM

(To be stamped in accordance with Stamp	Act, the Non-Judicial	Stamp Paper should be
in the name of the issuing Bank)		

Bank Guarantee No.:  Date:
To: (insert Name and Address of Employer)
WHEREAS M/s (insert name of Bidder) having its Registered/Head Office at (insert address of the Bidder) (hereinafter called "the Bidder") has submitted its Bid for the performance of the Contract for (insert name of the Package)
KNOW ALL PERSONS by these present that WE(insert name & address of the issuing bank) having its Registered/Head Office at(insert address of registered office of the bank) (hereinafter called "the Bank"), are bound unto(insert name of Employer) (hereinafter called "the Employer") in the sum of
Employer, the Bank binds itself, its successors and assigns by these presents.
Sealed with the Common Seal of the said Bank this day of
THE CONDITIONS of this obligation are:

(1) If the Bidder withdraws its bid during the period of bid validity specified by the

Bidder in the Bid Form; or

- (2) In case the Bidder does not withdraw the deviations proposed by him, if any, at the cost of withdrawal stated by him in the bid and/or accept the withdrawals/rectifications pursuant to the declaration/confirmation made by him in Attachment Declaration of the Bid; or
- (3) If the Bidder does not accept the corrections to arithmetical errors identified during preliminary evaluation of his bid pursuant to ITB Clause 33.1; or
  - (4) If, as per the requirement of Qualification Requirements the Bidder is required to submit a Deed of Joint Undertaking and he fails to submit the same, duly attested

byNotary Public of the place(s) of the respective executant(s) or registered with the Indian Embassy/High Commission in that Country, within ten days from the date of intimation of post – bid discussion; or

- (5) in the case of a successful Bidder, if the Bidder fails within the specified time limit
  - (i) to sign the Contract Agreement, in accordance with ITB Clause 43, or
  - (ii) to furnish the required performance security, in accordancewith ITB Clause 44.
    - (6) In any other case specifically provided for in ITB.

WE undertake to pay to the Employer up to the above amount upon receipt of its first written demand, without the Employer having to substantiate its demand, provided that in its demand the Employer will note that the amount claimed by it is due to it, owing to the occurrence of any of the above-named CONDITIONS or their combination, and specifying the occurred condition or conditions.

This guarantee will remain in full force up to and including ..........(insert date, which shall be the date 30 days after the period of bid validity)......., and any demand in respect thereof must reach the Bank not later than the above date.

For and on behalf of the Bank

[Signature of the	authorised signatory(ies)]
Signature	
Name	
Designation	
POA Number	
Contact Number(s): Tel	_Mobile
Fax Number	
email	
Common Seal of the Bank_	
	Witness:

		Signature
		Name
		Address
		Contact Number(s): TelMobile
		email
Note	<u>e:</u>	
1.	the	case the bid is submitted by a Consortium, the bid security shall be in the name of a Consortium and not in the name of the Lead Partner or any other Partner(s) of a Consortium.
2.	Ho lia Gu	e Bank Guarantee should be in accordance with the proforma as provided. owever, in case the issuing bank insists for additional paragraph for limitation of bility, the following may be added at the end of the proforma of the Bank translate [i.e., end paragraph of the Bank Guarantee preceding the signature(s) of the issuing authority(ies) of the Bank Guarantee]:
	Qu	note_
	"λ	otwithstanding anything contained herein:
	1.	Our liability under this Bank Guarantee shall not exceed (value in figures) [ (value in words)].
	2.	This Bank Guarantee shall be valid upto(validity date)
	3.	We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only & only if we receive a written claim or demand on or before (validity date)"

<u>Unquote</u>

### 3a. FORM OF NOTIFICATION BY THE EMPLOYER TO THE BANK

### (Applicable for Forfeiture of Bank Guarantee)

To: (insert Name and Address of the issuing Bank)
Ref.:: Forfeiture of Bid Security Amount against Bank Guarantee No
Dear Sirs,
Please refer to the subject Bank Guarantee executed by you in our favour for
As per the terms of the said guarantee, the bank has guaranteed and undertaken to pay immediately on demand by the Employer the amount of without any reservation, protest, demur and recourse. Further, any demand made by the Employer shall be conclusive and binding on the Bank irrespective of any dispute or difference raised by the Bidder.
In terms of the said guarantee, we hereby submit our claim/demand through this letter for remittance of Bid Security amount to (insert name of the Employer)owing to the occurrence of the condition referred to at Sl. NoThe Bank is requested to remit the full guaranteed sum towards proceeds of the bid security in the form of Demand Draft in favour of ' (insert name of the Employer)', payable at(insert place of the Employer)'.
Thanking you,  For(Name of the Employer)
(AUTHORISED SIGNATORY)
Copy to:
(Registered Office of the Bank)

### 3b. FORM OF NOTIFICATION BY THE EMPLOYER TO THE BANK

(Applicable for conditional claim pending extension of Bank Guarantee by the Bidder)

To: (insert Name and Address of the issuing Bank)
Ref: Conditional Claim against Bank Guarantee No
Dear Sirs,
Please refer to the subject Bank Guarantee executed by you in our favour on behalf of M/s(insert name of the Bidder), who have submitted this Bank Guarantee to us towards Bid Security against (insert name of the Package); Specification No
We, (insert name of the Employer) do hereby request you to lodge our claim/demand against the subject Bank Guarantee for full guaranteed sum. Kindly note that this claim/demand against the subject Bank Guarantee is without any further notice in case the amendment to Bank Guarantee No
This is without prejudice to our right under this guarantee and under the law.
Thanking you,
For(Name of the Employer)
(AUTHORISED SIGNATORY)
Copy to: (insert Name and Address of the Bidder)
- You are requested to do the needful so that the amendment to the subject Bank Guarantee extending the validity up to is received by us by

### 4. FORM OF 'NOTIFICATION OF AWARD OF CONTRACT'

## **4a.** FORM OF 'NOTIFICATION OF AWARD OF CONTRACT FOR SUPPLY OF PLANT

Ref. N	No. :	
	(inser	t Contractor's Name &Address)
[in ca	use of	
(Lead	Part	all also be included: ner of the Consortium of M/sand M/s)]
	Notifi (inser	ication of Award for Supply of Plant Contract (Contract Part I) for
(Cor		t Part I)
1.0	REFE	ERENCE
	This l	nas reference to the following:
1.1	Our R	Request for Bids (RFB) dated
1.2		bidding documents for the subject package issued vide our letter Ref. No dated,anddownloaded by you from e-tender portal, rising the following:
	a)	Part 1 : Bidding Procedures and Requirements (Document Code No)
	b)	Part 2 : Employer's Requirements (Document Code No)
	c)	Part 3 : Conditions of Contract and Contract Forms (Document Code No)

1.2.1	Amendment/Errata No to Bidding Documents issued to you vide our letter no dated
	(Applicable only if any Errata/Amendment to the Bidding Documents has been issued subsequently)
1.2.2	Clarifications to the Bidding Documents, pursuant to pre-bid conference held on, issued to you vide our letters no
	(Applicable only if any clarification to the Bidding Documents has been issued subsequently)
	(INCLUDE AS FURTHER SUB-PARAGRAPHS ANY OTHER CORRESPONDENCE MADE TO THE BIDDER AFTER ISSUANCE OF BIDDING DOCUMENTS UP TO BID OPENING)
1.3	Technical Part (First envelope) of your Bid submitted/the Bid submitted by the Sole/ Bidder/ Lead Consortium Member of M/s
1.4	Intimation for Opening of Financial Part (Second Envelope) of Bid issued to you vide our letter no dated
1.5	Price Part ( Second Envelope) of your Bid/the Bid by the Sole/ Bidder/ Lead Consortium Member of M/s
1.6	Post bid discussions we had with you on various dates from to resulting into the Minutes of Meeting/ Record Notes of Post Bid Discussions enclosed as APPENDIX (NOA)-1with this Notification of Award.
2.0	AWARD OF CONTRACT AND ITS SCOPE
2.1	We confirm having accepted your Bid/Bid of the Sole/ Bidder/ Lead Consortium Member of M/s

I') covering inter-alia supply of Plant on FOR {final place of destination (Site/Project Site)} basisinteralia including design, engineering, manufacture, testing, transportation, insurance etc. and other services, incidental thereto, , required for the complete execution of the ..... (insert name of Package along with name of the Project) ......, as detailed in the documents referred hereinabove. The scope of work inter-alia includes the following:

(	Indicate	brief So	cope of	Work	)

The scope of work under this Notification of Award (NOA) shall also include all such items which are not specifically mentioned in the bidding documents and/or your bid but are necessary for the successful completion of your scope under the Contract for the construction of ..... (insert name of Package along with name of the Project) ......, unless otherwise specifically excluded in the Bidding Documents or in this NOA.

- 2.1.1 You, the Lead Partner of the CONSORTIUM, along with M/s. ......, the Other Partner of CONSORTIUM, shall be liable jointly and severally for the execution of the Contract in accordance with terms and conditions of the Contract. As per the Power of Attorney furnished in your favour by the Consortium, as enclosed with Bid Proposal of the CONSORTIUM, you shall act as the Partner In-charge (Lead Partner) of the above Consortium for execution of the Contract. (*This provision shall be included only in case the Bidder is a Consortium*)

Notwithstanding the award of work for Completion of the Facilities under the Contract in two separate parts in the aforesaid manner, you/the CONSORTIUM (use as applicable) shall be overall responsible to ensure the execution of both the parts of the Contract to achieve successful completion and taking over of the Facilities/Works under the package by the Employer as per the requirements stipulated in the Bidding Documents. It is expressly understood and agreed by you/the CONSORTIUM (use as applicable) that any default or breach under the 'Contract Part II' shall automatically be deemed as a default or breach of this 'Contract Part I' also and vice-versa, and any such default or breach or occurrence giving us a right to terminate the 'Contract Part II', either in full or in part, and/or recover damages there under, shall give us an absolute right to terminate this

Contract Part I, at your/CONSORTIUM's (use as applicable) risk, cost and responsibility, either in full or in part and/or recover damages under this 'Contract Part I' as well. However, such default or breach or occurrence in the 'Contract Part II', shall not automatically relieve you/the CONSORTIUM (use as applicable) of any of your/CONSORTIUM's (use as applicable) obligations under this 'Contract Part I'. It is also expressly understood and agreed by you/the CONSORTIUM (use as applicable) that the Plant/equipment/goods/ materials supplied by you/the CONSORTIUM (use as applicable) under this 'Contract Part I', when erected, installed & commissioned by you under the 'Contract Part II' shall give satisfactory performance in accordance with the provisions of the Contract.

#### 3.0 CONTRACT PRICE FOR CONTRACT PART I

3.1	The total Contract Price for Contract Part I for the entire scope of work under this
	Contract Part I shall be(Specify the currency and the amount in figures
	& words) as per the following break-up:

Sl.	Price Component	Amount
No.		
1.	FOR Price component	
Tota	l for Supply of Plant Contract	

- 3.2 Notwithstanding the break-up of the Contract Price, the Contract shall, at all times, be construed as a single source responsibility Contract and any breach in any part of the Contract shall be treated as a breach of the entire Contract.
- - (In case any other performance security is required to be furnished, the same is to be mentioned here)
- 5.0 For release of advance payment (admissible as per the Bidding Documents) equal to ....% of the FOR Price component of the Contract Price for Contract part I, you are, inter-alia, required to furnish a Bank Guarantee for the 100% of the advance amount. The validity of the Advance Bank Guarantee shall be up to and including ............. Further, please note that furnishing of all the Contract Performance Securities under the 'Contract Part I' and 'Contract Part II' shall be one of the conditions precedent to release of advance under this Contract Part I.

- 6.0 All the bank guarantees shall be furnished from an eligible bank as described in the Bidding Documents.
- 7.0 The schedule for Taking Over/Completion of Facilities by the Employer upon successful Completion of the ..... (insert name of Package along with name of the Project).... shall be ... (indicate the completion schedule) .... months from the date of issue of this Notification of Award for all contractual purposes.
- 8.0 This Notification of Award constitutes formation of the Contract and comes into force with effect from the date of issuance of this Notification of Award.
- 9.0 You shall enter into a Contract Agreement with us within twenty-eight (28) days from the date of this Notification of Award.
- 10.0 This Notification of Award is being issued to you in duplicate. We request you to return its duplicate copy duly signed and stamped on each page including the enclosed Appendix as a token of your acknowledgement.

Please take the necessary action to commence the work and confirm action.

Vour	faithfully,	
1 Ours	raiumumy,	

	For and on behalf of
,	the Employer) Authorised Signatory)

### **Enclosures**:

APPENDIX (NOA) – 1 - Record Notes of Post - Bid Discussions held on various dates from ...... to ............

## 4b. FORM OF 'NOTIFICATION OF AWARD OF CONTRACT' FOR INSTALLATION OF PLANT AND EQUIPMENT

Ref. N	o. :						
		Contractor's Name &Address)					
[in ca follow (Lead	se of C ing shal Partr	Consortium, the aforesaid details shall be of the Lead Partner and the lalso be included:  ner of the Consortium of M/s					
Attn:	Mr						
Sub.:	II) for	cation of Award for Supply of Installation Services Contract (Contract Part r (insert name of the Package) Specification No.: Domestic Competitive Bidding. (Project Funding: Domestic).  (Contract Part II)					
		(Contract Fart II)					
Dear S	ir,						
1.0	REFE	RENCE					
	This h	as reference to the following:					
1.1	Our Ro	equest for Bids (RFB) dated					
1.2	RFB/ bidding documents for the subject package issued vide our letter Ref. No						
	a)	Part 1 : Bidding Procedures and Requirements (Document Code No)					
	b)	Part 2 : Employer's Requirements (Document Code No)					
	c)	Part 3 : Conditions of Contract and Contract Forms (Document Code No)					

1.2.1	Amendment/Errata No to Bidding Documents issued to you vide our letter no dated
	(Applicable only if any Errata/Amendment to the Bidding Documents has been issued subsequently)
1.2.2	Clarifications to the Bidding Documents, pursuant to pre-bid conference held on, issued to you vide our letters no dated (Use as applicable)  (Applicable only if any clarification to the Bidding Documents has been issued subsequently)
	(INCLUDE AS FURTHER SUB-PARAGRAPHS ANY OTHER CORRESPONDENCE MADE TO THE BIDDER AFTER ISSUANCE OF BIDDING DOCUMENTS UP TO BID OPENING)
1.3	Technical Part (First envelope) of your Bid submitted/the Bid submitted by the Sole/ Bidder/ Lead Consortium Member of M/s
1.4	Intimation for Opening of Financial Part (Second Envelope) of Bid issued to you vide our letter no
1.5	Price Part ( Second Envelope) of your our Bid/the Bid by the Sole/ Bidder/ Lead Consortium Member of M/s (Lead Partner) and M/s
1.6	Post bid discussions we had with you on various dates from to resulting into the Minutes of Meeting/ Record Notes of Post Bid Discussions enclosed as APPENDIX (NOA)-1with this Notification of Award.
2.0	AWARD OF CONTRACT AND ITS SCOPE
2.1	We confirm having accepted your Bid/Bid of the Sole/ Bidder/ Lead Consortium Member of M/s

The scope of work under this Notification of Award (NOA) shall also include all such items which are not specifically mentioned in the bidding documents and/or your bid but are necessary for the successful completion of your scope under the Contract for the construction of ..... (insert name of Package along with name of the Project) ......, unless otherwise specifically excluded in the bidding documents or in this NOA.

- 2.1.1 You, the Lead Partner of the CONSORTIUM, along with M/s. ......, the Other Partner of CONSORTIUM, shall be liable jointly and severally for the execution of the Contract in accordance with terms and conditions of the Contract. As per the Power of Attorney furnished in your favour by the Consortium, as enclosed with Bid Proposal of the CONSORTIUM, you shall act as the Partner In-charge (Lead Partner) of the above Consortium for execution of the Contract. (This provision shall be included only in case the Bidder is a Consortium)
- 2.2 The notification for award of Contract for Supply of Plant including Type Testing to be conducted, as set forth in the bidding documents, viz.

 (Indicate	brief	scope	of	work	of	the	Contract	Part	I)

Notwithstanding the award of work for Completion of the Facilities under the Contract in two separate parts in the aforesaid manner, you/the CONSORTIUM (use as applicable) shall be overall responsible to ensure the execution of both the parts of the Contract to achieve successful completion and taking over of the Facilities/ works under the package by the Employer as per the requirements stipulated in the Bidding Documents. It is expressly understood and agreed by

you/the CONSORTIUM(use as applicable) that any default or breach under the 'Contract Part I' shall automatically be deemed as a default or breach of this 'Contract Part II' also and vice-versa, and any such default or breach or occurrence giving us a right to terminate the 'Contract Part I', either in full or in part, and/or recover damages there under, shall give us an absolute right to terminate this Contract Part II, at your/CONSORTIUM's (use as applicable) risk, cost and responsibility, either in full or in part and/or recover damages under this ' Contract Part II' as well. However, such default or breach or occurrence in the 'Contract Part I', shall not automatically relieve you/the CONSORTIUM(use as applicable) of any of your obligations under this 'Contract Part II'. It is also expressly understood and agreed by you/the CONSORTIUM(use as applicable) Plant/equipment/goods/ materials that the supplied by you/the CONSORTIUM(use as applicable) under the 'Contract Part I', when erected, installed & commissioned by you/the CONSORTIUM(use as applicable) under this 'Contract Part II' shall give satisfactory performance in accordance with the provisions of the Contract.

#### 3.0 CONTRACT PRICE FOR CONTRACT PART II

3.1 The total Contract Price Contract Part II for the entire scope of work under this Contract Part II shall be ............. (Specify the currency and the amount in figures & words) ................................ as per the following break-up:

Sl.	Price Component	Amount
No.		
1.	Installation Services	
2.	Training Charges	Not Applicable
Tota	l for Supply of Installation Services Contract	

- 3.2 Notwithstanding the break-up of the Contract Price, the Contract shall, at all times, be construed as a single source responsibility Contract and any breach in any part of the Contract shall be treated as a breach of the entire Contract.

(In case any other performance security is required to be furnished, the same is to be mentioned here)

- 5.0 All the bank guarantees shall be furnished from an eligible bank as described in the Bidding Documents.
- 6.0 The schedule for Taking Over/Completion of Facilities by the Employer upon successful Completion of the ..... (insert name of Package along with name of the Project) .... shall be ... (indicate the completion schedule) .... months from the date of issue of this Notification of Award for all contractual purposes.
- 7.0 This Notification of Award constitutes formation of the Contract and comes into force with effect from the date of issuance of this Notification of Award.
- 8.0 You shall enter into a Contract Agreement with us within twenty-eight (28) days from the date of this Notification of Award.
- 9.0 This Notification of Award is being issued to you in duplicate. We request you to return its duplicate copy duly signed and stamped on each page including the enclosed Appendix as a token of your acknowledgement.

Please take the necessary action to commence the work and confirm action.

Yours faithfully,

	For and on behalf of
(Name of	the Employer)
(	Authorised Signatory

#### Enclosures:

APPENDIX (NOA) - 1	-	Record Notes	of	Post -	Bid	Discussions	held	on	various
		dates from		to					

#### Note:

(1) Instructions indicated in italics in this notification of award are to be taken care of by the issuing authority. The Forms may be modified appropriately to suit the specific requirement of the Contract.

### 5. FORM OF CONTRACT AGREEMENT

[Alternative – a]

CONTRACT AGREEMENT PART I FOR SUPPLY OF PLANT BETWEEN
(Name of Employer) AND M/s (Name of Contractor)/SOLE/ BIDDER/ LEAD CONSORTIUM MEMBER OF M/s(Name of
Lead Partner) (THE LEAD PARTNER OF THE CONSORTIUM) AND M/s(Name of Other Partner) (THE PARTNER OF THE CONSORTIUM) [Use as applicable]
THIS CONTRACT AGREEMENT PART I No
BETWEEN
(1)
and
(2) M/s
or
Sole/ Bidder/ Lead Consortium Member of M/s (Name of Lead Partner) (the Lead Partner of CONSORTIUM), a company incorporated under the
laws of Companies Act 1956 and having its Principal place of business at

Partner) (hereinafter called "the Contractor" and also referred to as "Consortium"/the 'CONSORTIUM'")
(Applicable only in case of Consortium)
WHEREAS the Employer desires to engage the Contractorto design, manufacture, test, deliver, install, commission and complete certain Facilities, viz[ insert the name of the Package along with ] ("the Facilities") as detailed in the Contract Document, and the Contractor, in accordance with the mode of contracting specified therein, has agreed to such engagement upon and subject to the terms and conditions appearing in this Contract Agreement Part I for Supply of Plant and in Contract Agreement Part II for Supply of Installation Services for the Facilities, the two parts read together, jointly and in conjunction, constituting the Contract. and the aggregate of the Contract Price for Contract Part II and theContract Price for Contract Part II constituting the Contract Price for the Contract.
WHERE, the Employer, under this Contract Agreement Part I, desires to engage the Contractor for the supply of Plant on FOR {final place of destination (Site/ Project Site)} basis interaliaincluding design, engineering, manufacture, testing, transportation, insurance etc. and other services, incidental thereto, required for the complete execution of the (insert name of Package along with name of the Project), and the scope of work is briefly described below:
[insert brief scope of work]
NOW IT IS HEREBY AGREED as follows:
Article 1. Contract Documents
1.1 Contract Documents (Reference GCC Clause 2)
The following documents shall constitute the Contract between the Employer and the Contractor, and each shall be read and construed as an integral part of the Contract:
VOLUME – A
<ol> <li>This Contract Agreement and the Appendices thereto.</li> <li>Notification of Award Ref. No/NOA-I/01 dated DD/MM/YYYY.</li> </ol>

VOLUME-B

3. Documents comprising of the following:

- Conditions of Contract and Contract Forms (Part 3 of Bidding Documents)
  - Conditions of Contract including Special Conditions of Contract (SCC) and General Conditions of Contract (GCC); (Section 7 of Bidding Documents)
  - Contract Forms (Section 8 of Bidding Documents)
- Employers' Requirements (Part 2 of Bidding Documents)
  - o Employer's Requirements (Section 6 of Bidding Document)
- Bidding Procedures and Requirements (Part 1 of Bidding Documents)
  - o Request for Bids Notice (Section 1 of Bidding Documents)
  - Eligibility and Qualification Requirements (Section 2 of Bidding Documents)
  - Instruction to Bidders and Bid Data Sheets (Section 3 of Bidding Documents

#### VOLUME - C

4. Bid Submitted by the Contractor.

(Only relevant extracts are attached herewith for easy reference. Should the circumstances warrant, the original Bid along with the enclosures thereof, shall be referred to.).

1.2 Order of Precedence (Reference GCC Clause 2)

In the event of any ambiguity or conflict between the Contract Documents listed above, the order of precedence shall be the order in which the Contract Documents are listed in Article 1.1 (Contract Documents) above.

1.3 Definitions (Reference GCC Clause 1)

Capitalized words and phrases used herein shall have the same meanings as are ascribed to them in the General Conditions of Contract/Special Conditions of Contract.

# Article 2. Contract Price and Terms of Payment

2.1 Contract Price (Reference GCC Clause 11) for Contract Part I

Sl.	Price Component	Amount
No.		
1.	FOR Price Component	
Total for Supply of Plant Contract		

The detailed break-up of Contract Price for Contract Part I is given in the relevant Appendices hereto.

# 2.2 Terms of Payment (Reference GCC Clause 12)

The terms and procedures of payment according to which the Employer will reimburse the Contractor are given in Appendix 1 (Terms and Procedures of Payment) hereto.

# Article 3. Effective Date for Determining Time for Completion

# 3.1 Effective Date (Reference GCC Clause 1)

The Effective Date from which the Time for Completion of the Facilities shall be counted and determined is the **date of Notification of the Award**.

# Article 4. Appendices

The Appendices listed in the List of Appendices, as mentioned below, shall be deemed to form an integral part of this Contract Agreement Part I and the Contract.

Reference in this Contract Agreement Part I and the Contract, to any Appendix shall mean and include the Appendices attached hereto, and thethis Contract Agreement Part I and the Contract shall be read and construed accordingly.

# List of Appendices

Appendix 1 Terms and Procedures of Payment

Appendix 2 Price Adjustment

Appendix 3	Insurance Requirements
Appendix 4	Time Schedule
Appendix 5	List of Approved Subcontractors
Appendix 6	Scope of Works and Supply by the Employer
Appendix 7	List of Document for Approval or Review
Appendix 8	Guarantees, Liquidated Damages for Non-Performance
Appendix 9	Price Schedules indicating Price Breakdown of Contract
	Price for Contract Part I for Supply of Plant
Appendix 11	Integrity Pact

#### Article 5.

Notwithstanding the award ofwork for Completion of the Facilities under the Contract in two separate parts in the aforesaid manner, the Contractor shall be overall responsible to ensure the execution of both the parts of the Contract to achieve successful completion and taking over of the Facilities by the Employer as per the requirements stipulated in the Contract. It is expressly understood and agreed by the Contractor that any default or breach under the 'Contract Part II' shall automatically be deemed as a default or breach of this 'Contract Part II' also and vice-versa and any such breach or occurrence or default giving the Employer a right to terminate the 'Contract Part II' either in full or in part, and/or recover damages there under the Contract Part II, shall give the Employer an absolute right to terminate this Contract Part I at the Contractor's risk, cost and responsibility, either in full or in part and /or recover damages under this 'Contract Part I' as well. However, such breach or default or occurrence in the 'Contract Part II' shall not automatically relieve the Contractor of any of its responsibility/ obligations under this 'Contract Part I'. It is also expressly understood and agreed

by the Contractor that the Plant/equipment/ goods /materials supplied by the Contractor under this 'Contract Part I' when erected, installed and commissioned by the Contractor under the 'Contract Part II' shall give satisfactory performance in accordance with the provisions of the Contract.

IN WITNESS WHEREOF the Employer and the Contractor have caused this Agreement to be duly executed by their duly authorized representatives the day and year first above written.

Signed by for and	Signed by for and	
on behalf of the Employer	on behalf of the Contractor	
Signature	Signature	
Title	Title	
in the presence of	in the presence of	

# 5. FORM OF CONTRACT AGREEMENT

[Alternative – b]

CONTRACT AGREEMENT PART II FOR SUPPLY OF INSTALLATION SERVICES
BETWEEN
THIS CONTRACT AGREEMENT PART I No
BETWEEN
(1)
and
(2) M/s
or
Sole/ Bidder/ Lead Consortium Member of M/s (Name of Lead Partner) (the Lead Partner of CONSORTIUM), a company incorporated under the
laws of Companies Act 1956 and having its Principal place of business at(Address of Lead Partner)

and Registered Office at(Registered address of Other Partner)
WHEREAS the Employer desires to engage the Contractorto design, manufacture, test, deliver, install, commission and complete certain Facilities, viz insert the name of the Package along with ("the Facilities") as detailed in the Contract Document, and the Contractor, in accordance with the mode of contracting specified therein, has agreed to such engagement upon and subject to the terms and conditions appearing in this Contract Agreement Part II for Supply of Installation Services and in Contract Agreement Part I for Supply of Plant for the Facilities, the two parts read together, jointly and in conjunction, constituting the Contract. and the aggregate of the Contract Price for Contract Part I and theContract Price for Contract Part II constituting the Contract Price for the Contract.
WHERE, the Employer, under this Contract Agreement Part II, desires to engage the Contractor for the supply of Installation Services for providing/ supplying all Installation Services (excluding the incidental services included in Contract Part I), interalia, unloading and handling of Plant, all labor, Contractor's equipment, temporary works, materials, consumables, design and preparation of layout, engineering drawings, and all matters and things of whatsoever nature, including testing, pre-commissioning, guarantee tests and commissioning, the provision of as-built drawings, operations and maintenance manuals, training, etc., applicable and necessary for the proper execution of the installation and other services, at final destination (Site/ Project Site), related to and incidental to successful installation of the Plant supplied under the Contract Part I, for the complete execution of the (insert name of Package along with name of the Project), and the scope of work is briefly described below:
[insert brief scope of work]
NOW IT IS HEREBY AGREED as follows:

#### Article 1. **Contract Documents**

# 1.1 Contract Documents (Reference GCC Clause 2)

The following documents shall constitute the Contract between the Employer and the Contractor, and each shall be read and construed as an integral part of the Contract:

# VOLUME - A

1. This Contract Agreement and the Appendices thereto. 2. Notification of Award Ref. No. ...../NOA-II/02 dated DD/MM/YYYY.

#### VOLUME – B

- 3. Documents comprising of the following:
  - Conditions of Contract and Contract Forms (Part 3 of Bidding Documents)
    - Conditions of Contract including Special Conditions of Contract (SCC) and General Conditions of Contract (GCC); (Section 7 of Bidding Documents)
    - Contract Forms (Section 8 of Bidding Documents)
  - Employers' Requirements (Part 2 of Bidding Documents)
    - o Employer's Requirements (Section 6 of Bidding Document)
  - Bidding Procedures and Requirements (Part 1 of Bidding Documents)
    - Request for Bids Notice (Section 1 of Bidding Documents)
    - Eligibility and Qualification Requirements (Section 2 of Bidding Documents)
    - Instruction to Bidders and Bid Data Sheets (Section 3 of Bidding Documents

#### VOLUME - C

4. Bid Submitted by the Contractor.

(Only relevant extracts are attached herewith for easy reference. Should the circumstances warrant, the original Bid along with the enclosures thereof, shall be referred to.).

1.2 Order of Precedence (Reference GCC Clause 3)

In the event of any ambiguity or conflict between the Contract Documents listed above, the order of precedence shall be the order in which the Contract Documents are listed in Article 1.1 (Contract Documents) above.

1.3 Definitions (Reference GCC Clause 1)

Capitalized words and phrases used herein shall have the same meanings as are ascribed to them in the General Conditions of Contract/Special Conditions of Contract.

# Article 2. Contract Price and Terms of Payment

# 2.1 Contract Price (Reference GCC Clause 11) for Contract Part II

Sl.	Price Component	Amount
No.		
1.	Installation Services	
2.	Training Charges (if required)	Not Applicable
Total for Supply of Installation Services Contract		

The detailed break-up of Contract Price for Contract Part I is given in the relevant Appendices hereto.

# 2.2 Terms of Payment (Reference GCC Clause 12)

The terms and procedures of payment according to which the Employer will reimburse the Contractor are given in Appendix 1 (Terms and Procedures of Payment) hereto.

# Article 3. Effective Date for Determining Time for Completion

# 3.1 Effective Date (Reference GCC Clause 1)

The Effective Date from which the Time for Completion of the Facilities shall be counted and determined is the date of the Notification of Award i.e.,

# Article 4. Appendices

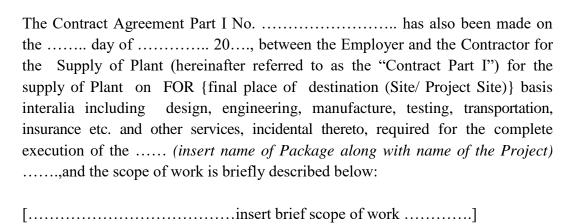
The Appendices listed in the List of Appendices, as mentioned below, shall be deemed to form an integral part of this Contract Agreement Part II and the Contract.

Reference in thisContractAgreement Part II and the Contract to any Appendix shall mean and include the Appendices attached hereto, and this Contract Agreement Part II and the Contract shall be read and construed accordingly.

# List of Appendices

Appendix 1	Terms and Procedures of Payment
Appendix 2	Price Adjustment
Appendix 3	Insurance Requirements
Appendix 4	Time Schedule
Appendix 5	List of Approved Subcontractors
Appendix 6	Scope of Works and Supply by the Employer
Appendix 7	List of Document for Approval or Review
Appendix 8	Guarantees, Liquidated Damages for Non-Performance
Appendix 9	Price Schedules indicating Price Breakdown of Contract
	Price for Contract Part II for Supply of Installation Services
Appendix 11	Integrity Pact

#### Article 5.



Notwithstanding the award ofwork for Completion of the Facilities under the Contract in two separate parts in the aforesaid manner, the Contractor shall be overall responsible to ensure the execution of both the parts of the Contract to achieve successful completion and taking over of the Facilities by the Employer as per the requirements stipulated in the Contract. It is expressly understood and agreed by the Contractor that any default or breach under the 'Contract Part I' shall automatically be deemed as a default or breach of this 'Contract Part II' also

and vice-versa and any such breach or occurrence or default giving the Employer a right to terminate the 'Contract Part I' either in full or in part, and/or recover damages there under the Contract Part I, shall give the Employer an absolute right to terminate this Contract Part I at the Contractor's risk, cost and responsibility, either in full or in part and /or recover damages under this 'Contract Part II' as well. However, such breach or default or occurrence in the 'Contract Part I' shall not automatically relieve the Contractor of any of its responsibility/ obligations under this 'Contract Part I'. It is also expressly understood and agreed by the Contractor that the Plant/equipment /goods/ materials supplied by the Contractor under the 'Contract Part I' when erected, installed and commissioned by the Contractor under this 'Contract part II' shall give satisfactory performance in accordance with the provisions of the Contract.

IN WITNESS WHEREOF the Employer and the Contractor have caused this Agreement to be duly executed by their duly authorized representatives the day and year first above written.

Signed by for and on behalf of the Employer	Signed by for and on behalf of the Contractor	
Signature	Signature	
Title	Title	
in the presence of	in the presence of	

(Separate Contract Agreements shall be executed by the Employer and the Contractor in accordance with the mode of contracting stipulated at ITB, Section 3 of bidding documents. The forms of Contract under both Alternative i.e., a & b shall be used).

# Appendix-1: TERMS AND PROCEDURES OF PAYMENT

In accordance with the provisions of GCC Clause 12 (Terms of Payment), the Employer shall pay the Contractor in the following manner and at the following times, on the basis of the Price Breakdown given in the Appendix regardingPrice Schedules. Payments will be made in Indian Rupees (INR).

- I. "Billable Items" are worked out and attached to Price Schedule. Items otherwise required for completion of work but not listed in the Price Schedule shall also be in the scope of the Contractor. The costs of such "Non- billable Items" is deemed to be included in the quoted price of "Billable Items" by the bidder in the Price Schedule. The payment shall be made on billable item wise basis only as indicated in Price Schedule.
- II. Valid Contract Performance Security to furnished by the Contractor as per the Contract and accepted by the Employer, shall be a condition precedent for release of the advance and progressive payment. Further, for release of any advance payment, requisite securities including Advance Payment Guarantee, as the case may be, to be furnished by the Contract as specified in the Contract and accepted by the Employer, shall also be a condition precedent. In case, the duration of contract gets extended then the Contractor shall furnish the revised Performance Bank Guarantee equal to 10% of the contract value and valid till 30 days beyond the warranty period as per the new contract timelines. The revised Bank Guarantee shall be submitted by the Contractor within 28 days from the date of approval of time extension by the Employer.
- III. The interest rate on advance payment shall be Marginal Cost of Funds Based Lending Rate (MCLR) for one year of the State Bank of India, prevailing on the date of advance payment to the Contractor. The interest accrued on interest bearing advance shall be adjusted first before releasing any payment. The interest rate shall be calculated on the daily progressive balances outstanding as on the date of recovery/adjustment i.e. on daily rest basis.

#### IV. Deleted

- V. Unmeasured ad-hoc payment: The employer, at his discretion in exigencies, to ensure liquidity of funds with the Contractor may accept un-measured ad-hoc bill of the Contractor. In this method, following methodology shall be adopted:
  - a. Submission of certificate on measurement book by Project Manager that materials under consideration have been erected, tested and commissioned as per technical specification, scope of work & approved drawings.

- b. Quantum and completion of works is certified by Project Manager jointly with Contractor and eligible amount of such works are computed as per approved payment terms.
- c. 50% of such eligible amount shall be released to the Contractor immediately within a week. The amount of un-measured bill should not be more than average of previous two measured bill.
- d. Next bill of the work shall invariably be a measured bill in which, various quantities of unmeasured bill shall be verified and measured jointly by Project Manager and Contractor.

# A. Supply, Erection, Testing and Commissioning of works under RDSS:

# 1. Advance payment (Optional):

i. Under the Supply of Plant Contract (Contract Part I), initial interest bearing adjustable Advance of 15% of Contract Price for Contract Part I shall be released in 2 (two)installments each of 7.5% of the Contract Price for Contract Part I.

First installment of 7.5% of the Contract Price for Contract Part I shall be released on presentation of the following:

- a. Signing of Contract Agreement Part I and ContractAgreement Part II by the Employer and the Contractor.
- b. Contractor's detailed invoice.
- c. Submission and acceptance of unconditional & irrevocable part Bank Guarantees (in two (02) equal installments) in favor of employer with total amounting to 100% of total advance amount as per proforma attached with Form:7, Section 8 of Part -3 (Contract Forms). For release of the Ist Installment of advance the Bank Guarantee equal to 100% of Ist Installment amount shall be taken. Once it gets adjusted and the 2nd installment is due for release, the Bank Guarantee for the 2<sup>nd</sup> installment equal to 100% of 2<sup>nd</sup>Installment amount shall be taken. The said Bank Guarantees shall be initially valid upto end of thirty (30) days after the scheduled month of supply of materials and shall be extended from time to time till thirty (30) days beyond revised scheduled month of supply of materials, as may be required under the Contract.

- d. An unconditional & irrevocable Bank Guarantee for ten percent (10%) of the total Contract price towards Contract Performance Guarantee (CPG) in accordance with the provisions of Clause 44.1, Section 3 and as per proforma attached with Section-8 of Part 3 (Contract forms). The said bank guarantee shall be initially valid up to thirty (30) days after expiry of the Warranty Period and shall be extended from time to time till thirty (30) days beyond successful completion of warranty period, as may be required under the Contract.
- e. Detailed PERT Network/Bar chart and its approval by the Employer.

The bidder must utilize first advance installment of 7.5% of ex-works supply component before requesting for second advance installment. Second installment of 7.5% shall be released on submission of Contractor's invoice, bank guarantee equal to 100% of the advance installment and satisfactory utilization certificate supported with documentary evidences of first advance installment.

ii. Under the Supply of Installation Services Contract (Contract part II), initial interest-bearing adjustable Mobilization Advance of 10% of Contract Price for Contract Part II shall be released in 2 (two)installments each of 5% of the Contract Price for Contract Part II:

First installment of 5% of the Contract Price for Contract Part I shall be released on presentation of the following:

- a. Submission of detailed invoice for advance payment.
- b. Establishment of Contractor's site offices and certification by Engineer that satisfactory mobilization for erection exists
- c. Submission and acceptance of unconditional & irrevocable part Bank Guarantees (in two (02) equal installments) in favor of employer with total amounting to 100% of total advance amount as per proforma attached with Form:7, Section 8 of Part -3 (Contract Forms). For release of the Ist Installment of advance the Bank Guarantee equal to 100% of Ist Installment amount shall be taken. Once it gets adjusted and the 2nd installment is due for release, the Bank Guarantee for the 2nd installment equal to 100% of 2nd Installment amount shall be taken. The said Bank Guarantees shall be initially valid upto end of thirty (30) days after the scheduled month of erection of materials and shall be extended from time to time till thirty (30) days beyond revised scheduled month of erection of materials, as may be required under the Contract.

d. Submission of an unconditional & irrevocable Bank Guarantee in favor of Employer for ten percent (10%) of the total Contract price towards Contract Performance Guarantee (CPG) in accordance with Clause 44.1 of Section-3, Part 1 and as per proforma attached with Section 8 of Part 3 (Contract Forms). The said Bank Guarantee shall be initially valid up to 30 (thirty) days after the expiry of warranty period and shall be extended from time to time till thirty (30) days beyond successful completion of warranty period, as may be required under the Contract.

The bidder must utilize first advance installment of 5% of Contract Price for Contract Part II before requesting for second advance installment. Second installment of 5% shall be released on submission of Contractor's invoice, bank guarantee equal to 100% of the advance installment and satisfactory utilization certificate supported with documentary evidences of first advance installment.

# 2. Progressive payments (Supply of Plant):

- **2.1. First Installment (60%):** Sixty percent (60%) payments for the supply of Plant under the Contract Part I, against various items in the attached Price Schedule, including 100% GST thereon reimbursable/ payable by Employer as per Contract, shall be paid on receipt and acceptance of Plant/ equipment/ goods/ materialson submission of documents indicated herein:
  - a. Signing of Contract Agreement Part I and ContractAgreement Part II by the Employer and the Contractor.
  - b. Detailed Project Execution Plan/PERT chart and its approval by the Employer.
  - c. Evidence of dispatch (R/R or receipted L/R)
  - d. Contractor's detailed invoice & packing list identifying contents of each shipment.
  - e. Invoice certifying payments of GST
  - f. Copy of Certificate to the effect of payments of State/ Central taxes, duties, levies etc. have been made against supply of materials through sub-vendors under the contract.
  - g. Certified copy of Insurance policy/Insurance Certificate.
  - h. Manufacturer's/Contractor's guarantee certificate of Quality.

- i. Material Dispatch Clearance Certificate (MDCC) / Dispatch Instructions (DI) for dispatch of materials from the manufacturer's works. MDCC/DI shall be issued by authorized officer of Employer
- j. Manufacturer's copy of challan
- k. submission of the certificate by the Employer's representative that the item(s) have been received,
- 1. Submission of certificate by Project Manager that materials have been supplied as per technical specification, scope of work & approved drawings enclosing certified copy of inspection reports and dispatch clearances.
  - a. 60% of proportionate Mobilization Advance against Supply shall be adjusted while making payments of this installment. In case of delay of project, the entire mobilization advance shall get recovered from the Contractor as per supply and erection contracts' works completion schedule respectively.
- **2.2. Second Installment (30%):** Thirty percent (30%) payments against various items of price schedule 1 shall be paid on following conditions:
  - a. Unconditional acceptance of the Letter of Award and signing of contract agreement by the Contractor.
  - b. Detailed Project Execution Plan/PERT chart and its approval by the Employer.
  - c. Evidence of dispatch (R/R or receipted L/R)
  - d. Contractor's detailed invoice & packing list identifying contents of each shipment.
  - e. Invoice certifying payments of ED, Taxes for the direct transaction between Employer and Contractor,
  - f. Copy of Certificate to the effect of payments of State/ Central taxes, duties, levies etc. have been made against supply of materials through sub-vendors under the contract.
  - g. Certified copy of Insurance policy/Insurance Certificate.
  - h. Manufacturer's/Contractor's guarantee certificate of Quality.

- i. Material Dispatch Clearance Certificate (MDCC) / Dispatch Instructions (DI) for dispatch of materials from the manufacturer's works. MDCC/DI shall be issued by authorized officer of Employer
- j. Manufacturer's copy of challan
- k. Submission of the certificate on measurement book by the Project Manager that the item(s) have been received,
- 1. Submission of certificate on measurement book by Project Manager that materials under consideration have been erected, tested and commissioned as per technical specification, scope of work & approved drawings.
- m. Test check certification on Measurement Book be recorded by officers in hierarchy with the claim as per policy.
  - While releasing 2<sup>nd</sup> installment of 30% supply payment following adjustment shall be made:
    - a. Balance initial mobilization advance shall be adjusted. Also, up-to-date accrued interest shall also be recovered.
    - b. In case of delay of project, the entire mobilization advance shall get recovered at this stage.

#### 2.3. Third & Final Installment (10%):

- a. The balance ten percent (10%) of payment against Supply contracts excluding Excise Duty, Taxes etc. shall be reimbursable on successful supply, erection, testing and commissioning of the works in the project and issuance of Completion Certificate by the Employer.
- b. 'Commissioning' for the purpose of payments shall mean satisfactory completion of all supplies, erection, commissioning checks and successful completion of all site tests and continuous energisation of the equipment/materials at rated voltage as per the Contract and to the satisfaction/approval of the Employer.
- c. On submission of the certificate by the Project Manager that the item(s) have been received, erected, tested and commissioned. The amount will be released after successful commissioning and completion of the entire project and not as per taking over certificate of particular unit/part of facilities.
- d. In case, for any reason not attributable to the Contractor, the commissioning and charging of equipment/materials is delayed beyond

120 days of successful completion of final checking and testing of works, the balance 10% payment shall be released against an unconditional & irrevocable bank guarantee of equivalent amount initially valid till 6 months from the readiness of works for commissioning and charging at rated voltage, to be extended till 30 days beyond actual commissioning & taking over.

# 3. Progressive payments (Erection):

- **3.1. First Installment (90%)**: Ninety percent (90%) payments along with GST against Erection contracts shall be paid on erection, testing and commissioning of works and on submission of relevant documents indicated herein under:
  - a. Unconditional acceptance of the Letter of Award and signing of contract agreement by the Contractor.
  - b. Detailed Project Execution Plan/PERT chart and its approval by the Employer.
  - c. Certified copy of Insurance policy/Insurance Certificate.
  - d. Material reconciliation statement consisting of the materials utilized for erection, testing & commissioning vis-à-vis erection activity of the lot of villages.
  - e. Submission of certificate on measurement book by Project Manager that materials under consideration have been erected, tested and commissioned as per technical specification, scope of work & approved drawings.
  - f. Test check certification on Measurement Book be recorded by officers in hierarchy with the claim as per policy.

While releasing 1<sup>st</sup> installment of 90% erection payment following adjustment shall be made:

- b. 100% Mobilization Advance against Erection shall be fully adjusted while making payments of first installment. Also, up-todate accrued interest shall also be recovered.
- c. In case of delay of project, the entire mobilization advance shall get recovered from the Contractor as per supply and erection contracts' works completion schedule respectively.

# 3.2. Second and Final Installment (10%):

- a. The balance ten percent (10%) of payment against Erection contracts shall be released on successful commissioning of the works in the project, issuance of CompletionCertificate of the project and asset tagging of the created asset in GIS portal provided by the Nodal agency. The amount will be released after successful commissioning and completion of the entire project and not as per taking over certificate of particular unit/part of facilities.
- b. 'Commissioning' for the purpose of payments shall mean satisfactory completion of all supplies, erection, commissioning checks and successful completion of all site tests and continuous energisation of the equipment/materials at rated voltage as per the Contract and to the satisfaction/approval of the Employer.
- c. On submission of the certificate by the Project Manager that the equipment/materials have been erected, tested and commissioned.
- d. On certification of Project Manager for reconciliation of materials and payments.
- e. On certification of Project Manager of updating the asset information in the GIS platform and providing requisite information as per Employer's GIS data model. The mobile application for GIS mapping has to be provided by the Employer.
- f. On certification of Project Manager that assets under the project are created and are taken over by Employer.
- g. However, in case, for any reason solely attributable to the Owner/Employer, the commissioning of equipment/materials is delayed beyond 120 days of successful completion of final checking and testing of line for the purpose of commissioning as defined in bid documents, the balance 10% payment shall be released against an unconditional & irrevocable bank guarantee of equivalent amount initially valid till 6 months from the readiness of transmission lines/ distribution transformer/ service connections for commissioning and charging at rated voltage, to be extended till 30 days beyond actual commissioning & taking over.
- h. For development of new lines/ poles, the Contractor should also submit an automated measurement report based on the GPS coordinates captured through the mobile application.

4. The Project Manager shall within sixty (60) days after receipt of invoices enclosing requisite documents as per payment terms release the payment through electronic mode in designated bank account of the Contractor. In the event that the Contractor has duly followed the procedure enumerated above and the Employer fails to make any payment on its respective due date, the Employer shall pay to the Contractor interest on the amount of such delayed payment as from the end of the 60days period on certified amount due but not paid at the end of such period. The applicable interest rate on the delayed amount willbe equal tothe marginal cost of funds based lending rate (MCLR) for one year of the State Bank of India, as applicable on the 1stApril of the financial year in which the date of disbursement of the payment lies. In case the period of default lies in two or more financial years the interest amount shall be calculated separately for the periods falling in different years.

#### **Appendix-2:PRICE ADJUSTMENT**

The prices for execution of the entire works covered under the scope of this work shall be quoted by the Bidder in the manner specified, in the BPS. The Ex-works price component, less advance will be subject to price adjustment, only for equipment/materials/items of work specifically stated under clause 1.0 below, (for which the bidder shall quote a base price), based on separate formulae as per price adjustment provisions given herein. However, it shall be noted that the Price Adjustment clause will be effective from the contract signing date. The Employer shall ensure that all the Price Adjustment would be governed as per the approved L-2 schedule signed by Employer and Contractor, which would be included in the contract.

Prices for Ex-works price component for all other equipment/items except specified at Clause 1.0 below, Charges for Erection, Inland Freight & Insurance etc. shall be FIRM and no price adjustment shall be applicable for these components for the entire duration of the Contract.

No price adjustment shall be applicable on the portion of the Contract Price payable to the Contractor as advance payment. However, if a Contractor opts for no advance then Price Adjustment would be applicable on 100% contract value.

#### **1.0** Materials and Labour portion:

# 1.0.1 For ACSR Conductor

The price quoted/confirmed for Aluminum Conductor is based on the input cost of raw materials as on the date of quotation. It is deemed to be related to the prices of the raw materials, as specified in the price variation clauses mentioned below. In case of any variation in these prices, the prices payable shall be subject to adjustment up or down in accordance with the following formula:

For Excise duty units:

$$P = Po + WA (AL - ALo) + WF (FE - FEo)$$

For Excise duty exempted units:

$$P = Po + WA (AL_e - ALo_e) + WF (FE_e - FEO_e)$$

Wherein.

P = Ex works price payable in Rs. Per km as adjusted in accordance with the price variation clause

Po = Ex-works price quoted/confirmed in Rs. Per km.

WA = Weight of Aluminium in ACSR conductor in MT per km. (As per IS: 398)

WF = Weight of Steel content in the ACSR conductor in MT per km. (As per IS: 398)

AL = Price of EC Grade Aluminium Ingot/Rod (as per contract) exclusive of excise duty in Rs./MT for the conductor. This price is applicable prevailing as on 30 days prior to the date of delivery.

Al<sub>e</sub> = Price of EC Grade Aluminium Ingot/Rod (as per contract) inclusive of excise duty in Rs./MT for the conductor. This price is applicable prevailing as on 30 days prior to the date of tender delivery.

ALo = Price of EC Grade Aluminium Ingot/Rod (as per contract) exclusive of excise duty in Rs./MT for the conductor. This price is applicable prevailing as on 30 days prior to the date of tender opening.

ALo<sub>e</sub> = Price of EC Grade Aluminium Ingot/Rod (as per contract) inclusive of excise duty in Rs./MT for the conductor. This price is applicable prevailing as on 30 days prior to the date of tender opening.

FE = Price (exclusive of excise duty) of high tensile galvanized steel wire in Rs./MT of appropriate size. This price is applicable prevailing as on 30 days prior to the date of delivery.

 $FE_e$  = Price (exclusive of excise duty) of high tensile galvanized steel wire in Rs./MT of appropriate size. This price is applicable prevailing as on 30 days prior to the date of delivery.

FEo = Price (exclusive of excise duty) of high tensile galvanized steel wire in Rs./MT of appropriate size. This price is applicable prevailing as on 30 days prior to the date of tender opening.

FEo<sub>e</sub> = Price (exclusive of excise duty) of high tensile galvanized steel wire in Rs./MT of appropriate size. This price is applicable prevailing as on 30 days prior to the date of tender opening.

Note: In case of any clarifications in the above formula kindly refer the IEEMA price variation formula for ACSR conductors given in circular IEEMA/PVC/CONDUCTOR/2012 effective from 1<sup>st</sup> April 2012, In case of any discrepancies the IEEMA circular mentioned shall prevail.

#### 1.0.2 For Station/ Power Transformer

The price adjustment on the Ex-works price component, less advance, of Transformers shall be as follows:

#### 1.0.2.1 The price variation clause for 'Power Transformers'

The price payable shall be subject to adjustment, up or down in accordance with the following formula:

$$P = 0.01 \text{ X Po } (6 + 32 \text{X } (\text{C / Co}) + 27 \text{ X(ES / ESo)} + 12 \text{X } (\text{IS / ISo}) + 4 \text{X(IM / IMo)} + 9 \text{X(TO/TOo)} + 10 \text{X(W/Wo)} )$$

Wherein,

P = Price payable as adjusted in accordance with the above formula.

Po = Price quoted / confirmed.

Co = Price of CC copper rods (as published by IEEMA) This price isapplicable for the month, one month prior to the date of tendering.

ESo = Price of CRGO Electrical steel lamination (as published by IEEMA) This price as applicable for the month, one month prior to the date of tendering.

ISo = Average price of steel Plates 10 mm thick(as published by IEEMA) This price is as applicable for the month, one month prior to the date of tendering.

IMo = Price of Insulating Material (as published by IEEMA) This price is as applicable for the month, one month prior to the date of tendering.

TOo = Price of Transformer oil (as published by IEEMA) This price is as applicable for the month, one month prior to the date of tendering.

Wo = All India average consumer price index number for industrial workers, as published by the labour bureau, Ministry of Labour, Govt. of India (Base: 2001 = 100) This index number is applicable for the month, three months prior to the date of tendering.

C = Price of CC copper rods (as published by IEEMA) This price is applicable for the month, two months prior to the date of delivery.

ES = Price of CRGO Electrical steel lamination (as published by IEEMA) This price is applicable for the month, two months prior to the date of delivery.

IS = Average price of Steel Plates 10 mm thick(as published by IEEMA) This price is as applicable for the month, one month prior to the date of delivery.

IM = Price of Insulating Material (as published by IEEMA) This price is as applicable for the month, two months prior to the date of delivery.

TO = Price of Transformer oil (as published by IEEMA) This price is as applicable for the month, one month prior to the date of delivery.

W = All India average consumer price index number for industrial workers, as published by the labour bureau, Ministry of Labour, Govt. of India (Base: 2001 = 100) This index number is as applicable for the month, three months prior to the date of delivery.

Note: In case of any clarifications in the above formula kindly referthe IEEMA price variation formula given in circular IEEMA/PVC/PWR TRF\_upto 400 KV/2021effective from 1<sup>st</sup>September 2021, In case of any discrepancies the IEEMA circular mentioned shall prevail.

# 1.0.3 Station / Distribution Transformer (Aluminum/Copper wound)

The price adjustment on the Ex-works price component, less advance, of Transformers shall be as follows:

1.0.3.1 The price variation clause for Aluminium wound distribution transformers (Single & Three phase of ratings uptoand including 2,500kVA and voltage upto 33kV) complete with all accessories and components.

The price payable shall be subject to adjustment, up or down in accordance with the following formula:

 $P = 0.01 \times Po (8 + 22X (AL / ALo) + 36X(ES / ESo) + 12X(IS / ISo) + 5X(IM / IMo) + 10 \times (TO/TOo) + 7X(W/Wo)$ 

#### Wherein,

P = Price payable as adjusted in accordance with the above formula.

Po = Price quoted / confirmed.

ALo = LME CSP Average of Aluminium (as published by IEEMA) This price as applicable for the month, one month prior to the date of tendering.

ESo = Price of CRGO Electrical steel lamination (as published by IEEMA) This price as applicable for the month, one month prior to the date of tendering.

ISo = Price of the HR coil of 3.15 mm thickness (as published by IEEMA) This price is as applicable for the month, one month prior to the date of tendering.

IMo = Price of Insulating Material (as published by IEEMA) This price is as applicable for the month, one month prior to the date of tendering.

TOo = Price of Transformer oil (as published by IEEMA) This price is as applicable for the month, one month prior to the date of tendering.

Wo = All India average consumer price index number for industrial workers, as published by the labour bureau, Ministry of Labour, Govt. of India (Base: 2016 = 100) This index number is as applicable for the month, three months prior to the date of tendering.

AL = LME CSP Average of Aluminium (as published by IEEMA) This price as applicable for the month, one month prior to the date of delivery.

ES = Price of CRGO Electrical steel lamination (as published by IEEMA) This price as applicable for the month, one month prior to the date of delivery.

IS = Price of the HR coil of 3.15 mm thickness (as published by IEEMA) This price is as applicable for the month, one month prior to the date of delivery.

IM = Price of Insulating Material (as published by IEEMA) This price is as applicable for the month, one month prior to the date of delivery.

TO = Price of Transformer oil (as published by IEEMA) This price is as applicable for the month, one month prior to the date of delivery.

W = All India average consumer price index number for industrial workers, as published by the labour bureau, Ministry of Labour, Govt. of India (Base: 2001 = 100) This index number is as applicable for the month, three months prior to the date of delivery.

Note: In case of any clarifications in the above formula kindly refer the IEEMA price variation formula given in circular IEEMA/PVC/DIST\_AL\_upto 2.5

MVA/2021 effective from 1<sup>st</sup>September 2021, In case of any discrepancies the IEEMA circular mentioned shall prevail.

1.0.3.2 The price variation clause for Copper wound distribution transformers (Single & Three phase of ratings uptoand including 2,500kVA and voltage upto 33kV) complete with all accessories and components.

The price payable shall be subject to adjustment, up or down in accordance with the following formula:

P = 0.01 X Po (7 + 41 X (C/Co) + 23 X(ES / ESo) + 10 X(IS / ISo) + 5 X(IM / IMo) + 8 X(TO/TOo) + 6 X(W/Wo)

Wherein.

P = Price payable as adjusted in accordance with the above formula.

Po = Price quoted / confirmed.

Co = Price of CC copper rods (as published by IEEMA) This price as applicable for the month, one month prior to the date of tendering.

ESo = Price of CRGO Electrical steel lamination (as published by IEEMA) This price as applicable for the month, one month prior to the date of tendering.

ISo = Price of the HR coil of 3.15 mm thickness (as published by IEEMA) This price is as applicable for the month, one month prior to the date of tendering.

IMo = Price of Insulating Material (as published by IEEMA) This price is as applicable for the month, one month prior to the date of tendering.

TOo = Price of Transformer oil (as published by IEEMA) This price is as applicable for the month, one month prior to the date of tendering.

Wo = All India average consumer price index number for industrial workers, as published by the labour bureau, Ministry of Labour, Govt. of India (Base: 2016 = 100) This index number is as applicable for the month, three months prior to the date of tendering.

C = Price of CC copper rods (as published by IEEMA) This price is as applicable for the month, one month prior to the date of delivery.

ES = Price of CRGO Electrical steel lamination (as published by IEEMA) This price is as applicable for the month, one month prior to the date of delivery.

IS = Price of the HR coil of 3.15 mm thickness (as published by IEEMA) This price is as applicable for the month, one month prior to the date of delivery.

IM = Price of Insulating Material (as published by IEEMA) This price is as applicable for the month, one month prior to the date of delivery.

TO = Price of Transformer oil (as published by IEEMA) This price is as applicable for the month, one month prior to the date of delivery.

W = All India average consumer price index number for industrial workers, as published by the labour bureau, Ministry of Labour, Govt. of India (Base: 2016 = 100) This index number is as applicable for the month, three months prior to the date of delivery.

Note: In case of any clarifications in the above formula kindly refer the IEEMA price variation formula given in circular IEEMA/PVC/DIST\_CU\_upto 2.5 MVA/2021 effective from 1<sup>st</sup> September 2021, In case of any discrepancies the IEEMA circular mentioned shall prevail.

#### 1.0.4 Cables

The price adjustment on the Ex works price component, less advance, of Cables shall be as follows:

Terms used in price variation formula:

P = Price payable as adjusted in accordance with the appropriate formula (in Rs/km)

Po = Price quoted/confirmed (in Rs/km)

#### Aluminium

AIF = Variation factor in Aluminium (as published by IEEMA)

Al = Price of EC grade aluminum rods (Properzi rods) (as published by IEEMA). This price is as applicable on the first working day of the month, one month prior to the date of delivery.

Alo = Price of EC grade aluminum rods (Properzi rods) (as published by IEEMA). This price is as applicable on the first working day of the month, one month prior to the date of tendering.

#### Copper

CuF = Variation factor for copper

Cu = Price of CC copper rods (as published by IEEMA). This price is as applicable on the first working day of the month, one month prior to the date of delivery.

Cuo = Price of CC copper rods (as published by IEEMA). This price is as applicable on the first working day of the month, one month prior to the date of tendering.

#### **PVC Compound Polymer**

PVCc = Price of PVC compound (as published by IEEMA). This price is as applicable on the first working day of the month, one month prior to the date of delivery.

PVCco = Price of PVC compound (as published by IEEMA). This price is as applicable on the first working day of the month, one month prior to the date of tendering.

CCFAl = Variation factor for PVC Compound/ Polymer for aluminum conductor cable (as published by IEEMA)

CCFCu = Variation factor for PVC Compound/ Polymer for copper conductor cable (as published by IEEMA)

#### XLPE COMPOUND

Cc = Price of XLPE compound. This price is as applicable on first working day of the month, one month prior to the date of delivery.

Cco = Price of XLPE compound. This price is as applicable on first working day of the month, one month prior to the date of tendering.

XLFAL = Variation factor for XLPE compound for aluminum conductor cable.

XLFCU = Variation factor for XLPE compound for Copper Conductor cable.

#### Steel

FeF = Variation factor for steel (as published by IEEMA)

FeW = Variation factor for round wire steel armouring (as published by IEEMA)

Fe = Price of steel strips / steel wire (as published by IEEMA). This price is as applicable on the first working day of the month, one month prior to the date of delivery.

Feo = Price of steel strips / steel wire (as published by IEEMA). This price is as applicable on the first working day of the month, one month prior to the date of tendering.

The prices and indices mentioned above are published by IEEMA vide circular reference IEEMA(PVC)/Cable/--/-- prevailing as on 1<sup>st</sup> working day of the month i.e., one month prior to the date of tendering.

Price variation formulae for Power Cables

A. Aluminium conductor PVC insulated 1.1kV power cables

For unarmoured multicore cables (without steel armour); FeF = 0

B. Copper conductor PVC insulated 1.1kV power cables

$$\begin{array}{l} P = Po + CuF \left( \begin{array}{cc} Cu & Cuo \end{array} \right) + CCFCu \left( \begin{array}{cc} PVCC & PV & Cco \end{array} \right) + Fef \left( \begin{array}{cc} Fe & Feo \end{array} \right) \\ + AIF \left( AI - Alo \right) \end{array}$$

For steel armoured cables; AlF = 0

For aluminium armoured cables : FeF = 0

For unarmoured cables; FeF, AlF = 0

C. Copper conductor PVC insulated 1.1kV control cables

$$P = Po + CuF(Cu - Cuo) + CCFCu(CC - Cco) + FeF(Fe - Feo)$$

For unarmoured cables: FeF = 0

D. Aluminium conductor XLPE insulated 1.1kV power cables

$$\begin{array}{l} P = Po + AlF \, (AL - Alo) + XLFAL \, (CC \cdot Cco) + CCFAl \, (PVCC - PVCco) \\ + \, FeF \, (Fe - Feo) \end{array}$$

For unarmoured cables; FeF = 0

E. Copper conductor XLPE insulated 1.1kV power cables

$$P = Po + CuF (Cu - Cuo) + XLFCU (CC - Cco) + CCFCu (PVCC - PVCco) + FeF (Fe - Feo) + AlF (AL - Alo)$$

For steel armoured cables; AlF = 0

For aluminium armoured cables: FeF = 0

For unarmoured cables; FeF, AlF = 0

F. Copper conductor XLPE insulated 1.1kV control cables

$$\frac{P = Po + CuF (Cu - Cuo) + XLFCU (CC - Cco) + CCFCu (PVCC - PVCco) + FeF (Fe - Feo)}{}$$

For unarmoured cables; FeF = 0

G. For Aluminium conductor XLPE insulated 3.3 to 33kV power cables

$$-P = Po + AlF (Al - Alo) + XLFAL (CC - Cco) + CCFAl (PVCc - PVCco) + FeF (Fe - Feo)$$

- -For unarmoured multicore cables (without steel armour); FeF = 0
- H. Copper conductor XLPE insulated 3.3 to 33kV power cables

$$-P = Po + CuF (Cu - Cuo) + XLFCU (CC - Cco) + CCFCu (PVCC - PVCco) + FeF (Fe - Feo) + AlF (AL - Alo)$$

- For steel armoured cables; AlF = 0
- For aluminium armoured cables; FeF = 0
- For unarmoured cables; FeF, AlF = 0

Note: In case of any clarifications in the above formula kindly refer the IEEMA price variation formula given in circular IEEMA/DIV/CAB/05dated 24.04.2018 effective from 1<sup>st</sup>November 2017, In case of any discrepancies the IEEMA circular mentioned shall prevail.

#### 1.0.5 A. Steel Structure

Steel structure (excluding nuts, bolts) used in fabrication work at various places in Sub-Transmission and Distribution network (such as lattice structure used in ST&D network/line, switchyard etc.), which are billable items in the Bill of quantity (BOQ) shall be covered under this head. The price adjustment formula for such structural steel items shall be as mentioned hereinafter.

The price component of the structural steel for any shipment/ dispatch comprises of a fixed portion (designated as 'F' and the value of which is specified hereunder) and a variable portion linked with the indices for respective materials and labour (description and co-efficient as enumerated below).

The amount of price adjustment towards variable portion payable/recoverable on each shipment/dispatch shall be computed as under:

$$EC = EC1 - EC0$$

EC1 will be computed as follows in any of appropriate manner as applicable (a or b or c):

- a) For structure using both heavy and lighter angles:  $\frac{EC1 = EC0 * [F + 0.18 * (HA1/HA0) + 0.40 * (LA1/LA0) + 0.16 *}{(Zn1/Zn0) + 0.11 * (L1/L0)]}$
- b) For structure using only heavy angles:
  - EC1 = EC0 \* [F + 0.58 \* (HA1/HA0) + 0.16 \* (Zn1/Zn0) + 0.11 \* (L1/L0)]
- c) For structure using only lighter angles:

EC = Adjustment to Ex-Works price component payable to Contractor for each shipment/dispatch

EC1 = Adjusted amount of Ex-works price component of Contract payable to Contractor for each shipment / dispatch.

ECo = Ex-works price for the respective item of the Contract, Shipment/dispatch wise (quoted price).

F = Fixed portion of the ex-works/FOB component of the Contract Price (F) shall be 0.15.

- HA = Price of Heavy angle steel, as published by IEEMA
- LA = Price of Lighter angle steel, as published by IEEMA
- Zn = Price of electrolytic high grade zinc, as published by IEEMA
- L = All India average Consumer Price Index Number for Industrial Workers (base 2001=100) as published/declared by Labour Bureau, Shimla, Government of India and circulated by IEEMA.

For the indices, subscript 'o' refers to indices as on 30 days prior to date set for opening of bids. Subscript '1' refers to indices as of

- (a) two months/sixty (60) days prior to the date of shipment/dispatch for labour, and
  - (b) at the expiry of two third (2/3) period from the date of Notification of Award to the date of shipment/dispatch, for material.

For the purpose of this clause the date of shipment/dispatch shall mean the Schedule date of shipment/dispatchor actual date of shipment/dispatch, whichever is earlier. The schedule date of shipment/dispatch shall be as identified in line with provisions of Time Schedule in the Contract Agreement.

In case of shipments/ dispatches which are delayed beyond the schedule date of shipment/dispatch for reasons attributable to the Contractor, the price adjustment provision shall not be applicable for the period of time between the schedule date of shipment/dispatch and the actual date of shipment/dispatch.

Note: As per IEEMA Circular No. IEEMA(PVC)/TLT/(R)/02/2007-

- 1) Heavy Steel Angles of size 150mm\*150mm\*12mm as per IS-2062 has been categorized as Heavy Angles (HA).
- 2) Re rolled steel angles of size 50mm\*50mm\*4 mm Lighter has been categorized as Lighter Angles (LA).
- 3) Input costs for all heavy angles of size above 110m\*110mm are deemed to be related to the price under Sr No.1.
- 4) Input costs for all lighter angles of size below & including 110m\*110mm are deemed to be related to the price under Sr No.2.

Steel Tubular Poles: PRICE VARIATION CLAUSE FOR POLES: The price quoted/confirmed is based on the input cost of raw materials/components and labour cost as on the date of quotation and the same is deemed to be related to prices of raw materials and all India average consumer price index number for industrial workers as specified in the price variation clause given below. In case of any variation in these prices and index numbers, the price payable shall be subject to adjustment, up or down in accordance with the following formula:

(A) Steel Tubular Poles

$$P = P_{100} (7 + 70ISIS_{1} + 13ZnZn_{1} + 10WW_{1})$$

(B) Polygonal Poles

$$P = P_{a} = 100 (9 + 64ISIS_{a} + 13ZnZn_{a} + 14WW_{a})$$

Wherein,

P = Price payable as adjusted in accordance with the above formula.

P0 = Price quoted/confirmed.

ISO = Price of HR Coil of 3.15 mm thickness (refer notes) This price is as applicable for the month, ONE month prior to the date of tendering.

Zn0 = Price of Electrolytic high grade zinc (refer notes) This price is as applicable on the 1st working day of the month, ONE month prior to the date of tendering.

W0 = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2016 = 100) (Refer notes)

This index number is as applicable for the month, THREE months prior to the date of tendering.

For example, if date of tendering falls in May 2022, the applicable prices of HR Coil (ISO) should be for the month March 2022, Zinc (ZnO) should be for the month April 2022 and all India average consumer price index number (WO) should be for the month of February 2022.

The above prices and indices are as published by IEEMA vide circular reference number IEEMA (PVC)/TLT 2014 (R-1)/\_/\_ ONE month prior to the date of tendering.

IS = Price of HR Coil of 3.15 mm thickness (refer notes) This price is as applicable for the month, FOUR month prior to the date of delivery.

Zn = Price of Electrolytic high grade zinc (refer notes) This price is as applicable on the 1st working day of the month, ONE month prior to the date of delivery.

W = All India average consumer price index number for industrial workers, as published by the Labour Bureau, Ministry of Labour, Govt. of India (Base: 2016 = 100) (Refer notes) This index number is as applicable on the first working day of the month, THREE months prior to the date of delivery.

For example, if date of delivery falls in December 2022, the applicable prices

of HR Coil (IS) should be for August 2022 and Zinc (Zn) should be for the month November 2022 and all India average consumer price index number (W) should be for the month of September 2022.

The date of delivery is the date on which Poles are notified as being ready for inspection/dispatch (in the absence of such notification, the date of manufacturer's dispatch note is to be considered as the date of delivery) or the contracted delivery date (including any agreed extension thereto), whichever is earlier.

#### Notes:

- (a) All prices of raw materials are exclusive of GST and any other central, state or local taxes etc.
- (b) The details of prices are as under:
- 1. Price of steel is the average retail price of HR Coil 3.15 mm thickness as published by Joint Plant Committee (JPC) in Rs./MT.
- 2. The price of Electrolytic high grade zinc (in Rs/MT) is ex-works price as quoted by a primary producer.
- (C) Note: In case of any clarifications in the above formula kindly refer the IEEMA price variation formula given in circular 10/PVC/T & D Project/05 effective from 1<sup>st</sup>April 2022, In case of any discrepancies the IEEMA circular mentioned shall prevail.

# 1.0.6 <u>66/11 KV & 33/11 KV Switchgear (indoor/outdoor) including 66/33/11 KV Circuit Breakersand Isolators:</u>

The Contract Price shall be subject to price adjustment during performance of the Contract to reflect changes in the cost of labour and material components in accordance with the provisions described below.

The Ex-Works price of 66/11 KV & 33/11 KV Switchgear (Indoor/Outdoor), Circuit Breakers, and Isolators excluding Mandatory Spares and Type Tests Charges (if any) will be subject to Price adjustment. The price adjustment formula for the components of the Contract Price, as mentioned above shall be as stipulated hereinafter.

The price component of the equipment for any shipment/ dispatch comprises of a fixed portion (designated as 'F' and the value of which is specified hereunder) and a variable portion linked with the indices for various materials and labour (description and co-efficient as enumerated below).

The amount of price adjustment towards variable portion payable/recoverable on each shipment/dispatch shall be computed as under:

$$P = 0.01 \text{ X Po } (20 + 28 (\text{ IS / ISo}) + 26 (\text{ C / Co}) + 4 (\text{ AL / ALo}) + 9 (\text{ ln / lno}) + 13 (\text{ W / Wo})$$

Wherein,

P = Price payable as adjusted in accordance with the above formula

Po = Price quoted/confirmed

ISo = Wholesale price index number for 'Manufacture of Basic Metals' (Base: 2011-12 = 100) (as published by IEEMA). This price index number for the month, Three month prior to the date of tendering

Co = Average LME settlement price of copper wire bars (as published by IEEMA). This price is applicable for the month, One month prior to the date of tendering

Alo = Price of busbar grade aluminum(as published by IEEMA). This price is applicable on the 1<sup>st</sup> working day of the month, One month prior to the date of tendering

lno = Price of epoxy resin for indoor circuit breakers and switch gear(as published by IEEMA). This price is applicable on the 1<sup>st</sup> working day of the month, One month prior to the date of tendering

Or wholesale price index of insulator for outdoor circuit breakers (VBF and SDB) (as published by IEEMA). This index number is as applicable for the month, Three month prior to the date of tendering

Wo = All India average consumer price index number for industrial workers, as published by the Labour bureau, Ministry of Labour, Government of India (Base : 2001 = 100)

This index number is as applicable for the month, Four month prior to the date of tendering. (as published by IEEMA)

ISo = Wholesale price index number for 'Manufacture of Basic Metals' (Base: 2011-12 = 100) (as published by IEEMA). This price index number for the month, Three month prior to the date of tendering

Co = Average LME settlement price of copper wire bars(as published by IEEMA). This price is applicable for the month, One month prior to the date of tendering

Alo = Price of busbar grade aluminum(as published by IEEMA). This price is applicable on the 1<sup>st</sup> working day of the month, One month prior to the date of tendering

lno = Price of epoxy resin for indoor circuit breakers and switch gear(as published by IEEMA). This price is applicable on the 1<sup>st</sup> working day of the month, One month prior to the date of tendering

Or wholesale price index of insulator for outdoor circuit breakers (VBF and SDB) (as published by IEEMA). This index number is as applicable for the month, Three month prior to the date of tendering

Wo = All India average consumer price index number for industrial workers, as published by the Labour bureau, Ministry of Labour, Government of India (Base: 2001 = 100)(as published by IEEMA). This index number is as applicable for the month, Four month prior to the date of tendering

Note: In case of any clarifications in the above formula kindly refer the IEEMA price variation formula given in circular IEEMA/PVC/MVSWGR/2019 (R-2)effective from 1<sup>st</sup> January 2019, In case of any discrepancies the IEEMA circular mentioned shall prevail.

#### 1.0.7 Aerial Bunched Cables

The price payable shall be subject to adjustment up or down in accordance with the formulae provided in this document.

Terms used in price variation formulae:

P = Price payable as adjusted in accordance with above appropriate formula (in Rs/Km)

Po = Price quoted/confirmed (in Rs/Km)

n = No. of phase conductor

**ALUMINIUM** 

Alph= Aluminium factor for phase conductor (as published by IEEMA)

Alm= Aluminium factor for messenger conductor (as published by IEEMA)

Alsl= Aluminium factor for street light conductor (as published by IEEMA)

Aln= Aluminium factor for neutral conductor (as published by IEEMA)

AI = Price of LME average Cash SELLER Settlement price of Primary Aluminium in US\$ per MT as published by London Metal Bulletin (LME) including Premium for Aluminium Ingot in US\$ per MT converted in Rs./MT This price is as applicable of first working day of the month, one month prior to the date of delivery.

Alo= Price of LME average Cash SELLER Settlement price of Primary Aluminium in US\$ per MT as published by London Metal Bulletin (LME) including Premium for Aluminium Ingot in US\$ per MT converted in Rs./MT This price is as applicable on first working day of the month, one month prior to the date of tendering.

#### **XLPE COMPOUND**

CCFAlph = XLPE factor for phase conductor (For LV AB Cables) (as published by IEEMA)

CCF1Alph= XLPE factor for phase conductor (For MV\_HV AB Cables) (as published by IEEMA)

CCFAlm= XLPE factor for messenger conductor (as published by IEEMA)

CCFAlsl= XLPE factor for street light conductor (as published by IEEMA)

CCFAln= XLPE factor for neutral conductor (as published by IEEMA)

Cc = Price of LV/HV XLPE Compound in Rs/MT of a representative grade applicable for LV /HV Aerial

Bunch Cables respectively; as quoted by supplier/s. (as published by IEEMA)

This price is as applicable of first working day of the month, one month prior to the date of delivery

Cco = Price of LV/HV XLPE Compound in Rs/MT of a representative grade applicable for LV /HV Aerial

Bunch Cables respectively; as quoted by supplier/s.

This price is as applicable of first working day of the month, one month prior to the date of tendering

**PVC/PE Compound** 

CCF2Alph= PVC/ PE factor for phase conductor (For MV\_HV AB Cables)

PVCc price of PVC compound (equivalent to CW-22 grade) in Rs/MT; as quoted by supplier/s.

This price is as applicable on first working day of the month, one month prior to the date of delivery

PVCco Price of PVC compound (Equivalent to CW-22 Grade) in Rs/MT; as quoted by supplier/s.

This price is as applicable on first working day of the month, one month prior to the date of tendering Copper

CuFtph= Cu tape factor for phase conductor

CU = The LME price of Copper Wire Bars (in Rs./MT) is the LME average settlement price of Copper

Wire Bars converted into Indian Rupees (INR), with average exchange rate of the month. This price is the

landed cost, inclusive of applicable customs duty only.

This price is as applicable of first working day of the month, one month prior to the date of delivery.

CU0 = The LME price of Copper Wire Bars (in Rs./MT) is the LME average settlement price of Copper

Wire Bars converted into Indian Rupees (INR), with average exchange rate of the month. This price is thelanded cost, inclusive of applicable customs duty only. This price is as applicable of first working day of the month, one month prior to the date oftendering.

The above prices and indices are as published by IEEMA vide Circular referenceIEEMA(PVC)/CABLE(R-1)/--/-- prevailing as on 1st working day of the month i.e. one month prior tothe date of tendering.

#### Price variation formulae for 'LV & HV Aerial Bunch Cables'

1. LV Aerial Bunched Cables with AluminiumConductor , XLPE Insulated and Aluminium Magnesium-Silicon Alloy Messenger Conductor

$$\begin{array}{l} P = P0 + Alph * n* (Al-Al0) + Alm(Al-Al0) + Alsl(Al-Al0) + Aln(Al-Al0) + \\ CCFAlph * n* (CC-CC0) + CFAlm(CCCC0) + CCFAlsl (CC-CC0) + \\ CCFAln(CC-CC0) \end{array}$$

In case messenger is bare; XLPE factor CCFAlm= 0

2. HV Aerial Bunched Cables with Aluminium Conductor, Conductor screened, XLPE Insulated, insulation screened followed by copper tape and over all PVC/PE sheathe cores twisted around Bare Aluminium Magnesium-Silicon Alloy Messenger Conductor

Note In case of any clarifications in the above formula kindly refer the IEEMA price variation formula given in circular IEEMA(PVC)/AB CABLE/2017effective from 1<sup>st</sup> November 2017, In case of any discrepancies the IEEMA circular mentioned shall prevail.

The PV will be applicable against the materials as specified above.

- 1.0.8 The Employer shall use the recent formula/ revisions published by IEEMA to calculate the Price adjustment on supply of plants and facilities.
- 1.0.9 The price adjustment amount towards the price components of materials shall be as per the price variation formulas mentioned in para 1.0.1 to 1.0.8 without any ceiling.
- 1.0.10 For the purpose of price adjustment for Ex works price component, the date of shipment for goods shall mean the scheduled date of shipment or actual date of shipment, whichever is earlier. Scheduled date of shipment will be ex-works date of dispatch, governed by the approved PERT Chart as per Appendix 4 Time Schedule.

- 1.0.11 No price increase shall be allowed beyond the original delivery dates unless specifically stated in the Time Extension letter, if any, issued by the Employer. The Employer will, however, be entitled to any decrease in the Contract price which may be caused due to lower price adjustment amount in case of delivery beyond the original delivery dates. In such event where the time extension is agreed by the Employer, a revised L2 schedule is to be released by the Employer for the extended period in which price variation would also be allowed.
- 1.0.12 In case of non-publication of applicable indices on a particular date, which happens to be the applicable date for price adjustment purposes, the published indices prevailing immediately prior to the particular date shall be applicable.
- 1.0.13 If the price adjustment amount works out to be positive, the same is payable to the Contractor by the Employer and if it works out to be negative, the same is to be recovered by the Employer from the Contractor without any ceiling.
- 1.0.14 The Contractor shall promptly submit the price adjustment invoices for the supplies made and works executed at site, positively within three (3) months from the date of shipment/work done whether it is positive or negative.
- 1.0.15 Bids shall conform to the price adjustment provisions detailed above. Bids specifying prices for items on variable basis run the risk of rejection. A bid submitted on a fixed price basis will not be rejected but the price adjustment will be treated as zero.
- 1.0.16 In case of extension of the project beyond the scheduled date of completion, the price adjustment shall remain in effect till the time of scheduled completion, however for the period beyond the scheduled date of completion for which the Contractor is liable to pay liquidated damages to the employer, the price adjustment shall not be applicable.

#### Appendix-3: INSURANCE REQUIREMENTS

#### A) Insurances to be taken out by the Contractor

In accordance with the provisions of GCC Clause 34, the Contractor shall at its expense take out and maintain in effect, or cause to be taken out and maintained in effect, during the performance of the Contract, the insurances set forth below in the sums and with the deductibles and other conditions specified. The identity of the insurers and the form of the policies shall be subject to the approval of the Employer, such approval not to be unreasonably withheld. The inability of the insurers to provide insurance cover in the sums and with the deductibles and other conditions as set forth below, shall not absolve the Contractor of his risks and liabilities under the provisions of GCC Clause 34. However, in such a case the Contractor shall be required to furnish to the Employer documentary evidence from the insurer in support of the insurer's inability as aforesaid.

#### (a) Marine Cargo Policy/Transit Insurance Policy:

(I) Transit Insurance Policy for indigenous equipment

Similarly, Transit Insurance Policy shall be taken wherein only inland transit is involved for the movement of Plant and Equipment supplied from within India. The policy shall cover movement of Plant and Equipment from the manufacturer's works to the project's warehouse at final destination site. Inland Transit Clause(ITC) 'A' along with war & Strike Riots & Civil Commotion (SRCC) extension cover shall be taken.

Amount	Deduc	Parties	From	То
	tible	insured		
	Limits			
120% of Ex-work Price of all the	Nil	Contractor&	Mfrs ware-	Project's
Plant and Equipment to be		Employer	house	ware-
supplied from within India plus				house store
Excise Duty and Sales Tax/ GST				at final
etc., if additionally payable.				destination

(II) If during the execution of Contract, the Employer requests the Contractor to take any other add-on cover(s)/ supplementary cover(s) in aforesaid insurance, in such a case, the Contractor shall promptly take such add-on cover(s)/ supplementary cover(s) and the charges towards such premium for such add-on cover(s)/ supplementary cover(s) shall be reimbursed to the Contractor on submission documentary evidence of payment to the Insurance company. Therefore, charges towards premium for such add-on cover(s)/ supplementary cover(s) are not included in the Contract Price.

(III) The Contractor shall take the policy in the joint names of Employer and the Contractor. The policy shall indicate the Employer as the beneficiary. However, if the Contractor is having an open policy for its line of business, it should obtain an endorsement of the open cover policy from the insurance company indicating that the dispatches against this Contract are duly covered under its open policy and include the name of the Employer as jointly Insured in the endorsements to the open policy.

#### (b) Erection All Risk Policy/Contractor All Risk Policy:

(I) The policy should cover all physical loss or damage to the facility at site during storage, erection and commissioning covering all the perils as provided in the policy as a basic cover and the add on covers as mentioned at Sl. No. (III) below.

Amount	Amount Deductible Part		From	То
	limits	insured		
105% of Ex-work	Nil	Contractor&	Receipt at site	Up to
Price of all the Plant		Employer	of first lot of	Operational
and Equipment to be			the Plant and	Acceptance
supplied from within			Equipment	
India plus Excise Duty				
and Sales Tax/ GST				
etc., if additionally				
payable.				
and				
100% of erection price				
component				

(II) The Contractor shall take the policy in the joint name of Employer and the Contractor. All these policies shall indicate Employer as the beneficiary. The policy shall be kept valid till the date of the Operational Acceptance of the project and the period of the coverage shall be determined with the approval of the Employer.

If the work is completed earlier than the period of policy considered, the Contractor shall obtain the refund as per provisions of the policy and pass on the benefit to Employer. In case no refund is payable by the insurance company then the certificate to that effect shall be submitted to Employer at the completion of the project.

(III) The following add-on covers shall also be taken by the Contractor:

- i) Earthquake
- ii) Terrorism
- iii) Escalation cost (approximately @10% of sum insured on annual basis)
- iv) Extended Maintenance cover for Defect Liability Period
- v) Design Defect
- vi) Other add-on covers viz., 50-50 clause, 72 hours clause, loss minimization clause, waiver of subrogation clause (for projects of more than Rs.100 crores, cover for offsite storage/fabrication (over Rs.100 crores).

# (IV) Third Party Liability cover with cross Liability within Geographical limits of India as on ADD-on cover to the basic EAR cover:

The third party liability add-on cover shall cover bodily injury or death suffered by third parties (including the Employer's personnel) and loss of or damage to property (including the Employer's property and any parts of the Facilities which have been accepted by the Employer) occurring in connection with supply and installation of the Facilities.

Amount	Deductible	Parties	From	То
	limits	insured		
• For projects uptoRs. 100	Nil	Contractor/	Receipt	Upto Defect
crores, the third party		Sub-	at site	Liability
liability limit shall be 10% of		Contractor		Period.
the project value for single				
occurrence/ multiple				
occurrences in aggregate				
during the entire policy				
period.				
• For projects from Rs. 100				
crores to Rs. 500 crores, the				
third party liability limit				
shall be Rs. 10 crores for				
single occurrence/multiple				
occurrences in aggregate				
during entire policy period.				
For projects of more than				
Rs.500 crores, the third party				
liability limit shall be Rs. 25				
crores for single occurrence/				
multiple occurrences in				
aggregate during entire				

policy period.		

(V) As per GCC Clause 30.8, the cost of insurance premium is to be reimbursed to the Contractor for Owner Supplied Materials (OSM) for which the insurer is to be finalized by the Contractor as detailed therein. Alternatively, the Contractor may take a single policy covering the entire cost of the project including the cost of OSM. For this purpose, the Contractor shall submit documentary evidence for the premium paid for the entire project to the Employer and Employer shall reimburse to the Contractor the proportion of premium equal to value of OSM to total sum insured.

If during the execution of Contract, the Employer requests the Contractor to take any other add-on cover(s)/ supplementary cover(s) in aforesaid insurance, in such a case, the Contractor shall promptly take such add-on cover(s)/ supplementary cover(s) and the charges towards such premium for such add-on cover(s)/ supplementary cover(s) shall be reimbursed to the Contractor on submission documentary evidence of payment to the Insurance company. Therefore, charges towards premium for such add-on cover(s)/ supplementary cover(s) are not included in the Contract Price.

#### (c) Automobile Liability Insurance

The Contractor shall ensure that all the vehicles deployed by the Contractor or its Subcontractor (whether owned by them) in connection with the supply and installation of the Facilities in the project are duly insured as per RTA act. Further the Contractor or its Subcontractors may also take comprehensive policy (own damage plus third-party liability) of each individual vehicle deployed in the project on their own discretion in their own name to protect their own interest.

#### (d) Workmen Compensation Policy:

- (I) Workmen Compensation Policy shall be taken by the Contractor in accordance with the statutory requirement applicable in India. The Contractor shall ensure that all the workmen employed by the Contractor or its Subcontractors for the project are adequately covered under the policy.
- (II) The policy may either be project specific covering all men of the Contractor and its Subcontractors. The policy shall be kept valid till the date of Operational Acceptance of the project.

Alternatively, if the Contractor has an existing 'Workmen Compensation Policy' for all its employees including that of the Subcontractor(s), the Contractor must include the interest of the Employer for this specific Project in its existing 'Workmen Compensation Policy'.

(III) Without relieving the Contractor of its obligations and responsibilities under this Contract, before commencing work the Contractor shall insure against liability for death of or injury to persons employed by the Contractor including liability by statute and at common law. The insurance cover shall be maintained until all work including remedial work is completed including the Defect Liability Period. The insurance shall be extended to indemnify the Principal for the Principal's statutory liability to persons employed by the Contractor.

The Contractor shall also ensure that each of its Subcontractors shall affect and maintain insurance on the same basis as the 'Workmen Compensation Policy' effected by the Contractor.

#### (e) Contractor's Plant and Machinery (CPM) Insurance

The Employer (including without limitation any consultant, servant, agent or employee of the Employer) shall not in any circumstances be liable to the Contractor for any loss of or damage to any of the Contractor's Equipment or for any losses, liabilities, costs, claims, actions or demands which the Contractor may incur or which may be made against it as a result of or in connection with any such loss or damage.

The Employer shall be named as co-insured under all insurance policies taken out by the Contractor pursuant to GCC Sub-Clause 34.2, except for the Third-Party Liability, Workmen Compensation Policy Insurances, and the Contractor's Subcontractors shall be named as co-insureds under all insurance policies taken out by the Contractor pursuant to GCC Sub-Clause 34.2 except for the Cargo Insurance During Transport and Workmen Compensation

Policy Insurances. All insurer's rights of subrogation against such co-insureds for losses or claims arising out of the performance of the Contract shall be waived under such policies.

#### B) Insurances to be taken out by the Employer

The Employer shall at its expense take out and maintain in effect during the performance of the Contract the following insurances.

Amount Deductible limits	Parties Insured	From	То
--------------------------	-----------------	------	----

	NIL	

-- End –

#### Appendix-4: TIME SCHEDULE

- 1. The Project Completion Schedule shall be as follows: As per 2.2.13 (Project Timelines)
- 1.1 The activity(ies) under the Contractor's programme for Project Completion shall be in the form a PERT chart and shall identify the various activities like engineering, vendor finalization, placement of orders to sub-vendors, survey, Resource mobilization, erection, testing & commissioning including submission of closure proposals. Format of PERT chart is enclosed at Annexure-A. The PERT Chart shall conform to the above Project Completion Schedule.

This PERT Chart shall be discussed and agreed before Award in line with above, engineering drawing and data submission schedule shall also be discussed and finalised before Award. Liquidated damages for delay in successful Completion of the Facilities or specific part thereof (where specific parts are specified in SCC) and Operational Acceptance at rates specified in Clause 26 of GCC shall be applicable beyond the date specified above.

- 1.2 The Employer reserves the right to request minor changes in the work schedule at the time of Award of Contract to the successful Bidder.
- 1.3 The successful Bidder shall be required to prepare detailed PERT Chart and finalise the same with the Employer as per the requirement, which shall from a part of the Contract.
- 1.4 In case of new substations the date of start of the works shall be counted from the date of land made available to the Contractor by the employer.
- 1.5 The start date of the contract will be the date of contract signing between the Contractor and employer. In the L1 and L2 schedule all the milestone timelines should be from the date of start of contract.

#### Appendix-5: LIST OF APPROVED SUBCONTRACTORS

Prior to award of Contract, the following details shall be completed indicating those sub-Contractors proposed by the Bidder by Attachment to its bid that are approved by the Employer for engagement by the Contractor during the performance of the contract.

The following Subcontractors are approved for carrying out the item of the facilities indicated. Where more than one Subcontractor is listed, the Contractor is free to choose between them, but it must notify the Employer of its choice in good time prior to appointing any selected Subcontractor. In accordance with GCC Sub-Clause 19.1, the Contractor is free to submit proposals for Subcontractors for additional items from time to time. No Subcontracts shall be placed with any such Subcontractors for additional items until the Subcontractors have been approved in writing by the Employer and their names have been added to this list of Approved Subcontractors.

Item of Facilities	Approved Subcontractors	Nationality

Further, erection portion of the contract shall not be subcontracted without the prior approval of the Employer. However, such approval shall not be necessary for engaging labour.

#### Appendix-6: SCOPE OF WORKS AND SUPPLY BY THE EMPLOYER

The following personnel, facilities, works and supplies will be provided/supplied by the Employer, and the provisions of GCC 10, 20, 21 and 24 as well as Employer responsibilities stated in technical specifications shall apply as appropriate.

All personnel, facilities, works and supplies will be provided by the Employer in good time so as not to delay the performance of the Contractor in accordance with the approved Time Schedule and Program of Performance pursuant to GCC Sub-Clause 18.2.

Unless otherwise indicated, all personnel, facilities, works and supplies will be provided free of charge to the Contractor.

free of charge to the Contr	ractor.					
Personnel	Charge to Contractor – None					
	NIL					
Facilities	Charge to Contractor - None except as noted					
Electricity and Water	Charge to Contractor - as noted					
electricity and water as r necessary for such use. Th Employer's overheads, if	ntitled to use for the purposes of the facilities such supplies of may be available on the Site and shall provide any apparatus as Contractor shall pay the Employer at the applicable tariff plus any, for such use. Where such supplies are not available, the own arrangement for provision of any supplies he may require.					
Works	Charge to Contractor - None					
	NIL					
Supplies	Charge to Contractor – None					

-----NIL-----

incorporation into the Contract Agreement.

A. Approval

### Appendix-7: LIST OF DOCUMENTS FOR APPROVAL OR REVIEW

Pursuant to GCC Sub-Clause 20.3.1, the Contractor shall prepare, or cause its Subcontractor to prepare, and present to the Project Manager in accordance with the requirements of GCC Sub-Clause 18.2 (Program of Performance), the following documents for:

1.	
2.	
3.	
B. Review	
1.	
2.	
3.	
Note:	

Bidder shall furnish the exhaustive list, which shall be discussed and finalised for

# Appendix-8 :GUARANTEES, LIQUIDATED DAMAGES FOR NON – PERFORMANCE

- 1. The equipment offered shall meet the rating and performance requirements stipulated in Technical Specification for various equipment or indicated in Data requirement.
- 2. The ratings and performance figures of the below mentioned equipment are guaranteed as per losses given in respective Indian Standard (up to date) by bidder.

Sl.	Description					
No.	Description					
A.	12/10/8/6.3/5/3.15/1.6 MVA 33/11kV, 3 ph. Power Transformer					
B.	1000/630/500/315/200/100/63/25/16KVA, 11/0.433kV, 3 phase Station &					
	Distribution Transformer					
<del>C.</del>	16/10KVA, 11/0.250kV, 1 phase Distribution Transformer					

3. If the aforementioned guarantees are not established at factory tests, then the Employer shall reject the equipment.

## 6. PERFORMANCE SECURITY FORM

Bank Guarantee No	•••••		Date
Contract No			
[Name of Contract]			
To:[Name and address of Empl	'oyer]		
Dear Ladies and/or Gentlemen,			
We refer to the Contract (" Contract) between M/s. (Registered Address of employe (Name of owner) (hereinafte 'Owner'), and M/s	WBSEDCL, having er) ("the Employer" er referred to as (Name of Contract Address of Contract(Registered	ng its Registered ("'" WBSEDCL") on 'XXXX (Short Notetor)	office at XXXXX  n behalf of XXXX  ame of Owner)' / naving its Principal and Registered Contractor) actor") concerning . for the complete of the Project)
	Or		
We refer to the Contract signed M/s. WBSEDCL, having its employer) ("the Employer"/" (hereinafter referred to as "	Registered Office WBSEDCL") on XXXX (Short Nam or), hav actor)	at XXXXX (Regarder) (R	(Name of owner) Owner'), and M/s lace of business at istered Office at Contractor)
Contract ("the Contract") signed WBSEDCLon behalf of Own having its Principal place and Register	ed on(inse er and M/s of business at ered Office at	rt date of the Cont(Name of Asso(Addre(Registered ad, the Associate	cociate)
for executing the Facilities con	=		

with name of the Project)...... [Applicable for Bank Guarantees to be issued by Contractor against those Contracts awarded to their Associate]

We undertake to make payment under this Letter of Guarantee upon receipt by us of your first written demand signed by the Employer duly authorized officer or the authorized officer of **Owner** declaring the Contractor to be in default under the Contract and without cavil or argument any sum or sums within the above named limits, without your need to prove or show grounds or reasons for your demand and without the right of the Contractor to dispute or question such demand.

Our liability under this Letter of Guarantee shall be to pay to the Employer whichever is the lesser of the sum so requested or the amount then guaranteed hereunder in respect of any demand duly made hereunder prior to expiry of the Letter of Guarantee, without being entitled to inquire whether or not this payment is lawfully demanded.

Except for the documents herein specified, no other documents or other action shall be required, notwithstanding any applicable law or regulation.

Our liability under this Letter of Guarantee shall become null and void immediately upon its expiry, whether it is returned or not, and no claim may be made hereunder after such expiry or after the aggregate of the sums paid by us to the Employer shall equal the sums guaranteed hereunder, whichever is the earlier.

All notices to be given under shall be given by registered (airmail) posts to the addressee at the address herein set out or as otherwise advised by and between the parties hereto.

We hereby agree that any part of the Contract may be amended, renewed, extended, modified, compromised, released or discharged by mutual agreement between you and the Contractor, and this security may be exchanged or surrendered without in any way

impairing or affecting our liabilities hereunder without notices to us and without the necessity for any additional endorsement, consent or guarantee by us, provided, however, that the sum guaranteed shall not be increased or decreased.

No action, event or condition which by any applicable law should operate to discharge us from liability hereunder shall have any effect and we hereby waive any right we may have to apply such law so that in all respects our liability hereunder shall be irrevocable and, except as stated herein, unconditional in all respects.

[Signature of the authorised signatory(ies)] Signature\_\_\_\_\_ Name\_\_\_\_\_ Designation\_\_\_\_ POA Number\_\_\_\_\_ Contact Number(s): Tel.\_\_\_\_\_Mobile\_\_\_\_ Fax Number\_\_\_\_\_ email \_\_\_\_\_ Common Seal of the Bank\_\_\_\_\_ Witness: Signature\_\_\_\_\_ Name\_\_\_\_\_ Address\_\_\_\_\_ Contact Number(s): Tel. \_\_\_\_\_Mobile\_\_\_\_\_ email \_\_\_\_\_

For and on behalf of the Bank

Note:

- 1. For the purpose of executing the Bank Guarantee, the non-judicial stamp papers of appropriate value shall be purchased in the name of Bank who issues the 'Bank Guarantee'.
- 2. The Bank Guarantee shall be signed on all the pages by the Bank Authorities indicating their POA nos. and should invariably be witnessed.
- 3. The Bank Guarantee should be in accordance with the proforma as provided. However, in case the issuing bank insists for additional paragraph for limitation of liability, the following may be added at the end of the proforma of the Bank Guarantee [i.e., end paragraph of the Bank Guarantee preceding the signature(s) of the issuing authority(ies) of the Bank Guarantee]:

#### Quote

"Notwithstanding anything contained herein:

1.	Our liability un in figures)_words)						(value (value in
2.	This Bank		shall	be	valid	upto	(validity
3.	We are liable	to pay the gua ee only & only	if we re	eceive	a writte	• •	ereof under this r demand on or

**Unquote** 

#### 7. BANK GUARANTEE FORM FOR ADVANCE PAYMENT

Bank Guarantee No	Date
Contract No	
[Name of Contract]	
To:[Name and address of the Employer]	
Dear Ladies and/or Gentlemen,	
We refer to the Contract ("the Contract") signed on	Contractor) of Contractor) concerning the complete
Whereas, in accordance with the terms of the said Contract, the Employer pay or cause to be paid to the Contractor an Advance Payment in the	•
By this letter we, the undersigned,(insert name & address of the, a Bank (which expression shall include its successors, administrat and assigns) organized under the laws of	ors, executors d having its office of the unts upon the he Contractor act, and in the

Provided always that the Bank's obligation shall be limited to an amount equal to the outstanding balance of the advance payment, taking into account such amounts, which have been repaid by the Contractor from time to time in accordance with the terms of payment of the said Contract as evidenced by appropriate payment certificates.

This Guarantee shall remain in full force from the date upon which the said advance payment is received by the Contractoruptothirty (30) days beyond the date on which the

entire advance so advanced along with the interest if any due thereon has been fully adjusted in terms of the Contract i.e., upto of thirty (30) days beyond the date of Completion of the Facilities under the Contract. This Guarantee may be extended from time to time, as may be desired by M/s. ................................. on whose behalf this Guarantee has been issued.

Any claims to be made under this Guarantee must be received by the Bank during its period of validity, i.e. uptothirty (30) days beyond the date of Completion of the Facilities by the Employer i.e. upto and inclusive of ................................. (dd/mm/yy).

For and on behalf of the Bank
[Signature of the authorised signatory(ies)]
Signature
Name
Designation
POA Number
Contact Number(s): TelMobile
Fax Number
email
Common Seal of the Bank
Witness:
Signature
Name
Address
Contact Number(s): TelMobile
email

#### Note:

- 1. For the purpose of executing the Bank Guarantee, the non-judicial stamp papers of appropriate value shall be purchased in the name of Bank who issues the 'Bank Guarantee'.
- 2. The Bank Guarantee shall be signed on all the pages by the Bank Authorities indicating their POA nos. and should invariably be witnessed.
- 3. The Bank Guarantee should be in accordance with the proforma as provided. However, in case the issuing bank insists for additional paragraph for limitation of liability, the following may be added at the end of the proforma of the Bank Guarantee [i.e., end paragraph of the Bank Guarantee preceding the signature(s) of the issuing authority(ies) of the Bank Guarantee]:

#### Quote

"Notwithstanding anything contained herein:

in figures)].	. [				(value in
This Bank Guarantee date)	shall	be	valid	upto	(validity
1 ,				• •	
	<ul><li>in figures)</li></ul>	words)].  This Bank Guarantee shall date)  We are liable to pay the guaranteed	in figures)	words)].  This Bank Guarantee shall be valid date)  We are liable to pay the guaranteed amount or an	This Bank Guarantee shall be valid upto

## 8. FORM OF COMPLETION CERTIFICATE

Date
Name of Contract
Contract No
To:
(Name and address of the Contractor)
Dear Ladies and/or Gentlemen,
Pursuant to GCC 24.4 (Completion) of the General Conditions of the Contract entered into between yourselves and the Employer dated relating to the
Facilities)
<ol> <li>Description of the Facilities or part thereof</li> <li>Date of Completion :</li> </ol>
However, you are required to complete the outstanding items listed in the attachment hereto as soon as practicable.
This letter does not relieve you of your obligation to complete the execution of the Facilities in accordance with the Contract nor of your obligations during the Defects Liability Period.
Very truly yours,
Title
(Project Manager)

# 9. FORM OF INDEMNITY BONDTO BE EXECUTED BY THE CONTRACTOR FOR THE EQUIPMENT HANDED OVER IN ONE LOT BY .....(abbreviated name of the Employer)...... FOR PERFORMANCE OF ITS CONTRACT

#### INDEMNITY BOND

THIS INDEMNITY BOND is made this day of 20 by
a Company registered under the Companies Act, 1956/2013 (with
amendment from time to time)/Partnership firm/ proprietary concern having its
Registered Office at(hereinafter called as 'Contractor' or "Obligor" which
expression shall include its successors and permitted assigns) in favour of (insert
name of the Employer), a Company incorporated under the Companies Act,
1956/2013 (with amendment from time to time) having its Registered Office at
(insert registered address of the Employer) and its project at
(hereinafter called "(abbreviated name of the Employer)" which expression shall
include its successors and assigns):
<b>C</b> ,
WHEREAS(abbreviated name of the Employer) has awarded to the Contractor a
Contract forvide its Notification of Award/Contract No
dated and its Amendment No (applicable when amendments have
been issued) (hereinafter called the "Contract") in terms of which(abbreviated name
of the Employer) is required to hand over various Equipment to the Contractor for
execution of the Contract.
And WHEREAS by virtue of Clause Noof the said Contract, the Contractor is
required to execute an Indemnity Bond in favour of(abbreviated name of the
Employer) for the Equipment handed over to it by(abbreviated name of the
Employer) for the purpose of performance of the Contract/Erection portion of the
contract (hereinafter called the "Equipment").
AND THEREFORE, This Indemnity Bond witnesseth as follows:

 Contractor shall be construed as handing over of the Equipment purported to be covered by such title documents and the Contractor shall hold such Equipment in trust as a Trustee for and on behalf of .....(abbreviated name of the Employer).......

- 2. That the Contractor is obliged and shall remain absolutely responsible for the safe transit/protection and custody of the Equipment at .....(abbreviated name of the Employer)....... project Site against all risks whatsoever till the Equipment are duly used/erected in accordance with the terms of the Contract and the Plant/Package duly erected and commissioned in accordance with the terms of the Contract, is taken over by .....(abbreviated name of the Employer)....... The Contractor undertakes to keep .....(abbreviated name of the Employer)....... harmless against any loss or damage that may be caused to the Equipment.
- 3. The Contractor undertakes that the Equipment shall be used exclusively for the performance/execution of the Contract strictly in accordance with its terms and conditions and no part of the equipment shall be utilised for any other work of purpose whatsoever. it is clearly understood by the Contractor that non-observance of the obligations under this Indemnity Bond by the Contractor shall inter-alia constitute a criminal breach of trust on the part of the Contractor for all intents and purpose including legal/penal consequences.
- 4. That .....(abbreviated name of the Employer)....... is and shall remain the exclusive Employer of the Equipment free from all encumbrances, charges or liens of any kind, whatsoever. The equipment shall at all times be open to inspection and checking by the Employee or Employer's Representative in this regard. Further, ......(abbreviated name of the Employer)........ shall always be free at all times to take possession of the Equipment in whatever form the equipment may be, if in its opinion, the Equipment are likely to be endangered, misutilised or converted to uses other than those specified in the Contract, by any acts of omission or commission on the part of the Contractor or any other person or on account of any reason whatsoever and the Contractor binds himself and undertakes to comply with the directions of demand of .....(abbreviated name of the Employer)....... to return the equipment without any demur or reservation.
- 5. That this indemnity Bond is irrevocable. If at any time any loss or damage occurs to the Equipment or the same or any part thereof is misutilised in any manner then the Contractor hereby agrees that the decision of the Employer's Representative as to assessment of loss or damage to the Equipment shall be final and binding on the Contractor. The Contractor binds itself and undertakes to replace the lost and/or damaged Equipment at his own cost and/or shall pay the amount of loss to .....(abbreviated name of the demur, reservation or protest. This is without *Employer*)......without any prejudice to any other right or remedy that may be available to .....(abbreviated

name of the Employer)......against the Contractor under the Contract and under this Indemnity Bond.

6. NOW THE CONDITION of this Bond is that if the Contractor shall duly and punctually comply with the terms and conditions of this Bond to the satisfaction of ......(abbreviated name of the Employer)......., THEN, the above Bond shall be void, but otherwise, it shall remain in full force and virtue.

IN WITNESS WHEREOF, the Contractor has hereunto set its hand through its authorized representative under the common seal of the Company, the day, month and year first above mentioned.

#### **SCHEDULE**

Particulars of the	Quantity	Particulars of Dispatch title		Value of the	Signature of the
Equipment		Documents		Equipment	Attorney in
handed over		RR/GR No.			token of receipt
		date of lading	Carrier		

		For and on behalf of
		M/s
W]	TNESS	
1.	Signature	Signature
	Name	Name
	Address	Address
2.	Signature	Authorised representative
	Name	(Common Seal)
	Address	(In case of Company)

Indemnity Bonds are to be executed by the authorised person and (i) in case of contracting Company under common seal of the Company or (ii) having the power of attorney issued under common seal of the company with authority to execute Indemnity

Bonds, (iii) In case of (ii), the original Power of Attorney if it is specifically for this Contract or a Photostat copy of the Power of Attorney if it is General Power of Attorney and such documents should be attached to Indemnity Bond.

# 10. FORM OF INDEMNITY BOND TO BE EXECUTED BY THE CONTRACTOR FOR THE EQUIPMENT HANDED OVER IN INSTALLMENTS BY ......(abbreviated name of the Employer)....... FOR PERFORMANCE OF ITS CONTRACT

#### **INDEMNITY BOND**

THIS INDEMNITY BOND is made this
a Company registered under the Companies Act, 1956/2013
(with amendment from time to time)/Partnership firm/proprietary concern having its
Registered Office at(hereinafter called as 'Contractor' or 'Obligor'
which expression shall include its successors and permitted assigns) in favour of
(insert name of the Employer), a company incorporated under the Companies
Act, 1956/2013 (with amendment from time to time) having its Registered Office at
(insert registered address of the Employer) and its project at
(hereinafter called"(abbreviated name of the Employer)"
which expression shall include its successors and assigns):
WHEREAS(abbreviated name of the Employer) has awarded to the Contractor a
Contract forvide its Notification of Award/Contract No
dated (applicable when amendments
have been issued) (hereinafter called the "Contract") in terms of which(abbreviated
name of the Employer) is required to handover various Equipment to the
Contractor for execution of the Contract.
AND WHEREAS by virtue of Clause Noof the said Contract, the Contractor is
required to execute an Indemnity Bond in favour of(abbreviated name of the
Employer) for the Equipment handed over to it by(abbreviated name of the
Employer) for the purpose of performance of the contract/Erection portion of the
Contract (hereinafter called the "Equipment".)
NOW THEREFORE, This Indemnity Bond witnesseth as follows:
1. That in consideration of various Equipments as mentioned in the Contract, valued
at (amount in words) to be handed over to the
Contractor in installments from time to time for the purpose of performance of
the contract, the Contractor hereby undertakes to indemnify and shall keep
(abbreviated name of the Employer)indemnified, for the full value of
Equipment. The Contractor hereby acknowledges receipt of the initial installment
of the equipment per details in the schedule appended hereto. Further, the
Contractor agrees to acknowledge receipt of the subsequent installments of the
Equipment as required by(abbreviated name of the Employer) in the
form of Schedules consecutively numbered which shall be attached to this

Indemnity bond so as to form integral parts of this Bond. It is expressly understood by the Contractor that handing over the dispatch title documents in respect of the said Equipments duly endorsed by .....(abbreviated name of the Employer)...... in favour of the Contractor shall be construed as handing over the Equipment purported to be covered by such title documents and the Contractor shall hold such Equipments in trust as a Trustee for and on behalf of .....(abbreviated name of the Employer).......

- 2. That the Contractor is obliged and shall remain absolutely responsible for the safe transit/protection and custody of the Equipment at .....(abbreviated name of the Employer)....... project Site against all risks whatsoever till the Equipment are duly used/erected in accordance with the terms of the Contract and the Plant/Package duly erected and commissioned in accordance with the terms of the Contract, is taken over by .....(abbreviated name of the Employer)....... The Contractor undertakes to keep ......(abbreviated name of the Employer)....... harmless against any loss or damage that may be caused to the Equipment.
- 3. The Contractor undertakes that the Equipment shall be used exclusively for the performance/execution of the Contract strictly in accordance with its terms and conditions and no part of the equipment shall be utilised for any other work or purpose whatsoever. It is clearly understood by the Contractor that non-observance of the obligations under this Indemnity Bond by the Contractor shall inter-alia constitute a criminal breach of trust on the part of the Contractor for all intents and purpose including legal/penal consequences.
- 4. That .....(abbreviated name of the Employer)....... is and shall remain the exclusive Employer of the Equipment free from all encumbrances, charges or liens of any kind, whatsoever. The equipment shall at all times be open to inspection and checking by the Employer or Employer's Representative in this regard. Further, ......(abbreviated name of the Employer)....... shall always be free at all times to take possession of the Equipment in whatever form the Equipment may be, if in its opinion, the Equipment are likely to be endangered, misutilised or converted to uses other than those specified in the Contract, by any acts of omission or commission on the part of the Contractor or any other person or on account of any reason whatsoever and the Contractor binds himself and undertakes to comply with the directions of demand of ......(abbreviated name of the Employer)....... to return the equipment without any demur or reservation.
- 5. That this indemnity Bond is irrevocable. If at any time any loss or damage occurs to the Equipment or the same or any part thereof is misutilised in any manner whatsoever, then the Contractor hereby agrees that the decision of the Employer's Representative as to assessment of loss or damage to the Equipment shall be final and binding on the Contractor. The Contractor binds itself and undertakes to replace the lost and/or damaged Equipment at its own cost and/or shall pay the

amount of loss to .....(abbreviated name of the Employer)...... without any demur, reservation or protest. This is without prejudice to any other right or remedy that may be available to .....(abbreviated name of the Employer)...... against the Contractor under the Contract and under this Indemnity Bond.

6. NOW THE CONDITION of this Bond is that if the Contractor shall duly and punctually comply with the terms and conditions of this Bond to the satisfaction of .....(abbreviated nameof the Employer)......, THEN, the above Bond shall be void, but otherwise, it shall remain in full force and virtue.

IN WITNESS WHEREOF, the Contractor has hereunto set its hand through its authorised representative under the common seal of the Company, the day, month and year first above mentioned.

#### SCHEDULE No. 1

Particulars of the	Quantity	Particulars of Dispatch title		Value of the	Signature of
Equipment		Documents		Equipment	the Attorney
handed over		RR/GR No.			in token of
		date of lading	Carrier		receipt

		For and on behalf of M/s
W]	TNESS	IVI/ S
1.	Signature	Signature
	Name	Name
	Address	Address
2.	Signature	Authorised representative
	Name	(Common Seal)
	Address	(In case of Company)

Indemnity Bonds are to be executed by the authorised person and (i) in case of contracting Company under common seal of the Company or (ii) having the power of attorney issued under common seal of the company with authority to execute Indemnity Bonds, (iii) In case of (ii), the original Power of Attorney if it is specifically for this Contract or a photostat copy of the Power of Attorney if it is General Power of Attorney and such documents should be attached to Indemnity Bond.

### 11. FORM OF AUTHORISATION LETTER

Ref	No:						
Dat	e:						
То							
M/s							
REI	F.: Contract		awarded by( <i>ins</i>			 ployer)	
Dea	r Sir,						
Emp 195  Doc encl	bloyer)	You are her amendment amendment of address of the physical comment Note Note for the solution of the purpose of the purpose of the purpose of the purpose of the solution of the purpose of the solution of the purpose of the purpose of the solution of the purpose	reby authorised on pany incorporated from time to time) the Employer) delivery of materia No*  e purpose of successe, whatsoever.  (Signature of Project	behalf of under the and havin ls/equipme dated	laws of laws of laws of laws of laws Regiments Covere and formance	Compargistered (its Project under las detaile	Name of nies Act Office at ect at Dispatch ed in the
Dat	<del>2</del>		Designation				
Enc	l: As Above.						
** 7	To be signed n	ot below the r	ank of Manager.				
* N	Iention LR/RI	R No.					
	edule of Mate	erial/Equipme	nt covered under D	ispatch Tit	tle Docur	ment (RR	No./LR
Sl.	Contract	NOA No./	<b>Description of</b>	Spec.	Qty.	Value	Remarks

No.	Name	CA No.	Materials/ Equipments	No.		

(Signature of the Project Authority)
(Designation)
(Date)

# 12. FORM OF TRUST RECEIPT FOR PLANT, EQUIPMENT AND MATERIALS RECEIVED

We M/s
We do hereby acknowledge the receipt of the Plant, Equipment and Materials as are fully described and mentioned under Documents of Title/RR/LR etc. and in the schedule annexed hereto, which shall form an integral part of this receipt as "Trustee" of (insert name of the Employer)
For M/s(Contractor's Name)
Dated:(AUTHORISED SIGNATORY)
Place:

## 13. FORM OF EXTENSION OF BANK GUARANTEE

Ref. No	Dated:
To: [Name and address of the Employer]	
Dear Sirs,	
Sub.: Extension of Bank Guarantee No, issued to you on behalf of M/s  **Contractor** in respect of Contractor**	(insert name of the act No dated e along with the Project name)
At the request of M/s (insert name of the(insert name & address of the issuing bank)	, a Bank organized under the ead Office at(insert do hereby extend our liability
Please treat this as an integral part of the original Gu attached.	arantee to which it would be
	For and on behalf of the Bank
[Signature o	of the authorised signatory(ies)]
Signati	ure
Na	me
Designati	on
POA Numl	per
Contact Number(s): Tel	Mobile
Fax Numl	per

email	
Common Seal of the Bank	
	Witness:
Signature	
Name	
Address	
Contact Number(s): TelMol	bile
email	

#### **Note:**

- 1. For the purpose of executing the Bank Guarantee, the non-judicial stamp papers of appropriate value shall be purchased in the name of Bank who issues the 'Bank Guarantee'.
- 2. The Bank Guarantee shall be signed on all the pages by the Bank Authorities indicating their POA nos. and should invariably be witnessed.

#### 14. FORM OF POWER OF ATTORNEY FOR CONSORTIUM

KNOW ALL MEN BY THESE PRESENTS THAT WE, the Partners whose details
are given hereunder have formed a
Consortium under the laws of and having our Registered
Office(s)/Head Office(s) at (hereinafter called the
'Consortium' which expression shall unless repugnant to the context or meaning thereof,
include its successors, administrators and assigns) acting through M/s
being the Partner in-charge do hereby
constitute, nominate and appoint M/s a Company
incorporated under the laws of and having its
Registered/Head Office at as our duly constituted lawful
Attorney (hereinafter called "Attorney" or "Authorised Representative" or "Partner In-
charge") to exercise all or any of the powers for and on behalf of the Consortium in
regard to Specification No
have been invited by (insert name of the Employer along with address)
(hereinafter called the 'Employer') to undertake the following acts :

- i) To submit proposal and participate in the aforesaid Bid Specification of the Employer on behalf of the "Consortium".
- ii) To negotiate with the Employer the terms and conditions for award of the Contract pursuant to the aforesaid Bid and to sign the Contract with the Employer for and on behalf of the "Consortium".
- iii) To do any other act or submit any document related to the above.
- iv) To receive, accept and execute the Contract for and on behalf of the "Consortium".

It is clearly understood that the Partner In-charge (Lead Partner) shall ensure performance of the Contract(s) and if one or more Partner fail to perform their respective portions of the Contract(s), the same shall be deemed to be a default by all the Partners.

It is expressly understood that this Power of Attorney shall remain valid binding and irrevocable till completion of the Defect Liability Period in terms of the Contract.

The Consortium hereby agrees and undertakes to ratify and confirm all the whatsoever the said Attorney/Authorised Representatives/Partner in-charge quotes in the bid, negotiates and signs the Contract with the Employer and/or proposes to

	act on behalf of the Consortium by virtue of this Power of Attorney and the same shall bind the Consortium as if done by itself.
	IN WITNESS THEREOF the Partners Constituting the Consortium as aforesaid have executed these presents on this
	for and on behalf of the Partners of Consortium
	The Common Seal of the above Partners of the Consortium:
The	Common Seal has been affixed there unto in the presence of:
WI	ΓNESS
1.	Signature
	Name
	Designation
	Occupation
2.	Signature
	Name
	Designation
	Occupation

#### **Note:**

- 1. For the purpose of executing the Agreement, the non-judicial stamp papers of appropriate value shall be purchased in the name of Consortium.
- 2. The Agreement shall be signed on all the pages by the authorised representatives of each of the partners and should invariably be witnessed.

#### 15. FORM OF UNDERTAKING BY THE CONSORTIUM PARTNERS

THIS JOINT DEED OF UNDERTAKING executed on this day of Two
Thousand andbya company
incorporated under the laws of and having its Registered Office
at(hereinafter called the "Party No.1" which expression shall include its
successors, executors and permitted assigns) and M/sa company incorporated
under the laws of and having its Registered Office at
(hereinafter called the "Party No.2" which expression shall include its
successors, executors and permitted assigns ) and M/s a
Company incorporated under the laws of and having its Registered
Office at (hereinafter called the "Party No.3" which expression shall include
its successors, executors and permitted assigns) for the purpose of making a bid and
entering into a contract [hereinafter called the "Contract" {in case of award)] against the
Specification No for (insert name of the package along with project
name)
incorporated under the Companies Act of 1956/2013 (with amendment from time to time)
having its registered office at(insert registered address of the
Employer) (hereinafter called the "Employer").
WHEREAS the Party No.1, Party No.2 and Party No.3 have entered into an Agreement
dated
AND WHEREAS the Employer invited bids as per the above-mentioned Specification for
the design, manufacture, supply, erection, testing and commissioning of Equipment/
Materials stipulated in the Bidding Documents under (insert name of the package
along with project name)

AND WHEREAS Clause 10.2, Section 3 of Part 1 and Section 2 (Eligibility and qualification requirements) of Part-1 forming part of the Bidding Documents, inter-alia stipulates that an Undertaking of two or more qualified manufacturers as partners, meeting the requirements of Section 2, as applicable may bid, provided, the Consortium fulfills all other requirements under Section 2 and in such a case, the Bid Forms shall be signed by all the partners so as to legally bind all the Partners of the Consortium, who will be jointly and severally liable to perform the Contract and all obligations hereunder.

The above clause further states that this Undertaking shall be attached to the bid and the Contract performance guarantee will be as per the format enclosed with the Bidding Documents without any restrictions or liability for either party.

AND WHEREAS the bid is being submitted to the Employer vide proposal No.......dated .......... by Party No.1 based on this Undertaking between all the parties; under these presents and the bid in accordance with the requirements of

Clause 10.2, Section 3 of Part 1 and Section 2 (Eligibility and qualification requirements) of Part-1, has been signed by all the parties.

#### NOW THIS UNDERTAKING WITNESSETH AS UNDER:

In consideration of the above premises and agreements all the parties of this Deed of Undertaking do hereby declare and undertake:

- 1. In requirement of the award of the Contract by the Employer to the Consortium Partners, we, the Parties do hereby undertake that M/s...... the Party No.1, shall act as Lead Partner and further declare and confirm that we the parties to the Consortium shall jointly and severally be bound unto the Employer for the successful performance of the Contract and shall be fully responsible for the design, manufacture, supply and successful performance of the equipment in accordance with the Contract:
- 2. In case of any breach or default of the said Contract by any of the parties to the Consortium, the party(s) dohereby undertake to be fully responsible for the successful performance of the Contract and to carry out all the obligations and responsibilities under the Contract in accordance with the requirements of the Contract.
- 3. Further, if the Employer suffers any loss or damage on account of any breach in the Contract or any shortfall in the performance of the equipment in meeting the performances guaranteed as per the specification in terms of the Contract, the Party(s) of these presents undertake to promptly make good such loss or damages caused to the Employer, on its demand without any demur. It shall not be necessary or obligatory for the Employer to proceed against Lead Partner to these presents before proceeding against or dealing with the other Party(s), the Employer can proceed against any of the parties who shall be jointly and severally liable for the performance and all other liabilities/obligations under the Contract to the Employer.
- 4. The financial liability of the Parties of this Deed of Undertaking to the Employer, with respect to any of the claims arising out of the performance or non-performance of the obligations set forth in this Deed of Undertaking, read in conjunction with the relevant conditions of the Contract shall, however, not be limited in any way to restrict or limit the liabilities or obligations of any of the Parties of this Deed of Undertaking.
- 5. It is expressly understood and agreed between the Parties to this Undertaking that the responsibilities and obligations of each of the Parties shall be as delineated in Appendix I (to be suitably appended by the Parties along with this Undertaking in its bid) to this Deed of Undertaking. It is further undertaken by the parties that

the above sharing of responsibilities and obligations shall not in any way be a limitation of joint and several responsibilities of the Parties under the Contract.

- 6. It is also understood that this Undertaking is provided for the purposes of undertaking joint and several liabilities of the partners to the Consortium for submission of the bid and performance of the Contract and that this Undertaking shall not be deemed to give rise to any additional liabilities or obligations, in any manner or any law, on any of the Parties to this Undertaking or on the Consortium, other than the express provisions of the Contract.
- 7. This Undertaking shall be construed and interpreted in accordance with the provisions of the Contract.
- 8. In case of an award of a Contract, we the parties to this Deed of Undertaking do hereby agree that we shall be jointly and severally responsible for furnishing a Contract performance security from a bank in favour of the Employer in the currency/currencies of the Contract.
- 9. It is further agreed that this Deed of Undertaking shall be irrevocable and shall form an integral part of the bid and shall continue to be enforceable till the Employer discharges the same or upon the completion of the Contract in accordance with its provisions, whichever is earlier. It shall be effective from the date first mentioned above for all purposes and intents.

IN WITNESS WHEREOF, the Parties to this Deed of Undertaking have through their authorised representatives executed these presents and affixed Common Seals of their companies, on the day, month and year first mentioned above.

Common Seal of	For Lead Partner (Party No1)
has been affixed in my/ our	For and on behalf of M/s
presence pursuant to Board of	
Director's Resolution dated	
Name	
Designation	
Signature	(Signature of the authorized representative)
WITNESS:	
I	

II	
Common Seal of	For Party No2
has been affixed in my/ our	For and on behalf of
presence pursuant to Board of	M/s
Director's Resolution dated	
Name	(Signature of the authorized representative)
Designation	
Signature	
WITNESS:	
I	
II	
Common Seal of	For Party No3
has been affixed in my/ our	For and on behalf of M/s.
presence pursuant to Board of	
Director's Resolution dated	
Name	
Designation	
Signature	(Signature of the authorized representative)
WITNESS:	
I	
II	

## Note:

1. For the purpose of executing the Joint Deed of Undertaking, the non-judicial stamp papers of appropriate value shall be purchased in the name of Consortium.

2. The Undertaking shall be signed on all the pages by the authorised representatives of each of the partners and should invariably be witnessed.

# 16. FORMAT FOR EVIDENCE OF ACCESS TO OR AVAILABILITY OF CREDIT/FACILITIES

### **BANK CERTIFICATE**

Contrac Employ  name) .	ctor) who have against for is our customer f	(insert Nar submitted their bid to	(insert name of the n Vide ref. No. along with the project ears.
followi	ng fund based and non-fund	our Bank have been satisfact l-based limits including for guar ch the extent of utilization as or	rantees, L/C, and other
Sl.	<b>Type of Facility</b>	Sanctioned Limit as on	<b>Utilisation as on Date</b>
No.		Date	
This let	ter is issued at the request of	f M/s	
		Signature	
		Name of Bank	
	Name	e of Authorised Signatory	
		Designation	
		Phone No.	

SEAL OF THE BANK

## 17. FORM OF OPERATIONAL ACCEPTANCE

Date
Name of Contract
Contract No
To:
(Name and address of the Contractor)
Dear Ladies and/or Gentlemen,
Pursuant to GCC 24.4 (Completion) of the General Conditions of the Contract entered into between yourselves and the Employer dated
Description of the Facilities or part thereof
2. Date of Operational Acceptance:
This letter does not relieve you of your obligation during the Defects Liability Period and Latent Defect warranty.
Very truly yours,
Title (Project Manager)

## 18. FORM OF SAFETY PLAN TO BE SUBMITTED BY THE CONTRACTOR WITHIN SIXTY DAYS OF AWARD OF CONTRACT

## [TO BE EXECUTED ON A NON JUDICIAL STAMP PAPER WORTH RS. TWENTY ONLY]

#### **SAFETY PLAN**

i i i i i i i i i i i i i i i i i i i
(with amendment from time to time)/Partnership firm/proprietary concern having its
Registered Office at[to be modified suitably for CONSORTIUM
Contractor] (hereinafter called as 'Contractor' which expression shall include its
successors and permitted assigns) for approval of(insert name of the Employer),
a company incorporated under the Companies Act, 1956/2013 (with amendment from
time to time) having its Registered Office at(insert registered address of the
Employer) for its Contract for(insert package name,
project name along with Specification number of the Contract)
WHEREAS(abbreviated name of the Employer) has awarded to the Contractor
the aforesaid Contract vide its Notification of Award/Contract No
dated and Amendment No (applicable when amendments
have been issued) (hereinafter called the "Contract") in terms of which the Contractor is
required to submit 'Safety Plan' along with certain documents to the Engineer In-
Charge/Project Manager of the Employer within Sixty (60) days of Notification of Award
for its approval.

NOW THEREFORE, the Contractor undertakes to execute the Contract as per the safety plan as follows:

- 1. THAT the Contractor shall execute the works as per provisions of Bidding Documents including those in regard to Safety Precautions / provisions as per statutory requirements.
- 2. THAT the Contractor shall execute the works in a well-planned manner from the commencement of Contract as per agreed mile stones of work completion schedule so that planning and execution of construction works goes smoothly and consistently throughout the contract duration without handling pressure in last quarter of the financial year/last months of the Contract and the shall be finalized in association with WBSEDCL Engineer In-charge/Project Manager from time to time as required.

3. THAT the Contractor has prepared the safe work procedure for each activity i.e.foundation works including civil works, erection, stringing (as applicable), testing & commissioning, disposal of materials at site / store etc. to be executed at site, which is enclosed at **Annexure** – **1A** (**SP**) for acceptance and approval of Engineer In-charge/Project Manager. The Contractor shall ensure that on approval of the same from Engineer In-charge/Project Manager, the approved copies will be circulated to Employer's personnel at site [Supervisor(s)/Executive(s)] and Contractor's personnel at site [Gang leader, supervisor(s) etc.] in their local language / language understood by gang.

THAT the Contractor has prepared minimum manpower deployment plan, activity wise as stated above, which is enclosed at **Annexure – 1B (SP)** for approval of Engineer In-charge/Project Manager.

- 4. THAT the Contractor shall ensure while executing works that they will deploy minimum 25% of their own experienced work force who are on the permanent roll of the company and balance 75% can be a suitable mixed with the hired gangs / local workers / casual workers if required. The above balance 75% work force should be provided with at least 10 days training by the construction agencies at sites and shall be issued with a certificate. No worker shall be engaged without a valid certificate. Hired gang workers shall also follow safe working procedures and safety norms as is being followed by company's workmen. It should also be ensured by the Contractor that certified **workers** fitters who are climbing towers / doing stringing operations can be easily identifiable with a system like issue of Badge / Identification cards (ID cards) etc. Colour identification batches should be worn by the workers. Contractor has to ensure that inexperience workers / unskilled workers should not be deployed for skilled job.
- 5. THAT the Contractor's Gang leader / Supervisor / Senior most member available at every construction site shall brief to each worker daily before start of work about safety requirement and warn about imminent dangers and precautions to be taken against the imminent dangers (Daily Safety Drill). This is to be ensured without fail by Contractor and maintain record of each gang about daily safety instructions issued to workers and put up to WBSEDCL site In-charge for his review and record.
- 6. THAT the Contractor shall ensure that working Gangs at site should not be left at the discretion of their Gang Leaders who are generally hired and having little knowledge about safety. Gang leader should be experienced and well versed with the safe working procedures applicable for transmission line/ Sub Station works. In case gang is having Gang leader not on permanent roll of the company then additional Supervisor from company's own roll having thorough knowledge about the works would be deployed so as to percolate safety instructions upto the grass root level in healthy spirits. Contractor has to ensure close supervision while

executing critical locations of transmission lines / sub stations and ensures that all safety instructions are in place and are being followed.

7. THAT the Contractor shall maintain in healthy and working condition all kind of Equipments / Machineries / Lifting tools / Lifting tackles / Lifting gears / All kind of Ropes including wire ropes / Polypropylene ropes etc. used for Lifting purpose during execution of the project and get them periodically examined and load tested for safe working load in accordance with relevant provisions and requirement of Building & other construction workers Regulation of Employment and Conditions of Services Act and Central Rule 1998 or latest, Factories Act 1948 or latest, Indian Electricity Act 2003 before start of the project. A register of such examinations and tests shall be properly maintained by the Contractor and will be promptly produced as and when desired by the Engineer In-charge/Project Manager or by the person authorised by him. The Contractor has to ensure to give special attention on the formation / condition of eye splices of wire rope slings as per requirement of IS 2762 Specification for wire rope slings and sling legs.

THAT the Contractor has prepared a list of all Lifting machines, lifting Tools / Lifting Tackles / Lifting Gears etc. / All types of ropes and Slings which are subject to safe working load is enclosed at Annexure - 2 (SP) for review and approval of Engineer In-charge/Project Manager.

THAT the Contractor has to procure sufficient quantity of Personal Protective 8. Equipment (PPE)conforming to Indian / International standards and provide these equipment to every workman at site as per need and to the satisfaction of Engineerin-charge/Project Manager of WBSEDCL. The Contractor's Site Supervisor/ Project Manager has to ensure that all workmen must use Personal Protective Equipment at site. The Contractor shall also ensure that Industrial Safety helmets are being used by all workmen at site irrespective of their working (at height or on ground). The Contractor shall further ensure use of safety shoes by all ground level workers and canvas shoes for all workers working at height, Rubber Gum Boots for workers working in rainy season and concreting job, Use of Twin Lanyard Full body Safety Harness with attachment of light weight such as aluminum alloy etc. and having features of automatic locking arrangement of snap hook, by all workers working at height for more than three meters and also for horizontal movement on tower shall be ensured by Contractor. The Contractor shall not use ordinary half body safety harness at site. The Contractor has to ensure use of Retractable type fall arrestors by workers for ascending / descending on suspension insulator string and other similar works etc., Use of Mobile fall arrestor for ascending / descending from tower by all workers. The Contractor has to provide cotton / leather hand gloves as per requirement, Electrical Resistance Hand gloves for operating electrical installations / switches, Face shield for protecting eyes while doing welding works and Dust masks to workers as per requirement. The Contractor will have to take action against the workers not using Personal Protective Equipment at site and those workers shall be asked to rest for that day and also their Salary be deducted for that day. **WBSEDCL** may issue warning letter to Project Manager of Contractor in violation of above norms.

THAT the Contractorshall prepare a detailed list of PPEs, activity wise, to commensurate with manpower deployed, which is enclosed at **Annexure – 3** (SP) for review and approval of Engineer In-charge/Project Manager. It shall also be ensured that the sample of these equipment shall be got approved from **WBSEDCL** supervisory staff before being distributed to workers. The Contractor shall submit relevant test certificates as per IS / International Standard as applicable to PPEs used during execution of work. All the PPE's to be distributed to the workers shall be checked by **WBSEDCL** supervisory staff before its usage.

The Contractor also agrees for addition / modification to the list of PPE, if any, as advised by Engineer In-Charge/Project Manager.

9. THAT the Contractor shall procure, if required sufficient quantity of Earthing Equipment / Earthing Devices complying with requirements of relevant IEC standards (Generally IECs standards for EarthingEquipments / Earthing Devices are – 855, 1230, 1235 etc.) and to the satisfaction of Engineer In-Charge/ Project Manager and Contractor to ensures to maintained them in healthy condition.

THAT the Contractor has prepared / worked out minimum number of healthy EarthingEquipments with Earthing lead confirming to relevant IS / European standards per gang wise during stringing activity/as per requirement, which is enclosed herewith at **Annexure – 4 (SP)** for review and acceptance of Engineer In-Charge/ Project Manager prior to execution of work.

- 10. THAT the Contractor shall provide communication facilities i.e., Walkie Talkie / Mobile Phone, Display of Flags / whistles for easy communication among workers during Tower erection / stringing activity, as per requirement.
- 11. THAT the Contractor undertakes to deploy qualified safety personnel responsible for safety as per requirements of Employer/Statutory Authorities.

THAT the Contractor employing more than 250 workmen whether temporary, casual, probationer, regular or permanent or on contract, shall employ at least one full time officer exclusively as qualified safety officer having diploma in safety to supervise safety aspects of the equipment and workmen who will coordinate with Engineer In-charge /Project Manager/Safety Coordinator of the Employer. In case of work being carried out through sub-Contractors the sub – Contractor's workmen / employees will also be considered as the Contractor's employees / workmen for the above purpose. If the number of workers are less than 250 then one qualified

safety officer is to be deployed for each contract. He will report directly to his head of organization and not the Project Manager of Contractor He shall also not be assigned any other work except assigning the work of safety. The curriculum vitae of such person shall be got cleared from **WBSEDCL** Project Manager / Construction staff.

The name and address of such safety officers of Contractor will be promptly informed in writing to Engineer In-charge with a copy to safety officer - In-charge before start of work or immediately after any change of the incumbent is made during the currency of the contract. The list is enclosed at **Annexure** – 5A (SP).

THAT the Contractor has also prepared a list including details of Explosive Operator (if required), Safety officer / Safety supervisor / nominated person for safety for each erection / stringing gang, list of personnel trained in First Aid Techniques as well as copy of organisation structure of the Contractor in regard to safety. The list is enclosed at **Annexure – 5B (SP)**.

- 12. The Project Manager shall have the right at his sole discretion to stop the work, if in his opinion the work is being carried out in such a way that it may cause accidents and endanger the safety of the persons and/or property, and/or equipment. In such cases, the Contractor shall be informed in writing about the nature of hazards and possible injury/accident and he shall comply to remove shortcomings promptly. The Contractor after stopping the specific work can, if felt necessary, appeal against the order of stoppage of work to the Project Manager within 3 days of such stoppage of work and decision of the Project Manager in this respect shall be conclusive and binding on the Contractor.
- 13. THAT, if, any Employer's Engineer/ supervisor at site observes that the Contractor is failing to provide safe working environment at site as per agreed Safety Plan / WBSEDCL Safety Rule/ Safety Instructions / Statutory safety requirement and creates hazardous conditions at site and there is possibility of an accident to workmen or workmen of the other Contractor or public or the work is being carried out in an un safe manner or he continues to work even after being instructed to stop the work by Engineer / Supervisor at site / RHQ / Corp. Centre, the Contractor shall be bound to pay a penalty of Rs. 10,000/ per incident per day till the instructions are complied with, and as certified by Engineer / Supervisor of Employer at site. The work will remain suspended and no activity will take place without compliance and obtaining clearance / certification of the Site Engineer / Supervisor of the Employer to start the work.
- 14. THAT, if the investigation committee of Employer observes any accident or the Engineer In-charge/Project Manager of the Employer based on the report of the Engineer/Supervisor of the Employer at site observes any failure on the Contractor's part to comply with safety requirement / safety rules/ safety standards/

safety instruction as prescribed by the Employer or as prescribed under the applicable law for the safety of the equipment, plant and personnel and the Contractor does not take adequate steps to prevent hazardous conditions which may cause injury to its own Contractor's employees or employee of any other Contractors or Employer or any other person at site or adjacent thereto, or public involvement because of the Contractor's negligence of safety norms, the Contractor shall be liable to pay a compensation of Rs. 10,00,000/- (Rupees Ten Lakh only) per person affected causing death and Rs. 1,00,000/- (Rupees One Lakh only) per person for serious injuries / 25% or more permanent disability to the Employer for further disbursement to the deceased family/ Injured persons. The permanent disability has the same meaning as indicated in Workmen's Compensation Act 1923 or latest. The above stipulations is in addition to all other compensation payable to sufferer as per workmen compensation Act / Rules

THAT as per the Employer's instructions, the Contractor agrees that this amount shall be deducted from their running bill(s) immediately after the accident, That the Contractor understands that this amount shall be over and above the compensation amount liable to be paid as per the Workmen's Compensation Act /other statutory requirement/ provisions of the Bidding Documents.

- 15. THAT the Contractor shall submit Near-Miss-Accident report along with action plan for avoidance such incidence /accidents to Engineer In-charge/ Project Manager. Contractor shall also submit Monthly Safety Activities report to Engineer In-charge/ Project Manager and copy of the Monthly Safety Activities report also to be sent to Safety In-charge at RHQ of the Employer for his review record and instructions.
- 16. THAT the Contractor is submitting a copy of Safety Policy/ Safety Documents of its Company which is enclosed at **Annexure 6** (**SP**) and ensure that the safety Policy and safety documents are implemented in healthy spirit.
- 17. THAT the Contractor shall make available of First Aid Box [Contents of which shall be as per Building & other construction workers (Regulation of Employment and Conditions of Services Act and Central Rule 1998 or latest / WBSEDCL Guidelines)] to the satisfaction of Engineer In-Charge/ Project Manager with each gang at site and not at camp and ensures that trained persons in First Aid Techniques with each gang before execution of work.
- 18. THAT the Contractor shall submit an 'Emergency Preparedness Plan' for different incidences i.e. Fall from height, Electrocution, Sun Stroke, Collapse of pit, Collapse of Tower, Snake bite, Fire in camp / Store, Flood, Storm, Earthquake, Militancy etc. while carrying out different activities under execution i.e. foundation works including civil works, erection, stringing (as applicable), testing & commissioning, disposal of materials at site / store etc. which is enclosed at

**Annexure** – **7** (**SP**) for approval of the Engineer In-Charge/ Project Manager before start of work.

19. THAT the Contractor shall organise Safety Training Programs on Safety, Health and Environment and for safe execution of different activities of works i.e.foundation works including civil works, erection, stringing (as applicable), testing &commissioning, disposal of materials at site / store etc. for their own employees including sub-Contractor workers on regular basis.

The Contractor, therefore, submits copy of the module of training program, enclosed at **Annexure – 9 (SP)**, to Engineer In-charge/Project Manager for its acceptance and approval and records maintained.

- 20. THAT the Contractor shall conduct safety audit, as per Safety Audit Check Lists enclosed at Annexure - 8 (SP), by his Safety Officer(s) every month during construction of Transmission Lines / Sub Stations / any other work and copy of the safety audit report will be forwarded to the Employer's Engineer In-charge / Site Incharge/Project Manager for his comments and feedback. During safety audit, healthiness of all Personal Protective Equipment (PPEs) shall be checked individually by safety officer of Contractor and issue a certificate of its healthiness or rejection of faulty PPEs and Contractor has to ensure that all faulty PPEs and all faulty lifting tools and tackles should be destroyed in the presence of WBSEDCL construction staff. Contractor has to ensure that each gang be safety audited at least once in two months. During safety audit by the Contractor, Safety officer's feedback from WBSEDCL concerned shall be taken and recorded. The Employer's site officials shall also conduct safety audit at their own from time to time when construction activities are under progress. Apart from above, the Employer may also conduct surveillance safety audits. The Employer may take action against the person / persons as deemed fit under various statutory acts/provisions under the Contract for any violation of safety norms / safety standards.
- 21. THAT the Contractor shall develop and display Safety Posters of construction activity at site and also at camp where workers are generally residing.
- 22. THAT the Contractor shall ensure to provide potable and safe drinking water for workers at site / at camp.
- 23. THAT the Contractor shall do health checkup of all workers from competent agencies and reports will be submitted to Engineer In-Charge within fifteen (15) days of health checkup of workers as per statutory requirement.
- 24. THAT the Contractor shall submit information along with documentary evidences regarding compliance to various statutory requirements as applicable which are enclosed at **Annexure 10A (SP)**.

The Contractor shall also submit details of Insurance Policies taken by the Contractor for insurance coverage against accident for all employees are enclosed at **Annexure – 10B (SP)**.

25. THAT a checklist in respect of aforesaid enclosures along with the Contractor's remarks, wherever required, is attached as **Annexure – Check List** herewith.

THE CONTRACTOR shall incorporate modifications/changes in this 'Safety Plan' necessitated on the basis of review/comments of the Engineer In-Charge/Project Manager within fourteen (14) days of receipt of review/comments and on final approval of the Engineer In-Charge/Project Manager of this 'Safety Plan', the Contractor shall execute the works under the Contract as per approved 'Safety Plan'. Further, the Contractor has also noted that the first progressive payment towards Services Contract shall be made on submission of 'Safety Plan' along with all requisite documents and approval of the same by the Engineer In-Charge/Project Manager.

IN WITNESS WHEREOF, the Contractor has hereunto set its hand through its authorised representative under the common seal of the Company, the day, month and year first above mentioned.

#### Note:

All the annexure referred to in this "Safety Plan" are required to be enclosed by the Contractor as per the attached "Check List"

- 1. Safety Plan is to be executed by the authorised person and (i) in case of contracting Company under common seal of the Company or (ii) having the power of attorney issued under common seal of the company with authority to execute such contract documents etc., (iii) In case of (ii), the original Power of Attorney if it is specifically for this Contract or a Photostat copy of the Power of Attorney if it is General Power of Attorney and such documents should be attached to this Safety Plan.
- 2. For all safety monitoring/ documentation, Engineer In-charge / Regional In-charge of safety at RHQ will be the nodal Officers for communication.

## **CHECK LIST FOR SEFETY PLAN**

S. N.	Details of Enclosure	Status	Remarks
		of Submission of information/ documents	
1.	Annexure – 1A (SP)	Yes/No	
	Safe work procedure for each activity i.e. foundation works including civil works, erection, stringing (as applicable), testing & commissioning, disposal of materials at site / store etc. to be executed at site.		
2.	Annexure – 1B (SP)	Yes/No	
	Manpower deployment plan, activity wise foundation works including civil works, erection, stringing (as applicable), testing & commissioning, disposal of materials at site / store etc.		
3.	Annexure – 2 (SP)	Yes/No	
	List of Lifting Machines i.e. Crane, Hoist, Triffor, Chain Pulley Blocks etc. and Lifting Tools and Tackles i.e. D shackle, Pulleys, come along clamps, wire rope slings etc. and all types of ropes i.e. Wire ropes, Poly propylene Rope etc. used for lifting purposes along with test certificates.	200,210	
4.	Annexure – 3 (SP)	Yes/No	
	List of Personal Protective Equipment (PPE), activity wise including the following along with test certificate of each as applicable:		
	<ul> <li>A. Industrial Safety Helmet to all workmen at site. (EN 397 / IS 2925) with chin strap and back stay arrangement.</li> <li>B. Safety shoes without steel toe to all</li> </ul>		
	ground level workers and canvas shoes for workers working on tower.		
	C. Rubber Gum Boot to workers working in		

S. N.	Details of Enclosure	Status	Remarks
		of Submission	
		of information/	
		documents	
	rainy season / concreting job.		
	D. Twin lanyard Full Body Safety harness		
	with shock absorber and leg strap		
	arrangement for all workers working at		
	height for more than three meters. Safety		
	Harness should be with attachments of		
	light weight such as of aluminum alloy		
	etc. and having a feature of automatic		
	locking arrangement of snap hook and		
	comply with EN 361 / IS 3521 standards.		
	E. Mobile fall arrestors for safety of workers		
	during their ascending / descending from		
	tower / on tower. EN 353 -2 (Guided type		
	fall arresters on a flexible anchorage line.)		
	F. Retractable type fall arrestor (EN360:		
	2002) for ascending / descending on		
	suspension insulator string etc.		
	G. Providing of good quality cotton hand		
	gloves / leather hand gloves for workers		
	engaged in handling of tower parts or as		
	per requirement at site.		
	H. Electrical Resistance hand gloves to		
	workers for handling electrical equipment		
	/ Electrical connections. IS: 4770		
	I. Dust masks to workers handling cement as		
	per requirement.		
	J. Face shield for welder and Grinders.		
	IS: 1179 / IS: 2553		
	K. Other PPEs, if any, as per requirement etc.		
5.	Annexure – 4 (SP)		
		Yes/No	
	List of Earthing Equipment / Earthing devices		
	with Earthing lead conforming to IECs for		
	earthing equipment are – (855, 1230, 1235 etc.)		
	gang wise for stringing activity/as per		
	requirement		
6.	Annexure – 5A (SP)		
		Yes/No	
	List of Qualified Safety Officer(s) along with		

S. N.	Details of Enclosure	Status	Remarks
		of Submission of information/ documents	
	their contact details		
7.	Annexure – 5B (SP)	Yes/No	
	Details of Explosive Operator (if required), Safety officer / Safety supervisor for every erection / stinging gang, any other person nominated for safety, list of personnel trained in First Aid as well as brief information about safety set up by the Contractoralong with copy of organisation of the Contractor in regard to safety		
8.	Annexure – 6 (SP) Copy of Safety Policy/ Safety Document of the Contractor's company	Yes/No	
9.	Annexure – 7 (SP)	Yes/No	
	'Emergency Preparedness Plan' for different incidences i.e. Fall from height, Electrocution, Sun Stroke, Collapse of pit, Collapse of Tower, Snake bite, Fire in camp / Store, Flood, Storm, Earthquake, Militancy etc. while carrying out different activities under execution i.e. foundation works including civil works, erection, stringing (as applicable), testing & commissioning, disposal of materials at site / store etc.	168/100	
10.	Annexure – 8 (SP)	Yes/No	
	Safety Audit Check Lists ( Formats to be enclosed)		
11.	Annexure – 9 (SP)	Yes/No	
	Copy of the module of Safety Training Programs on Safety, Health and Environment,		

S. N.	Details of Enclosure	Status	Remarks
		of Submission of information/ documents	
	safe execution of different activities of works for Contractor's own employees on regular basis and sub-Contractor employees.		
12.	Annexure – 10A (SP)		
	Information along with documentary evidences in regard to the Contractor's compliance to various statutory requirements including the following:		
<u>(i)</u>	Electricity Act 2003	Yes/No	
	[Name of Documentary evidence in support of compliance]		
(ii)	Factories Act 1948 or latest	Yes/No	
(iii)	Building & other construction workers (Regulation of Employment and Conditions of Services Act and Central Act 1996 or latest) and Welfare Cess Act 1996 or latest with Rules.	Yes/No	
(iv)	Workmen Compensation Act 1923 or latest and Rules.	Yes/No	

S. N.	Details of Enclosure	Status	Remarks
		of Submission of information/ documents	
	[Name of Documentary evidence in support of compliance]		
(v)	Public Insurance Liabilities Act 1991 or latest and Rules.	Yes/No	
(vi)	Indian Explosive Act 1948 or latest and Rules.	Yes/No	
(vii)	Indian Petroleum Act 1934 or latest and Rules.	Yes/No	
(viii)	License under the contract Labour (Regulation & Abolition) Act 1970 or latest and Rules.	Yes/No	
(ix)	Indian Electricity Rule 2003 and amendments if any, from time to time.	Yes/No	
	J,		

S. N.	Details of Enclosure	Status	Remarks
		of Submission of information/ documents	
(x)	The Environment (Protection) Act 1986 or latest and Rules.	Yes/No	
(xi)	Child Labour (Prohibition & Regulation) Act 1986 or latest.	Yes/No	
(xii)	National Building Code of India 2005 or latest (NBC 2005).	Yes/No	
(xiii)	Indian standards for construction of Low/ Medium/ High/ Extra	Yes/No	

S. N.	Details of Enclosure	Status	Remarks
		of Submission of information/ documents	
(iv)	Any other statutory requirement(s) [please specify]	Yes/No	
	[Name of Documentary evidence in support of compliance]		
13.	Annexure – 10B (SP)		
	Details of Insurance Policies along with documentary evidences taken by the Contractor for the insurance coverage against accident for all employees as below:		
<u>(i)</u>	Under Workmen Compensation Act 1923 or latest and Rules.	Yes/No	
	[Name of Documentary evidence in support of insurance taken]		
(ii)	Public Insurance Liabilities Act 1991 or latest	Yes/No	
	[Name of Documentary evidence in support of insurance taken]		
(iii)	Any Other Insurance Policies	Yes/No	

## 19. FORM OF JOINT DEED OF UNDERTAKING BY THE SUB-CONTRACTOR ALONGWITH THE CONTRACTOR

<b>THIS</b>	DEED (	OF UN	DERTAKING e	executed thi	is		day c	of	
Two	Thousand	d and	by M/s	S		,	a Com	pany ii	ncorporated
under	the laws	s of		. and havin	ig its Re	gister	ed Offi	ce at	
			(here	inafter call	ed the "	Sub-C	Contra	ctor" v	vhich
expre	ssion sha	all inclu	ide its successor	s, executor	s and pe	ermitte	ed assig	gns), ar	nd M/s.
		, 8	a Company inco	rporated ur	nder the	laws o	of		having
its Re	gistered	Office	at	(herei	inafter c	alled	the "Bi	dder"/	'Contractor"
which	express	ion sha	all include its suc	ccessors, ex	ecutors	and p	ermitte	d assig	gns) in favour
of W	BSEDCI	La Con	npany incorpora	ted under tl	he Comp	panies	Act of	1956/2	2013 (with
amen	dment fr	om tim	e to time) havin	g its registe	ered offi	ce at	Vidyut	Bhawa	ın, 2 <sup>nd</sup> Floor,
Block	k-DJ, Sed	ctor-II,	, Bidhannagar,	Kolkata-7	<b>00091</b> (1	nerein	after ca	lled th	e "Employer"
which	express	ion sha	all include its suc	ccessors, ex	ecutors	and p	ermitte	d assig	gns)
WHE	REAS	the	"Employer"	invited	Bid	as	per	its	Specification
No		fo1	RDSS works o	of		inc	luding	instal	lation of Sub-
statio	ns, lines	. bavs.	DTs and provi	ding corvi	oo oonn	oction	e otc		
			Disana pion	idilig sel vi	ce comi	CCHOI	is cic.		
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AND									Part
	WHERI	EAS C	lause No	, Sec	tion		., of		
formi	WHERI	EAS Contraction	lause No Bid Document	, Sec	tion	ates tl	., of	Bidde	er and/or Sub-
formi Contr	WHERI ng part actor mu	EAS Control of the last fulfi	lause No Bid Document ill the Qualifyir	, Sec ts inter-aliang Require	tion a stipula ments an	ates the	., of hat the jointly	Bidde and se	er and/or Sub- everally bound
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- 1.0 In consideration of the award of Contract by the Employer to the Bidder (hereinafter referred to as the "Contract") we, the **Sub-Contractor** and the Contractor do hereby declare that we shall be jointly and severally bound unto the **WBSEDCL**, for **execution of RDSS works** in accordance with the Contract Specifications.
- 2.0 Without in any way affecting the generality and total responsibility in terms of this Deed of Undertaking, the **Sub-Contractor** hereby agrees to depute their representatives from time to time to the Employer's Project site as mutually considered necessary by the Employer, Contractor and the **Sub-Contractor** to ensure proper quality, manufacture, testing and supply on FOR destination delivery at site basis and successful performance of **RDSS works** in accordance with Contract Specifications. Further, if the Employer suffers any loss or damage

on account of non-performance of the material fully meeting the performance guaranteed as per Bid Specification in terms of the contract. We the **Sub-Contractor** and the Contractor jointly and severally undertake to pay such loss or damages to the Employer on its demand without any demur.

- 3.0 This Deed of Undertaking shall be construed and interpreted in accordance with the laws of India and the Courts in Kolkata (Headquarter of Employer) shall have exclusive jurisdiction in all matters arising under the Undertaking.
- 4.0 We, the Bidder/Contractor and **Sub-Contractor** agree that this Undertaking shall be irrevocable and shall form an integral part of the Contract and further agree that this Undertaking shall continue to be enforceable till the Employer discharges it. It shall become operative from the effective date of Contract.

IN WITNESS WHEREOF the **Sub-Contractor** and/or the Contractor have through their Authorised Representatives executed these presents and affixed Common seals of their respective Companies, on the day, month and year first above mentioned.

WITNESS	(For <b>Sub-Contractor</b> )	
Signature	(Signature of t	he authoriz
Name	representative)	
Office Address	Name	
	Common Seal	of Compa
WITNESS	(For Bidder)	
Signature	(G: , , , , , , , , , , , , , , , , , , ,	
Name	(Signature of the representative)	he authoriz
Office Address	Name	••••
	Common Seal	of Compar

### **Note:**

- 1. For the purpose of executing the Deed of Joint Undertaking, the non-judicial stamp papers of appropriate value shall be purchased in the name of executant(s).
- 2. The Undertaking shall be signed on all the pages by the authorised representatives of each of the partners and should invariably be witnessed.
- 3. This Deed of Joint Undertaking duly attested by Notary Public of the place(s) of the respective executant(s), shall be submitted along with the bid.
- 4. In case the bid is submitted by a Sole/ Bidder/ Lead Consortium Member of two or more firms as partners, then the Joint deed of undertaking shall be modified accordingly.

## 20. FORM OF CERTIFICATE OF FINANCIAL PARAMETERS FOR QR

(as per clause ref. no. 2 of Section 2 of Part 1))

(Rupees in Lakhs)

S.	Financial parameters	2020-21	2019-20	2018-19	2017-18	2016-17
No.						
1.	Net Worth					
a)	Paid up Capital					
b)	Free Reserves and					
	Surplus*					
c)	Misc. expenses to the					
	extent not written off					
	Net Worth (a+b-c)					
2.	Annual Turnover **					
3.	Liquid Asset (Total					
	Current Asset -					
	<b>Inventories</b> )					

It is certified that all the figures are based on audited accounts read with auditors report and Notes to Accounts etc.

Place

(Chartered Accountants)

Membership No.

Seal

<sup>\*</sup> Free Reserve and Surplus should be Exclusive of Revaluation Reserve, written back of Depreciation Provision and Amalgamation.

<sup>\*\*</sup> Annual total Income/ turnover as incorporated in the Profit and Loss Account excluding non-recurring income, i.e., sale of fixed asset etc.

## 21. PROFORMA OF INDEMNITY BOND TO BE EXECUTED BY THE CONTRACTOR FOR THE COVERAGE AGAINST LATENT DEFECT

(To be submitted in NJ Stamp Paper of value Rupees 100/-)

		BOND Designat					•••••	or	n t	ehalf	of	M/S
resid comp  whic	ing at pany inc h paymen	orporated .herein aftet to be trul	herein under r referre y and fa	nafter ca Compa ed as OE nithfully	alled my BLIGI made	OBLIC Act EE or it e . i/we	1956 ts exec as OI	havin	g Re Iminis	egistere trator	d off or assig	ice at gns, for
	Sealed wit	th our seal		this	S		day of					
LOA cond	Noitions as d	HE said OED escribe in L and WBSE	ated OA / Co	ontract w	worl	k in ac	ccorda	nce with	ı term	, spe	cification	on and
OBL	IGOR sha	CONDITION all duty an the stipulat	d punct	ually as	per	terms	of afo	resaid L	OA/C			
with calen	contractu dar montl	Shall ensural stipulation commence the stipula	ons free ing imm	from conediately	defect	ts and r his sa	workm tisfact	nanship 1 ory com	for a	period	of 12(1	twelve)
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		S WHERI day o				set	out 1	•	e hai	nds ai	nd sea	al this
					(with		and D	ure of Coesignation		OR)		
Sign	sealed and	d Delivered	in Prese	nce of:								
		Name, Des			ress							
		 Name, Des			ess							

### **ADDITIONAL CLAUSE: SECTION – 6**

#### CLAUSE: 14 GENERAL INSTRUCTIONS ON ENVIRONMENT MANAGENT PLAN (EMP)

- 1. The Contractor shall comply with all applicable national, state, and local environmental, health and safety (labor) laws and regulations.
- 2. The Contractor shall comply with the EMP as per FORM 6.
- 3. The Contractor shall comply with the ADB's Safeguard Policy Statement (2009), the International Finance Corporation's Environmental Health and Safety General Guidelines and the guidelines on Electric Power Transmission and Distribution, and the International Labor Organization's Safety and Health in Construction guidelines.
- 4. The Contractor shall carry out all the requirements set forth in the environment safeguards framework attached here as FORM -6 and assigned to the Contractor and allocate the staffing and budget required to ensure that such requirements are met. More particularly, the Contractor will undertake site visits and consultations and complete screening forms and consultation proforma using the templates included in the FORM-6 for each distribution line and submit to the Employer for approval before starting any works on that distribution line including site establishment and site clearance work.
- 5. The Contractor shall implement the mitigation measures and carry out the monitoring requirements set forth in the FORM -6 and the project-level environmental management plan (EMP) attached here as FORM -6 allocate the staff and budget required to ensure that such requirements are met. The Contractor shall ensure mitigation measures are implemented at all construction sites as well as at any workers' camps or accommodation provided by them or their subcontractors. During project implementation the EMP will need to be updated to reflect any site-specific mitigation measures and monitoring requirements for each distribution line which the Contractor will be required to comply with. The definitive version of the EMP to be complied with by the Contractor will be disclosed on the ADB website.
- 6. The Contractor shall not commence any "Physical Works" on a distribution line including site establishment, tree or vegetation clearance until (i) written confirmation is received from the Employer that all project financier clearances have been obtained, (ii) the Contractor has undertaken and reported to the Employer on the findings of all applicable pre-construction environmental survey work and baseline environmental monitoring requirements, including completion of the screening forms and consultation proforma; (iii) the Contractor has incorporated all the applicable requirements of the EMP into their detailed designs; (iv) written confirmation is received from the Employer that the distribution line has been approved following submission of the completed screening forms and consultation proforma, (v) all required environment, health and safety (labor) permits or licenses including CTE for any construction plant have been obtained, and (vi) it has submitted all sub-plans required by the EMP and received written confirmation from the Employer of their approval.
- 7. The Contractor will be required to implement any corrective actions set out in safeguard monitoring reports that the Employer will prepare from time to time to report on implementation of the program to ADB. The Contractor shall cover the cost of corrective action required in response to non-compliance with the contract clauses, the definitive version of the EMP, or property damage caused by the Contractor, subcontractors and third parties employed by them.
- 8. The Contractor shall appoint at least (i) one appropriately qualified and experienced, dedicated Environment Officer, (ii) one appropriately qualified and experienced, dedicated Health and Safety Officer, (iii) one appropriately qualified and experienced, dedicated social and community liaison officer who will also act as the Grievance Focal Point for the Contractor; and (iv) sufficient appropriately qualified and experienced, dedicated environment, health and safety site supervisors to oversee all active distribution line works. The supervisors will be based on-site to supervise EMP implementation for the duration of all "Physical Works" undertaken.

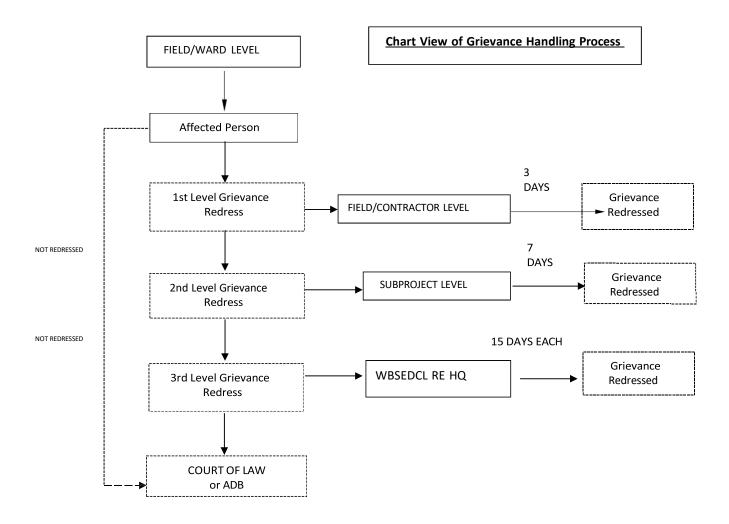
- 9. The Contractor shall employ suitably qualified and experienced third-party monitoring experts to carry out surveys, field tests and laboratory analysis required by the definitive version of the EMP in respect of environmental monitoring for ecology, air quality, noise, surface water and groundwater quality, and soil contamination, whichever is applicable.
- 10. The Contractor shall ensure that all its construction staff, as well as formal and informal subcontractors involved, understand their responsibilities to implement the EMP with appropriate training provided including construction-site EHS inductions, emergency procedure drills, monthly refresher trainings, and daily toolbox talks. The Contractor shall ensure all construction staff, including the staff of subcontractors, have attended the necessary specialized, task-specific training and are medically fit to perform their role.
- 11. The Contractor shall establish an operational system for managing and monitoring environmental, health and safety impacts and risks, progress with implementation, and compliance to the environment safeguards framework requirements. The Contractor's management and staff will attend meetings to be convened by the Employer for EMP. The Contractor will submit monthly reports on progress and compliance to the Employer documenting the mitigation measures and monitoring activities carried out, issues encountered including statistics and details of all near misses and accidents, grievances received, and follow-up actions that were taken (or will be taken) to correct any issues.
- 12. In case of (i) an unanticipated impact not considered in the EMP, including changes to the scope or design, or (ii) non-compliance, the Contractor will inform the "Employer" in writing and implement corrective actions agreed. In case of a health and safety incident or chance find it will inform the "Employer" within 24 hours with details of the incident and the corrective action being taken.
- 13. The Contractor will ensure no polychlorinated biphenyl (PCB) and no asbestos containing materials are used in construction. Transformers purchased shall be accompanied by a letter from the manufacturer they are guaranteed PCB free against each Serial No. of Transformers.
- 14. Sand and stone will only be obtained from existing approved quarries with valid EC, CTE and CTO and sources of water will have abstraction license. Records will be kept of the volume of all the materials used and their source.
- 15. The Contractor will ensure no forced or child labor or persons under 18 are employed on the project.
- 16. The contractor shall take all measures and precautions necessary to ensure the health, safety and welfare of all persons entitled to be on the site and will ensure that works are carried out in a safe and efficient manner. Such precautions shall include those that, in the opinion of the Employer, are reasonable to prevent unauthorized entry into the site and to protect members of the public from any activities under the control of the contractor.
- 17. The Contractor shall provide and maintain a suitably equipped and staffed first aid station. First aid equipment and free access for workers to a qualified nurse and/or doctor must be provided. Ambulance for moving injured persons to the nearest hospital must also be provided in ready to move condition. First-aid kits shall contain an adequate supply of in-date sterilized dressings and bandages with other necessary first aid equipment as per national health and safety (labor) laws and regulations and the EMP requirements.
- 18. The Contractor shall provide and maintain all necessary fire protection and firefighting facilities during the construction of the Works and shall comply with all national and state fire safety requirements. These facilities must include in-date, serviced, portable fire extinguishers suitable for fighting the potential hazards on the construction site.
- 19. Detailed design to ensure operational noise and EMF standard/guideline levels as specified in the definitive version of the EMP will be complied with. If noise levels cannot be met through siting alone, incorporate acoustic barrier(s) designed to international good practice around either the noise source and/or substation boundary to attenuate noise to level such that standards/guideline levels will be met.
- 20. Detailed design will ensure all ground mounted transformers are mounted on an impermeable plinth with spill containment bund of 110% capacity.

- 21. On individual items of electrical equipment provide written and visual warning signs to include the ISO 7010 "Hazard Type: Electrical Symbol" warning of risk of electrocution with an internal fence for high-risk equipment.
- 22. The Contractor will not undertake any works that could trigger the ADB environment category A (e.g., components/activities with significant adverse environmental impacts that are irreversible, diverse, or unprecedented).
- 23. The Contractor must not undertake any works that result in the significant conversion or degradation of natural habitat as defined by the ADB SPS 2009 or which are within a critical habitat as defined by the project financier ADB SPS 2009.
- 24. The Contractor will not undertake any works in National Parks, Wildlife Sanctuaries, bird sanctuaries, tiger reserve, elephant reserve, community reserve, conservation reserve, national World Heritage sites, Ramsar sites, reserve/protected forest areas, biodiversity heritage sties, or, notified wetlands. ABC conversion of existing distribution line that involves no new poles being constructed (except that required to bear additional load within the existing alignment, no diverted or new route) and underground cabling following existing power line or road rights of way can be allowed inside the eco sensitive zones (taken as 10km when the eco sensitive zone has not yet been gazetted) provided that (i) based on biodiversity study adverse impacts and risks to biodiversity, especially birds, primates, and elephants, can be avoided, by virtue of location and/or design, (ii) critical habitat as defined by the ADB SPS 2009 will not be impacted, and (iii) the works are in accordance with the legal requirements for eco sensitive zones and forest/wildlife department have been consulted and have provided their written agreement.
- 25. The Contactor will ensure no new overhead lines or new poles outside of existing route alignments will be constructed in important biodiversity areas, key biodiversity areas, or wildlife/tiger/elephant corridors. Conversion of lines to ABC, including new poles to bear the excess weight, using existing route alignments, and underground cables will only be permitted if based on biodiversity study (i) adverse impacts and risk to biodiversity, especially birds, primates, and elephants, can be avoided by virtue of location and/or design, and (ii) critical habitat as defined by the ADB SPS 2009 will not be impacted.
- 26. The Contractor may adopt "bird sensitive design" for overhead distribution lines following GoI and international good practice guidelines.
- 27. The Contractor must not undertake any work that would result in significant damage to physical cultural resources or require physical cultural resources to be removed from their current location must be excluded.
- 28. The Contractor will not undertake any works in historical/cultural areas including ASI monuments or their protected/regulated zones, cultural World Heritage Sites and their buffer zones.
- 29. The Contractor must ensure all safety clearances per Government of India requirements are met by new and upgraded distribution lines. No new feeders will be constructed across school compounds or buildings; conversion of existing lines to ABC will only be permitted if school compounds are not crossed, or minor rerouting takes place to avoid them.
- 30. Bidders shall comply with the Grievance redress mechanism as mentioned in the EMP-ANNEXURE-I hereunder.
- 31. Bidders shall also consider and cause no harm to the important installations, Birds and Animals during their project construction work. The detailed list is provided as "West Bengal- District Sensitivity Matrix" under the enclosed EMP-ANNEXURE-II.

#### **EMP-ANNEXURE-I**

#### **GRIEVANCE REDRESS MECHANISM**

- 1. GRM can be an effective tool for early identification and resolution of complaints onsubprojects. Under the project, it is required that an efficient consultation and grievance redress mechanism be established to assist affected persons to resolve queries and complaints, if any, in a timely manner. The guidelines on GRM will be applied at project and subproject level to assure that adequate resources are made available for the project GRM to function effectively.
- 2. ADB's Safeguard Policy Statement (2009) requires the establishment of a responsive, readily accessible and culturally appropriate GRM capable of receiving and facilitating the resolution of affected persons' concerns and grievances about the physical, social and economic impacts of the project. The GRM aims to (i) reduce conflict, risk of undue delay and complication in Project implementation; (ii) improve the quality of Project activities and outputs; (iii) ensure that the rights of affected persons are respected; (iv) helpidentify and respond to unintended impacts of Project on individuals; and (v) maximize participation, support and benefits to local communities. The proposed GRM for the Projectis presented in Table 14 and Figure 8.
- 3. The proposed GRM, which will handle both environmental and social grievances, includes grievance redress committees (GRCs) to be setup by WBSEDCL (EA) at respective district Project Offices and Project Head Quarter to provide the means for the effective resolution of complaints and issues on each subproject. The GRCs will be convened as necessary by WBSEDCL or DISCOM grievance focal point (GFP) and, in addition, include a representative of the affected person, a representative of women groups, the relevant Village Panchayet Pradhan (headman/woman)/Chairperson of concerned Municipality, the relevant Project Manager, anominated divisional forest officer or equivalent for environment safeguards grievances or nominated district revenue officer as nodal officer for social safeguards grievances, and, the designated GFP of the contractor dealing with the environmental or social safeguards as applicable. The GRCs will meet as and when a major grievance (i.e. grievance which cannot be resolved at contractor or DISCOM level) arises.
- 4. The fundamental objectives of the GRM are:
  - To reach mutually agreed solutions satisfactory to both, the Project and the affected persons, and to resolve any Project-related grievance locally, in consultation with the aggrieved parties;
  - To facilitate the smooth implementation of the EMPs and resolution of compensations and prevent delay in subproject implementation;
  - iii. To democratize the development process at the local level, while maintaining transparency as well as to establish accountability to the affected people;
  - iv. To facilitate an effective dialogue and open communication between the Project and affected persons; and
  - v. To have clear definition of roles and responsibilities of the various parties involved in consideration and resolution of grievances.



## **Grievance Handling Process**

Level	Name of Level	Description	Time frame <sup>14</sup>
1	Field level (by contractor and DISCOM field officials)	One Grievance Focal Person (GFP) will be assigned by each contractor and the WBSEDCL in order to receive and handle grievances. Complaints can be registered by contractor or directly to Project Offices of WBSEDCL.	3 working days
		Contractor's GFP should receive the complaint (written or verbal) and provide acknowledgement letter to the complainer within 3 days after receipt of the complaint.	
		Contractor's GFP should maintain data of Grievance Logbook and submit/update all necessary data related to the registered grievances to the WBSEDCL's GFP on a weekly basis.	
		Upon resolution the Contractor's GFP should convey the solution to the affected person and seek their concurrence (written or verbal) that it is acceptable to them.	
		If the grievance cannot be solved within 3 working days, then Contractor's GFP should submit	
Level	Name of Level	Description	Time frame14

			<del> </del>
		information to the next level (WBSEDCL GFP at subproject level) and provide updated information to the complainant regarding the grievance resolution process being followed.	
2	MFF subproject level (DISCOM GFP; District Project Office)	The WBSEDCL GFP (District Project Office ) for each subproject should review the grievance with the support of the environment and social safeguards officers and resolve it within 7 working days. If the case is complex and requires investigation (experts' opinion) expertise or confirmations from the state bodies, the resolution period can be extended up to 15 calendar days. Upon resolution the WBSEDCL's GFP should convey the solution to the affected person and seek their concurrence (written or verbal) that it is acceptable to them. If the grievance cannot be resolved still, or the complaining party is not agreed with the offered solution, then the WBSEDCL GFP should submit information to the next level (WBSEDCL HQ GRC) and provide updated information to the complainant regarding the grievance resolution process being followed.  WBSEDCLs GFP should maintain data of Grievance Logbook and submit/update all necessary data related to the registered grievances to WBSEDCL Project Offices on a monthly basis.	7 working days
3a	Implementing Agency level Grievance Redress Committee (DISCOM HQ)	The WBSEDCL GFP will request the WBSEDCL HQ GRC to review the grievance and resolve it within 15 calendar days. If the grievance is found invalid (after investigation of the GRC) a written response should be given to the complaining party explaining the reasons for its rejection. Otherwise a written response explaining the resolution should be provided to the complaining party and their concurrence (written or verbal) sought by the WBSEDCL GFP to confirm that it is acceptable to them.  If the grievance cannot be resolved still, or the complaining party is not agreed with the offered solution, then the WBSEDCL GFP should submit information to the next level (WBSEDCL GRC) and provide updated information to the complainant regarding the grievance resolution process being followed.	15 working days

3b	Executing Agency level Grievance Redress Committee (WBSEDCL)	WBSEDCL GFP will request WBSEDCL GRC to review the grievance and resolve it within 15 calendar days. If the grievance is found invalid (after investigation of the GRC) a written response should be given to the complaining party explaining the reasons for its rejection. Otherwise a written response explaining the resolution should be provided to the complaining party and their concurrence (written or verbal) sought by the DISCOM GFP to confirm that it is acceptable to them	15 working days
4	Court or INRM	If the affected person is still not satisfied with the GRC decision, the affected person can submit his/her complaint to the appropriate court of law in India for its resolution. The GRM does not impede access to the country's judicial or administrative remedies, so the project affected persons can file the case to the court of law regardless of the GRM stage and process. In addition, the affected person may raise the concern with ADB Operations Department through INRM for resolution. Project-affected people can also submit complaints to ADB's Accountability Mechanism. The Accountability Mechanism provides an independent forum and process whereby people adversely affected by ADB-financed projects can voice, and seek a resolution of their problems, as well as report alleged violations of ADB's operational policies and procedures.	Depends on nature of the complaint

- 5. Receiving grievances: All the received grievances should be registered by the GFPsof contractor and WBSEDCL. Submitting grievances and registration should be a straightforward process, and the affected persons should be able to submit their grievancesand questions directly or through a third party. This process requires availability of (i) responsible person to receive and register the complaints (GFP); (ii) multiple points (at field,DISCOM office) for receiving grievances; (iii) procedure for acknowledging the receipt (registered and signed) and informing the complaining party about the expected timeframefor the review and resolution; and (iv) grievance logbook about the complaints and their status.
- 6. The complaining party should be able to submit grievance in person, by phone call,email, letter or fax, to the GFP assigned by the contractor or Project Offices of WBSEDCL. Receipt of grievancelodged in person or via phone should be acknowledged immediately by a paper issued by the GFP or other persons who received the grievance. Any documentation relating to submitting and feeding back on grievances should be in Hindi (and other appropriate) locallanguage.
- 7. All the grievances, however minor, and regardless of its nature and eligibility, should be recorded in a grievance logbook in detail. Upon receipt of grievances, the contractor's GFP in coordination with the WBSEDCL GFP, referring to Project Offices of WBSEDCL should sort them into the following categories to define if the complaint is eligible for the Project established GRM. The procedure shouldestablish clear parameters (if complaint is caused by the Project activities) for qualifying grievance as eligible or ineligible for the Project established GRM. The following types of grievances are not eligible for resolution by the Project established GRM:
  - Grievances that are not related to the Project, or
  - Grievances that should be reviewed by separate, more appropriate procedures (e.g. issues of fraud and corruption).
  - 8. Feedback provision: After receiving grievance, the GFP (or other responsible person) should:
    - Provide acknowledgement of the grievance receipt, with response/ recommendations to complainant;

- Provide the complainant with information about the status of grievance resolution ineach of the grievance resolution levels;
- If the resolution is not reached or seem to be unreachable in a given level, the grievance should be passed on to the next level and the complainant should be informed accordingly. Information to the complainant shall include the date when thecase was passed on to the next level and the date by which the resolution is expected; and
- The resolution proposed at each level should be informed to the complainant.
- 9. In all the levels, the parties involved in resolution for grievance should closely discuss the issue and resolution alternatives with the complainant in order to come to the resolution that is reasonable and acceptable for all parties.
- 10. *Reporting:* The WBSEDCL is responsible to monitoring implementation of the Projectestablished GRM and reflect the outcomes in the safeguard monitoring reports.
  - The GFP of the contractor should document and monitor the grievance status in a grievance logbook. All grievances, no matter how minor, and regardless if immediately resolved by the contractor, will be logged.
  - GFP of the contractor should report to GFP of WBSEDCL on GRM on weekly basis and immediately inform them on receipt of any grievance.
- 11. GFP of the WBSEDCL will record all grievances, no matter how minor, and regardlessif immediately resolved by the contractor, in a tracking table (provided by ADB—Table 15) and report on a monthly basis to WBSEDCL GFP and to ADB on semi annual basis through the safeguard monitoring reports and immediately inform them of any grievance which reaches level 3a or 3b of the GRM. Besides, all grievances and their status along with details of the grievance and their resolution should be reflected in the safeguard monitoring reports.

#### **Grievance Registration Form**

(Project: WBSEDCL RDSS Project)

No	Title of complaint	Type of complaint	Date received	Name of plaintiff	Contact details of plaintiff	Summary of complaint	Action taken	Status of complaint / date	Notes/ comments
							•		
							•		



# WBSFDIL West Bengal State Electricity Distribution Co. Ltd.

#### **PUBLIC CONSULTATION NOTICE**

The West Bengal State Electricity Distribution Company Limited (WBSEDCL) hosting a meeting to discuss Conversion of Existing Feeders to Aerial Bunched Cable and Separation of Feeders work proposed under Revamped Reforms Based and Results Linked, Distribution Sector Scheme(RDSS). The details of meeting are given below.

**Discussion Point:** 

- ☐ Address by WBSEDCL officials
- ☐ Information about project and proposed work in the area/village
- ☐ Information on key impacts, mitigation measuresand recommendations from safeguards assessments
- ☐ An opportunity to present your views and concerns on the proposed work





The meeting is open to the Public and will provide a chance for the community to come together and receive up to date information regarding the proposed work to be carried out under this Project and raise their issues, if any.

For Further information or queries, please contact WBSEDCL a
below place and number.
Office Address:
Phone Contact No:

## **EMP-ANNEXURE-II**

## WEST BENGAL – District Sensitivity Matrix

District	HQ	Subdivis ion	Km of Projec t DL	Number and area of Protected Areas	Number and area of KBA (IBA)	Elephan t reserve / corridor	Tiger reserve / corridor	Number of National protected monuments	Number of State protected monument S	Popula tion (subdiv ision totals)	Popula tion density (popula tion/ sqkm (subdis trict)	% Illiter ate (subd ivisio n %)	Tri ba I ar ea	% Urba n (built up)	% agri cult ural	% for est	% wa ter	Elevat ion range	Other notable features
Malda	English Bazar	Malda Sadar			KBA/IBA- Farakka Barrage and adjoining area (20 sqkm)  IBA - Naya Bandh Wetland Complex (4 sqkm)  KBA/IBA - Gogabil Pakshi Vihar, Baghar Beel and Baldia Chaur (Located in adjacent Bihar State within 1km buffer from Malda dist. boundary)  Not reported in IBAT: Udhuwa Lake Bird Sanctuary in adjacent			1. Adina Mosque 2. Baisgazi Wall 3. Baroduary Masjid 4. Bhita of Chand Sagar 5. Chamkati masjid 6. Chika Masjid 7. Dakhil Darwaza 8. Firoz Minar 9. Gumti Gateway 10. Gunmant Mosque 11. Kotwali Darwaja 12. Lottan Masjid 13. Lukachuri Gateway 14. Qadam rasul Mosque 15. Tomb of Fateh Khan	1. Jami mosque in Old Malda municip ality 2. Ruins of the fortified city of Pandua 3. Ruins of Pathan palace at Adian 4. Ancient ruins at Ratnag arh at Wari 5. Ancient ruin site at Gagjiba npur	274627	1109	46%	1.8 9 %	13.58	55 %	1.5 %	7 %	40-159 m	Shares a 165.5 km international border with Bangladesh.  Prone to flooding and river bank erosion.  Low-lying basin, it is prone to flood. Major River - Ganga, Mahananda, Kalindi

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		Chanchal			Jhanrkhand State with 1km buffer			<ul> <li>16. Tantipara     Masjid</li> <li>17. Two Tombs of     Tantipara     Masjid</li> <li>18. Two Stone     Pillars</li> <li>19. Tower     Nimasarai</li> <li>20. Eklankhi     Mausoleum</li> <li>21. Qutub Shahi     Masjid</li> </ul>	-	133837 9	1154	42%	0.4	11%					
Mursid abad	Bahara mpur	Sadar						9 ASI sites  1. Tomb of Azimunnisha Begum 2. Residency Cemetery/Stati on Burial ground 3. Tomb of Mir Madan 4. Dutch Cemetery 5. Old English Cemerery or Old Residency Burial Ground 6. Devil's Mound * Raja Karna's Palace	1. Tomb of Nawab Sharfar az Khan at Nagina bagh 2. Temple of Ganges war Siva at Barana gar 3. Siva temple at Yugwar a	172552	1443	31%	% 1 %	19.85	60%	0.5 5 %	10 %	30- 100m	125.3km Bangladesh Border Main river Bhagirathi and bordered by Padma River Key environmental issue in Murshidabad is natural river bank erosion. Murshidabad district in West Bengal has lost a lot of land to the river Ganga, as thousands of people are rendered homeless

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								<ol> <li>Katra Masjid</li> <li>Jahan Kosha         Cannon     </li> <li>Hazarduari         Palace &amp;         Imambara     </li> </ol>	4. Ravratn a temple at Sibara mbati										* Soil erosion in the right bank of the river Ganga has rendered many people homeless.
		Jangipur			IBA- Farakka Barrage and adjoining area (20 sqkm)			ASI site     Kheraul Mosque		197230 8	1796	40%	1.4 3 %	44%					
		Kandi						ASI site     Mound known     as Barkona     Duel Mound		115564 5	963	35% %	0.8	6.79					
		Lalbagh						<ol> <li>ASI sites</li> <li>Bhavaniswar Mandir</li> <li>Char Bangla group of four Siva Mandirs</li> <li>South Gate, Kella Nezamat</li> <li>Imambara, Kella Nezamat</li> <li>White Mosque, Kella Nezamat</li> <li>Yellow Mosque, Kella Nezamat</li> <li>Tripolia Gate, Kella Nizamat</li> </ol>	1. The house, temples and ruins associa ted with memory of Jagat Sett's house at Mahima pur	125388 6	1230	33%	2.6	7.64 %					

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		Domkal						8. Tomb of Alivardi Khan & Seraj-ud- daullah 9. Tomb of Sujauddin -		996443	1189	34.5 %	0.5 1 %	2.45 %					
Birbhu m	Suri	Suri Sadar						2 ASI sites  1. Temple & Rasmancha/D amodar Temple 2. Dharmaraj Temple	1. Motichu r mosque at Rjanag ar 2. Temple of Dewanji and its contigu ous shrines at Hetamp ur 3. Temple of Chandr a Nath Siva at Hetamp ur 4. Siva temple at	112187	629	29%	8.8	3.43 %	73%	4%	3%	33- 94m	Mayurakshi & Ajoy River  Asian elephants from nearby Jharkhand state migrate into the district in search of food and sometime in attraction of Mahua flower (Madhuca longifolia) . Northern plains gray langur (Semnopithecus entellus) found partridges, green pigeons, and various water fouls. Few migratory birds are also found near Bolpur. Common birds of deltaic Bengal are mixed up in this

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		Bolpur		Ballabhpur Wildlife Sanctuary (2.021 sqkm) (not reported in IBAT)  ESZ: 100m buffer from WLS boundary vide Gazatte notification dated 25 Sept 2019 <sup>1</sup> .				3 ASI sites  1. Temple of Radha Binod/Joydeb 2. Two Mounds 3. Temple of Basuli and the mound together with 14 other temples near them containing the Linga images of Shiva	Panchr a 5. Siva temple at Rasa 6. Visnu temple at Hatsara ndi 7. Kali temple at Pathark unchi 1. Octago nal Siva temple at Supu 2. Temple of Kali at Itanda 3. Navarat na temple at Brahma ndidhi 4. Temple of Gouran ga at	872027	735	27%	8.8 %	3.44 %					district with birds of wooded hill, doyel, indian robin, drongo, hawk cuckoo, koel, sun bird, Indian roller (nilkantha), parrot and babblers are found in abundance.

<sup>&</sup>lt;sup>1</sup> https://moef.gov.in/wp-content/uploads/2018/12/ballavpur.pdf

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				Regulated: Erection of electrical and communication towers and laying of cables and other infrastructure - Regulated under applicable laws (underground cabling may be promoted).  Species: Chital (Axis axis) was introduced in the Sanctuary in the year 1967. Apart from chital, the Sanctuary have recorded jackal (Canis aureus), fox (Vulpes Vulpes) , jungle cat (Felis chaus), palm civet (Paradoxurus hermaphroditu s) and water birds including					Ilambaz ar 5. Siva temple at Ramna gar 6. Siva temple adjacen t to Kali temple 7. Siva temple at Ghurisa 8. Chand Roy temple at Uchkar an 9. Four Siva temples at Uchkar an										

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		Rampurh at		local and winter visitors; Others: Birbhum Forest Division				-	1. Mallesw ar Siva temple at Mallarp ur 2. Bhandis wara Siva temple at Bhandis war	150850 6	958	31%	4.8 %	3.38 %					
									Local/ Regional importance:  1. Tarapit h Temple										
Purba Burdw an	Burdwa n	Burdwan Sadar (North)		Ramnabagan Wildlife Sanctuary (0.15 sqkm)  (Not reported by IBAT)  ESZ: 100m buffer from WLS boundary			In November 2021, around 50 elephants came within 5 km of east Burdwan town	<ol> <li>Rudreswar Temple</li> <li>Tomb of Baharam Sakka, Sher Afghan and Nawab Qutabuddin</li> <li>Panduk Rajar Dhipi</li> </ol>	1. Excavat ed monum ent at Goswa mikhan da 2. Bijoy - Toran at	158662 3	810	28.3 %	9 %	26%	20%	23 %	15 %	30- 104m	Damodar River, Flood prone

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				vide Gazatte notification dated 19 Sept 2018 <sup>2</sup> Regulated: Erection of electrical and communication towers and laying of cables and other infrastructure - Regulated under applicable laws (underground cabling may be promoted)  Notable species: Cheetal (Axis axis), Northern plains gray langur (Semnopithecu s entellus), Black buck				4. Ancient mound, Bharatpur	Burdwa n town										
		Burdwan Sadar (South)						Jain brick     temple known     as Sat-Deul	1. Abando ned Gopal temple	119815 5	850	23%	10. 2 %	4.46 %					

<sup>&</sup>lt;sup>2</sup> https://westbengalforest.gov.in/upload/draft/ramnabagan.pdf

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									at Amdpur 2. Siva temple at Honpas - Kamarp ura 3. Temple of Kashina th Siva at Ajhapur 4. Temple of Madan Gopal at Kulingr am										
		Katwa						-	1. Radha Gobund a temple at Jagada nandap ur 2. Three Siva temple at Sribati	963022	900	31.7 %	1.2 %	11.6 %					

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		Kalna						1. Two ancient temples (joined together) 2. Group of temples (12 nos. temples sub ASI sites) as follows:  (i) Bijoy Vaidyanath Temple  (ii) Giri Gobardhan Temple  (iii) Gopalji Temple,  (iv) Jaleswar Temple  (v) Krishna Chandraji Temple	3. Badsahi or Hussain Shai mosque at Nutanh at 4. Hussain Shah mosque at Kulutia 1. Majlish Saheb or Id-Baqrid mosque at Kalna town 2. Panchr atna brick temple at Baidyap ur	109773	1100	25.4 %	7.6 %	13%					

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								(vi) Lalji Temple, (vii) Nava-Kailasha Temple (viii) Pancharatna Temple (ix) Pratapeswar Siva Temple in Rajbari compound (x) Rameswar Temple, (xi) Ratneswar Temple (xii) Rupeswar Temple											
Paschi m Burdw an	Asanso I	Asansol			KBA/IBA - Reservoirs of Chota Nagpur Plateau (Part in subdivision and part in Jharkhand State)			Group of four     Ancient     Temples     Stone Temple,     Garui		167265 9	2000	27%	9 %	83.33	20%	38 %		45-75 m	Coal Mining & Industrial area Durgapur: Notified as Critically polluted area by CPCB
		Durgapur		Other: Durgapur Forest Division				Temle of Ichai Ghosh     Ancient Site, Nadiha		120937 2	1600	24.8 %	7 %	79.22 %					The District Gazetter, Bardhaman, depicted that, the mammalian carnivore of the district comprises of leopard (Panthera pardus), wolf (Canis lupus), hyaena (Hyaena hyaena), jackal

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Madia				Dathuadahari				4. Maured language	1 Tompis	24.0050	1216	24.5		20.0	40.0	2.5	12	F. F.	(Canis aureus) and other smaller species, but hyaenas are not so common. Tigers (Panthera tigris) were formerly common in the district, especially in the jungles of the Asansol subdivision adjoining the Jharkhand, but have now a days entirely disappeared from this province of Paschim Bardhaman. Wolves are in frequently found and are mostly met with in the jungles north of Kanksa. Wild pigs (Sus scrofa) are numerous throughout the district and monkeys (Cercopithecidaesp.)
Nadia	Krishna nagar	Krishnan agar Sadar		Bethuadahari Wildlife Sanctuary				Mound known     as	1. Temple of Raghab	218650 3	1316	31.5 %	2.6	20.8 %	18.8 %	3.5 %	1.3 %	5.5- 28.8m	One of the major environmental issues of the

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				(0.66686 sqkm)  (Not reported in IBAT)  ESZ notification not found  Notable species:  Spotted deer, Jackal, Bengal fox, Porcupine, Common				Bamanpukur Mound or Fort 2. Ruins of Fort	eswar Siva at Dign agar										district is presence of Arsenic in ground water
		Ranaghat		Langur, Parakeets, Indian Cuckoo, Barbets Barbets and other smaller birds and pythons				-	1. Temple of	143276	1600	22.4	2.6	41.7					
		3 34							Shyamchan d at Santipur town	1		%	%	%					
		Kalyani						Temple,     Palpara		891563	1693	19%	5.1 %	76.7 %					

District	District HQ	Subdivis ion	Km of Projec t DL	Number and area of Protected Areas	Number and area of KBA (IBA)	Elephan t reserve / corridor	Tiger reserve / corridor	Number Nationa protecte monume	al ed	Number of State protected monument s	Popula tion (subdiv ision totals)	Popula tion density (popula tion/ sqkm (subdis trict)	% Illiter ate (subd ivisio n %)	Tri ba I ar ea	% Urba n (built up)	% agri cult ural	% for est	% wa ter	Elevat ion range	Other notable features
		Tehatta						-			796245	924	33%	1.9 0 %	2.85 %					
Hoogly	Chinsur	Chinsura						1. Haneswi Vasude temples 2. Dutch Cemeter together all tombs monume containe therein 3. Dutch Memoria monume of Susar Maria 4. Group of temples as Brind Chandra Math 5. Mounds Mahana 6. MInar, P 7. Mosque, Pandua 8. Mosque Tombs, Satgaon 9. Shrine a Mosque known as Darga	y with s & ants d lent Anna f known aban 's d andua	1. Chandi temple at Deulpar a 2. Siva temple at Bakhar pur 3. Temple of Sri Sri Nandad ulal Jew at Gurap 4. The mast of a Portugu ese ship at bandal	165751 8	1400	22.8	10. 8 %	0.55 %	6.34	12. 87 %	2.2	11- 17m	Hoogly & Damodar River, Bank erosion prone  Almost in every year the district is affected by flood in major areas of Khanakul - II, Khanakul - I, Arambagh Subdivision & Tarakeswar & Balagarh Blocks under Chandernagore & Sadar Sub-division. Specially Khanakul - I & Khanakul - II remain water logged for long days due to heavy rainfall as well as due to discharge of DVC water through Damodar, Mundeswari, Darakeswar rivers only for their low topography.

District	District HQ	Subdivis ion	Km of Projec t DL	Number and area of Protected Areas	Number and area of KBA (IBA)	Elephan t reserve / corridor	Tiger reserve / corridor		Number of National protected monuments	Number of State protected monument s	Popula tion (subdiv ision totals)	Popula tion density (popula tion/ sqkm (subdis trict)	% Illiter ate (subd ivisio n %)	Tri ba I ar ea	% Urba n (built up)	% agri cult ural	% for est	% wa ter	Elevat ion range	Other notable features
		Chandan nagar						1.	Zafar Khan Gazi, Tribeni Dupleix Palace (Institut e de Chandan Nagar)	1. Raj Rajesw ar temple at Dwarah atta	112717 6	2200	19%	4.4 %	41.5 %					
		Serampo						1.	i) Danish Cemetery ii) All ancient structures, all tombs stone monument remains and inscriptions within the area enclosed by the said walls	1. Henry martin's Pagoda at Seramp ore 2. Temple of Gour Chandr a and Krishna chandra at Chatra 3. Radha Govind a temle at Satpur 4. Siva temple at Hariram pur 5. Raj Rajesw ar	146984 9	3500	67%	1.6 5 %	73.1 %					

District	District HQ	Subdivis ion	Km of Projec t DL	Number and area of Protected Areas	Number and area of KBA (IBA)	Elephan t reserve / corridor	Tiger reserve / corridor	Number of National protected monuments	Number of State protected monument s	Popula tion (subdiv ision totals)	Popula tion density (popula tion/ sqkm (subdis trict)	% Illiter ate (subd ivisio n %)	Tri ba I ar ea	% Urba n (built up)	% agri cult ural	% for est	% wa ter	Elevat ion range	Other notable features
									temple at Kotalpu r										
		Arambag h						-	1. Jorbang la temple at Parul 2. Raghun andan temple at Parul 3. Jorbang la temple of Durga with Navarat na tower at Bali dewang anj 4. Mosque at Village Bajua 5. Kanake swar Shiva temple, Byra Kanpur	126460 2	1200	21%	2.2 %	5.23					

### FORM-6

### **Environmental Management Plan (EMP)**

IND: Development of Distribution Infrastructure for Loss Reduction at Hoogly, Burdwan East, Burdwan West, Birbhum, Nadia, Murshidabad and Malda District of West Bengal under Revamped Reforms Based and Results linked Distribution Sector Scheme (RDSS) – ADB Funded.

This Environmental Management Plan (EMP) for Bidding Document has been prepared for Turnkey Contract Packages of proposed West Bengal 'RDSS Scheme' Project. The scope of project included Development of Distribution Infrastructure for Loss Reduction at Hooghly, Burdwan East, Burdwan West, Birbhum, Nadia, Murshidabad and Malda Districts of West Bengal under Revamped Reforms Based and Results Linked, Distribution Sector Scheme.

The EMP is applicable to all subprojects under the Project includes mitigation measures and monitoring requirements presented in the matrix form. This EMP Matrix will form part of the contract document together with General Environment, Health & Safety (EHS) Conditions of Contract (CoC) for all contractors.

This EMP shall be updated based on detailed design and it will be the basis for the contractor to prepare site specific Environmental Management Plan (EMP).

### **Environmental Management Plan Matrix**

Project Activity	Potential Environmental Impact	Mitigation Action	Parameters to be Monitored	Standards/ Measurement/ Frequency	Institutional Responsibility	Implementation Schedule
		PLANNING & DESIGN / P	RE-CONSTRUCTION F	PHASE		
A Physica	l Resources					
Interference with drainage patterns/Irrigatio n channels	Temporary flooding hazards/loss of agricultural production	Pole by pole survey (network survey) of all existing bare conductor lines that will be replaced with AB Cabling.	Survey data and route	Review of survey data / line route maps - Once	Contractor subject to review by WBSEDCL / PMA (Project Management Agency)	Survey and design
Interference with national roads and railway lines	Traffic congestion. Possible damage to road / railway	Use of underground cabling for national road / railway crossings using Horizontal Directional Drilling (HDD) method as per Technical Specifications.	approvals from road / railway authorities and	Technical Specifications and guidelines issued by road and railway	Contractor subject to review by WBSEDCL/	Survey and design / pre-construction

Project Activity	Potential Environmental Impact	Mitigation Action	Parameters to be Monitored	Standards/ Measurement/ Frequency	Institutional Responsibility	Implementation Schedule
	infrastructure causing public inconvenience	Obtain necessary permits / clearances/ approvals from road / railway authorities. Follow guidelines issued by the authorities for detailed design.		authorities - Once	PMA.	
B Environ	ment Resources					
	Impact to the existing environment	Based on network survey data and line route maps, if new LT/HT lines are passing through forest areas, natural flow paths, important ecological habitats or close proximity to water bodies obtain approvals / permits from concerned authorities or propose alternate routes avoiding these areas in case of new LT/HT lines.	Survey data and route maps Conditions of permits / approvals and	Review of survey data / line route maps by WBSEDCL/ PMA – Once	Contractor subject to review by WBSEDCL / PMA	Survey and design
	Impact to the existing environment	Obtain necessary permits, approvals and clearances from concerned Authorities such as local authorities, forest dept. etc. once the line routes are finalized as above. (if required)	approvals and	Consultation with authorities. Review of survey data / line route maps by WBSEDCL/ PMA – Once	Contractor subject to review by WBSEDCL / PMA	Survey and design
Location of poles and other facilities	Impact on water bodies / land/ residences	If pole by pole survey indicates location of poles and distribution transformers inside or close proximity to water bodies propose alternate pole locations or rerouting of lines. Also consider crossing of water bodies through special arrangements (long span lines).  If illegal encroachments are noted within right of way (RoW) of the existing lines that disturb proposed conductor replacements with necessary clearances, consult WBSEDCL to remove such obstacles through appropriate actions or re-route lines as necessary.  If new LT/ HT lines are passing through private lands consider shifting lines to	Survey data and route maps	Review of survey data / line route maps by WBSEDCL/ PMA – Once	Contractor subject to review by WBSEDCL / PMA	Survey and design

Project Activity	Potential Environmental Impact	Mitigation Action	Parameters to be Monitored	Standards/ Measurement/ Frequency	Institutional Responsibility	Implementation Schedule
		boundary locations or obtain permission from owners to continue the line in the same manner.				
	Noise generation exposure to noise, Nuisance to neighbouring properties	for distribution lines to houses and buildings. Supply of distribution	Proximity of lines / distribution transformers to buildings. Noise level measurement of distribution transformers as per type testing	Statutory clearances as per IE rules / Transformer noise level as per NEMA Publication No. TR- 1 - Once	Contractor subject to review / testing by WBSEDCL / PMA	Survey and design / supply of equipment
	Impact on water bodies / land/ residences	Line routes and facilities shall be planned to avoid resettlements (no resettlements permitted for this project). Avoid location of poles inside or close proximity to water bodies and if necessary crossing of water bodies through special arrangements (long span lines). Avoid location of facilities inside private lands (unless permission is obtained from owners in exceptional cases).		Consultation with local authorities and landowners / Review of survey data / line route maps by WBSEDCL/ PMA – Once	Contractor subject to review by WBSDCL / PMA	Survey and design
Impact on visual aesthetics / loss of original landscape beauty	Impact to the existing environment	New lines and distribution poles to be sited to minimize visual impacts and the amount of visual clutter as far as possible given the nature of the project.  Consult individual households where a new pole location is directly in front of private property prior to finalizing detailed design.	Survey data and route maps  Compliance with national laws and regulations	Consultation with local authorities and landowners / Review of survey data / line route maps by WBSEDCL/ PMA – Once	Contractor subject to review by WBSDCL/ PMA	Survey and design
Impact on construction waste, Health and safety	Pollution risk and generation of construction wastes	Prepare pollution prevention plan (PPP) and construction waste management plan (CWMP) for solid and hazardous waste management (if any) in accordance with national regulations and the IFC's General EHS Guidelines (2007).  For all construction works undertake	Compliance with national laws and regulations	Consultation with local authorities / Review of survey data / line route maps by WBSEDCL/ PMA – Once	Contractor subject to review by WBSDCL / PMA	Survey and design

Project Activity	Potential Environmental Impact	Mitigation Action	Parameters to be Monitored	Standards/ Measurement/ Frequency	Institutional Responsibility	Implementation Schedule
		risk assessment and prepare H&S plan in accordance with the IFC EHS General Guidelines on OHS for approval by DISCOM, considering occupational and community H&S and including adherence to electrical safety standards and emergency preparedness and response plan with communication systems and protocols to report an emergency situation.				
C Ecologic	cal Resources					
Encroachment into sensitive ecological areas	Loss of sensitive ecological values/ damage to endangered species	Based on network survey if new LT/HT lines encroach into ecologically sensitive areas obtain necessary approvals from concerned authorities or re-route lines as necessary.	Floral and faunal habitats loss	Enumeration of flora and fauna at site-Once	Contractor subject to review by WBSEDCL / PMA	Survey and design
Cutting and Trimming of Trees	Loss of trees along the Right of Way (RoW)	Minimize tree cutting and trimming requirements for any new line routes proposed.		Tree cutting statistics provided by the Contractor- Once	Contractor subject to review by DISCOMS / PMA	Survey and design
D Human I	Environment					
Involuntary resettlement or land acquisition	Loss of habitats and structures	Avoid loss of habitats and structures during construction as no resettlement plan is permitted	Survey data and line route maps	-	Contractor with the approval of WBSEDCL	Pre-construction phase

Project Activity	Potential Environmental Impact	Mitigation Action	Parameters to be Monitored	Standards/ Measurement/ Frequency	Institutional Responsibility	Implementation Schedule
Encroachment into farmland	Loss of agricultural productivity	If power lines cross directly through private farmland; shift such lines towards boundaries.  Farmers to be compensated for any permanent loss of cash crop trees that need to be trimmed or removed.		Appropriate compensation - Once	Contractor with the approval of WBSEDCL	Pre-construction phase
Proximity of lines to houses and buildings	Safety risks to residents	Maintain vertical and horizontal statutory clearances for power lines to buildings as per technical specifications. If necessary re-route the proposed lines.	Survey data and line	Technical Specifications, IE rules, CEA guidelines Review of survey data and line route maps - Once	Contractor subject to review by WBSEDCL / PMA	Survey and design
Power line construction planning	Safety risks to people due to excessive sags / breakage of conductors / collapse of lines	Prepare sag-tension charts for stringing of AB cables at different ambient temperatures to control maximum sag and maximum tension at different ambient temperatures.  Ensure stays / struts are placed at required locations to support poles to ensure stability of lines.	and construction designs	Technical specifications, CEA guidelines Review of line design by WBSEDCL/PMA- Once	Contractor subject to review by WBSEDCL / PMA	Detailed design

Project Activity	Potential Environmental Impact	Mitigation Action	Parameters to be Monitored	Standards/ Measurement/ Frequency	Institutional Responsibility	Implementation Schedule
Construction of power lines and facilities at heritage sites	Loss of aesthetic value	As far as possible power lines and facilities shall be constructed not harming aesthetics of archaeological, historical, cultural, and religious heritage sites. Typically lines and distribution transformers shall be located away from such sites. Where necessary ABC or underground cables shall be used instead of bare conductor lines.  Distribution transformers if required inside the site may be installed within enclosures or buildings.  Consultations with heritage site authorities shall be carried out to plan and design facilities in compliance to their requirements.	route maps	Detailed designs - Once	Contractor subject to review by WBSEDCL / PMA	Survey and design
Interference with other utilities and traffic due to design and layout of Project equipment	Safety risks to WBSEDCL	Obtain necessary clearances consistent with the requirements of Government of India and Government of West Bengal from other utilities that could be affected by the Project (electric, water, sewerage, telecommunications, road, rail etc.)  Contractor to prepare for DISCOM approval traffic management plan in consultation with relevant local authorities to ensure proper execution of traffic controls including where temporary blockage of one lane of the road during installation is required for health and safety purposes that highly visible guides, advance warning signs or flag persons are in place to direct pedestrian and vehicular traffic.	_	100% of clearances obtained before commencement of works. Traffic management plan approved before commencement of works. No unresolved grievances from local community  Compliance with national laws and regulations	Contractor subject to review by WBSEDCL / PMA Review and approval of traffic management plan Assist with review and approval of traffic management plan	Survey and design

Project Activity	Potential Environmental Impact	Mitigation Action	Parameters to be Monitored	Standards/ Measurement/ Frequency	Institutional Responsibility	Implementation Schedule
Location of workers camp and materials storage areas could adversely affect residential areas and sensitive receptors (schools, hospitals/clinics		If required, laydown and storage areas, temporary worker camps, etc. to be located at least 25m from waterbodies, 50m from springs and groundwater wells, and 50m from sensitive receptors (houses, schools, clinics, temples, etc.) however noisy and dusty activities such as concrete batching, hot mix, construction workers overnight accommodation etc. to be located at least 200m away from any sensitive receptors. Local communities to be consulted when selecting sites for project facilities prior to finalization.	Related facilities located sufficient distance from nearest receptors  No unresolved grievances from local community  Compliance with national laws and regulations	Part of detailed design and pre-construction phase	Contractor subject to review by WBSEDCL / PMA	Pre-Construction phase
		CONSTRUC	CTION PHASE			
-	al Resources			_		
Erection of new poles and stays	Soil erosion	Implement measures to prevent possibility of soil erosion due to surface run off. Measures include immediate backfilling and compaction / stabilisation of excavated soils from pole pits and disposal of surplus soil as per approved procedure.	Soil erosion	Visual inspection of site – Once per each site upon completion of work	Contractor subject to monitoring by WBSEDCL / PMA	Construction phase
	Water contamination	Measures shall be taken to prevent water quality degradation in downstream water bodies from construction sites. Construction work should be carefully designed to prevent obstruction or destruction to natural drainage. Surplus soil / materials / waste and debris during construction shall be disposed as approved and shall not be left where it may be carried by water to downstream flood plains, dams, lagoons or other water bodies. Immediate backfilling and compaction / stabilisation of soil during construction.	Water contamination	Visual inspection of site – Once per each site upon completion of work	Contractor subject to monitoring by WBSEDCL / PMA	Construction phase

Project Activity	Potential Environmental Impact	Mitigation Action	Parameters to be Monitored	Standards/ Measurement/ Frequency	Institutional Responsibility	Implementation Schedule
Interference with other infrastructure facilities	Public inconvenience due to accidental damage / disturbance to utility infrastructure.	Measures shall be taken to minimise accidental damage / disturbance to utility infrastructure facilities such as electricity lines, water pipe lines, telecom lines, sewage lines etc.  Measures include prior consultation with relevant utility authorities, obtaining approvals, data and maps and follow their instructions. Use of well trained and experienced machinery operators to reduce accidental damage to the public utilities and arrangement with the utilities to notify and restore services immediately if damage / disturbance occurs. This includes payment of fees / costs for any repair work.	caused to utility infrastructure/ Disruption to commercial and public activities/public complaints	Utility guidelines, public complaints Site inspections – As required	Contractor subject to monitoring by WBSEDCL / PMA. Payment of fees / costs for any repairs for accidental damages shall be Contractor's responsibility.	Construction Phase
Road and railway crossings	Public inconvenience due to accidental damage / disturbance to road and railway infrastructure.	Follow instructions / guidelines issues by the road and railway authorities and conditions of approvals / permits.  Use HDD method for laying of underground cables as per technical specifications. Use of well trained and experienced machinery operators to reduce accidental damage. Maintain required clearances as per guidelines. Notify road and railway authorities immediately if any accidental damage occurs and pay applicable fees / costs for carrying out necessary repairs.		Guidelines issued by road and railway authorities. Visual inspections - Once	Contractor subject to monitoring by WBSEDCL / PMA  Payment of fees / costs for any repairs for accidental damages shall be Contractors responsibility.	Construction Phase

Project Activity	Potential Environmental Impact	Mitigation Action	Parameters to be Monitored	Standards/ Measurement/ Frequency	Institutional Responsibility	Implementation Schedule
AB Cable replacements for existing lines passing through environmentally sensitive areas	Impact to the existing environment	Lines passing through environmentally sensitive areas such as forest areas, protected areas, heritage sites etc shall be identified based on network survey. Necessary permits / approvals shall be obtained from concerned authorities to carry out proposed work. Work shall be carried out strictly in accordance with the conditions / parameters of the permits issued by the relevant authorities.	environmentally	Conditions of permits / approvals and clearances Site Inspections – As required	Contractor subject to monitoring by WBSEDCL / PMA	Construction Phase
Line construction work	Noise and vibrations	Selection of construction techniques and machinery to minimize noise and vibrations. Associated construction works in residential areas shall be limited to daytime only.	Noise pollution during construction. Public Complaints	Gol and IFC Noise control regulations Site Inspections - Quarterly	Contractor subject to monitoring by WBSEDCL / PMA	Construction phase
Provision of facilities for construction workers	Contamination of receptors (land, water, air)	Construction workforce facilities to include proper sanitation (soak pits/septic tanks), water supply and waste disposal facilities.  Workforce is not allowed to harvest wood, therefore the Contractor to ensure LPG gas cylinders are provided to labor camps.	Amenities for Workforce.	Presence of proper sanitation, water supply and waste disposal facilities - Visual inspection (Continuous)	Contractor subject to monitoring by WBSEDCL / PMA	Construction phase
Pole and distribution transformer erection, underground cabling and substation control room extensions	Noise and vibrations	Selection of construction techniques and machinery to minimize noise and vibrations. Associated construction works shall be limited to daytime only.	construction.	Gol and IFC Noise control regulations - Quarterly	Contractor subject to monitoring by WBSEDCL / PMA	Construction phase

Project Activity	Potential Environmental Impact	Mitigation Action	Parameters to be Monitored	Standards/ Measurement/ Frequency	Institutional Responsibility	Implementation Schedule
Underground cabling and substation control room extensions	Impairment of ambient air quality	Spraying of water to dust-generating areas; Covering excavated soil/dump during off-work with tarpaulin; Provide temporary enclosure of dust-generating construction area/activities; Trucks transporting construction materials that generate dust will be covered;	and dust control	Gol and IFC Air Quality regulations - Quarterly	Contractor subject to monitoring by WBSEDCL / PMA	Construction phase
Substation control room extensions and distribution transformer erections	Hazardous waste	Ensure transformer oil supplied is PCB free as per technical specifications. Ensure safe handling and disposal of hazardous waste including transformer oil and asbestos in accordance with applicable regulations and procedures.	disposal	Hazardous Waste (Management and Handling Rules,) 1989 - Continuous	Contractor subject to monitoring by WBSEDCL / PMA	Construction phase
		Implement agreed PPP and follow General EHS Guidelines for the use and storage of fuel, oil, and chemical including prevention and control of hazards associated with spill prevention, emergency response, clean up and contaminated soil remediation.  Fuel, oil and chemicals used to be kept	with EMP measures and approved PPP and	Compliance with national laws and regulations - Continuous	Contractor subject to monitoring by WBSEDCL / PMA	Construction phase
Impact on construction waste, Health and safety	Pollution risk and generation of construction wastes	under lock and key and stored in labelled, sealed containers on drip trays to provide secondary containment, ideally, they will be located on an impermeable surface and be under cover				
		Mounting of plant containing oil and diesel on drip trays to catch leaks.  Refuelling operations, equipment servicing and wash down to take place				

Project Activity	Potential Environmental Impact	Mitigation Action	Parameters to be Monitored	Standards/ Measurement/ Frequency	Institutional Responsibility	Implementation Schedule
		on an impermeable surface at least				
		25m from watercourses, and 50m from				
		springs and wells, with drainage directed through oil and grease				
		interceptors before being discharged				
		into a settling pond prior to discharge offsite				
		Provide sufficient absorbent materials (e.g. sorbents, dry sand, sandbags) onsite for soaking up fuel, oil or chemical leaks/spills				
		Provision of an appropriate domestic solid waste and construction waste collection and disposal system.				
		Collect and segregate construction wastes including scrap metal, oils, and solid waste.				
		Store all wastes in designated, labelled area in an environmentally sound manner e.g. oils to be stored in sealed drums on drip trays, solid wastes to be stored in an enclosed bin.				
		Recover recyclable wastes that could be reused or sold to recyclers. Prohibit burning of construction wastes.				
		Prohibit dumping of construction wastes into canals, rivers, agricultural fields etc.				
		Scrap metal waste to be immediately removed off-site to the DISCOM stores				

Project Activity	Potential Environmental Impact	Mitigation Action	Parameters to be Monitored	Standards/ Measurement/ Frequency	Institutional Responsibility	Implementation Schedule
		for appropriate reuse or disposal with all waste transfer records retained.				
C Ecologic	cal Resources					
Trimming /cutting of trees	Loss of vegetation and deforestation	Trees / bushes that can survive cutting shall only be pruned. Line routes shall be planned or re-routed so that no plant species of conservation status are cut. If necessary line Construction works will not be scheduled following harvest time to minimize damage to cash crops, Contractor is permitted to clear vegetation subject to consultation with crops owners.  Felled trees and other cleared or pruned vegetation shall be disposed in accordance with applicable procedures.	status retained as approved by statutory authorities.  Disposal of cleared vegetation as approved by the statutory authorities	Presence of target species in Right of Way (RoW) following vegetation clearance. Site Inspections – Twice during preconstruction and upon completion	Contractor subject to monitoring by WBSEDCL / PMA	Construction phase
Conduct of construction workers	Loss of vegetation and deforestation	Construction workers prohibited from harvesting wood in the project area during their employment. Contractor to provide LPG gas cylinder / cooker for labour camps.	harvesting - number of incidents reported	Complaints by local people or other evidence of illegal harvesting – Once	Contractor subject to monitoring by WBSEDCL / PMA	Construction phase
	Effect on fauna	Prevent work force from disturbing the flora, fauna including hunting of domestic animals, wildlife and fishing in water bodies.  Awareness programme for workers regarding conservation of flora, fauna including ground vegetation to all workers.		Complaints by local people or other evidence of illegal hunting / fishing - Once	Contractor subject to monitoring by WBSEDCL / PMA	Construction phase

Project Activity	Potential Environmental Impact	Mitigation Action	Parameters to be Monitored	Standards/ Measurement/ Frequency	Institutional Responsibility	Implementation Schedule
Site clearance for underground cabling and substation control room extensions	Loss of vegetation	Marking of vegetation to be removed prior to clearance, and strict control on clearance area as per approved site area requirements.	clearance control (area	Clearance strictly limited to target vegetation-Once	Contractor subject to monitoring by WBSEDCL / PMA	Construction phase
D Human	Environment					
All construction works interfering with public areas and facilities	Nuisance to the general public	Notify general public in the locality of the proposed construction activity, scheduled commencement and completion period and contact details for information and complaints.  Safe access to property and roads should be maintained and alternative routes and access provided where there are temporary diversions or blockages	Notifications	Site inspections - Once	Contractor subject to monitoring by WBSEDCL / PMA	Construction phase
Electricity supply interruptions for line construction works	Inconvenience to electricity consumers and negative impacts on social, agricultural and commercial activities.	Pre-plan line construction works so that supply interruption durations required for AB cable replacements are minimized. Follow stipulated WBSEDCL procedure for obtaining shutdown approval to carry out work on existing feeders. Make arrangements to inform affected consumers in advance. Make arrangements for immediate restoration of supply upon completion.		DISCOM procedure for providing shutdown approval. Supply Interruption hours - As Required	Contractor and WBSEDCL	Construction phase

Project Activity	Potential Environmental Impact	Mitigation Action	Parameters to be Monitored	Standards/ Measurement/ Frequency	Institutional Responsibility	Implementation Schedule
Power line and distribution transformer construction, underground cabling and substation control room extensions	Possible safety risks to general public and construction workers	Implement safety measures to minimize safety risks to general public and workers as per approved Safety Plan  Safety of general public: measures shall include demarcation of high risk construction activity areas such as pole pits and trenches, display warning signs / beacons / notices, traffic rearrangements / diversions, conduct safety audits and other measures as per approved safety plan. Ensure necessary safety clearances to houses / buildings are maintained.  Safety of workers: measures shall include provision of PPE for all workers, use of proper equipment, documentation and training on safe working practices, regular safety audits, work permit process, temporary earthing, temporary stays for line stringing, follow sag tension charts for stringing of lines, establish occupational health and safety management system as per Contract provisions, employment of a safety officer and other measures as per approved safety plan and technical specifications.	regulations, accidents, safety audit reports, public complaints	Approved Safety Plan, Technical Specifications, CEA safety regulations - Continuous	Contractor / safety officer subject to monitoring by WBSEDCL / PMA	Construction Phase
Construction of power lines and facilities at or vicinity of heritage sites	Disturbance to activities at heritage sites / Loss of aesthetic value	Schedule and carry out construction work in consultation with heritage site authorities to minimize disturbances to regular activities at site. Comply with the conditions and parameters of permits / approvals provided.	Work Schedules and implementation activity	Requirements as per permits / approvals / detailed designs - Once	Contractor subject to monitoring by WBSEDCL / PMA	Construction Phase

Project Activity	Potential Environmental Impact	Mitigation Action	Parameters to be Monitored	Standards/ Measurement/ Frequency	Institutional Responsibility	Implementation Schedule
Temporary use of land	Disturbance / Losses to neighbouring land uses/ values	Access to sites for workers and machinery shall be through roads / public land. If access through private land required in exceptional cases prior permission from land owners shall be obtained.  No damage shall be done to public / private properties during temporary use. If private lands are used for temporary storage of materials, labour camps, preconstruction works etc. it should be done in agreement with the land owners and upon payment of rentals as required. Material / debris shall not be stored along roads, near water bodies or in public lands in a manner that disturb intended	Site arrangements	Site Inspections - Once.	Contractor subject to monitoring by WBSEDCL / PMA	Construction Phase
		usage of such facilities. Temporarily used land shall be reinstated to original condition following completion of construction works				
Chance find of cultural resources and property/archae ological features	Loss/theft of precious archaeological item uncovered during excavation	In case of chance find of physical cultural resources and property/archaeological features damage to such property shall be prevented, concerned authorities shall be notified and ensure safety of such property until handover to concerned authorities.	Chance find information	Gol's Treasure and Trove Act. – As required	Contractor subject to monitoring by WBSEDCL / PMA	Construction Phase
Transportation and storage of materials	Nuisance to the general public	Transport loading and unloading of construction materials should not cause nuisance to the people by way of noise, vibration and dust.  Avoid storage of construction materials beside the road, around water bodies, residential or public sensitive locations.	Site arrangements	Site Inspections - Quarterly	Contractor subject to monitoring by WBSEDCL / PMA	Construction Phase
		Construction materials should be stored				

Project Activity	Potential Environmental Impact	Mitigation Action	Parameters to be Monitored	Standards/ Measurement/ Frequency	Institutional Responsibility	Implementation Schedule
		in covered areas to ensure protection from dust, emissions and such materials should be bundled in environment friendly and nuisance free manner.				
Soil erosion during auguring/ excavation of pole foundation.		Minimize removal of existing vegetation and topsoil to that which is absolutely necessary.  Infertile and rocky material will where possible be reused as fill material, if it needs to be taken off site it will be disposed by licensed waste management operator at designated disposal area suitable for accepting inert wastes.  Excavation will be limited to within the agreed corridor of impact, ideally road reserve. (no resettlements permitted for this project)  Use of auguring to limit the area to be disturbed for installation pole foundation. Undertake installation of poles during the dry season to minimize exposed areas subject to erosion by surface water runoff.	with EMP measures and approved CEMP provisions  Compliance with national laws and regulations	Site Inspections - Quarterly	Contractor subject to monitoring by WBSEDCL / PMA	Construction Phase
Occupational health and safety	Impact of Workers Health & Safety	Require workers to confirm they have seen and understood the requirements of the Occupational Health and Safety (OHS) plan before proceeding with the work.	withEMP measures	Compliance with national laws and regulations - Once	Contractor subject to monitoring by WBSEDCL / PMA	Construction Phase
Community health and safety such as toppling of concrete poles,	Impact on Community Health & Safety		Works in accordance with EMP measures and H&S Plans	Compliance with national laws and regulations - Continuous	Contractor subject to monitoring by WBSEDCL / PMA	Construction Phase

Project Activity	Potential Environmental Impact	Mitigation Action	Parameters to be Monitored	Standards/ Measurement/ Frequency	Institutional Responsibility	Implementation Schedule
traffic and accidents,		Provision for ensuring security of the cable to avoid vandalism. For pole				
emergency spill		mounted transformers a suitable anti-				
of materials, and access of villagers to		climbing deterrent, to be used together with suitable warning signs.				
dangerous		Fence and sign immediate working area				
working areas.		to prevent public access during construction works.				
		Do not leave hazardous conditions (e.g. unlit open excavations without means of escape) overnight unless no access by public can be ensured				
		Prevent standing water as it may become a breeding habitat for mosquitoes etc.				
		During construction works provide signage detailing site and office contacts in case of grievance.				
		Before handover all poles to be confirmed				
		to have adequate foundation that they will remain vertical during operation, and that all the feeder lines are correctly tensioned.				
		Wherever possible, the contractor should not discriminate and should proactively encourage the employment of suitably skilled women on the project.				
Capacity	Impacts to	Provision of information and training (if	Equipment O&M	Documentation and	•	Construction
Building	to construction	required) on the requirements regarding construction of works.	manuals, Specifications and training (if	Training provided – Once	arrangement by Contractor	Phase

Project Activity	Potential Environmental Impact	Mitigation Action	Parameters to be Monitored	Standards/ Measurement/ Frequency	Institutional Responsibility	Implementation Schedule
	procedures.		applicable)		subject to	
					monitoring by	
					WBSEDCL /	
					PMA	

#### POST CONSTRUCTION PHASE

After completion of all activities, the entire installations will be handed over to the Distribution (O&M) wing for commercial operations. The Distribution (O&M) wing has its own set up and some other corporate set up to look after the all the issues related with environment and operation and maintenance during the declared defect liability period.

Bidder is responsible for designing appropriately to facilitate their implementation as per technical parameters specified in the bidding documents. But Bidder has the role of rectification of commissioned project if any defect is intimated by the Distribution (O&M) wing, within the defect liability period.

#### APPENDIX 1: SAFEGUARDS SCREENING FORMS

One consolidated set of screening forms is to be completed for each subproject, reflecting all components/activities included under it. The consolidated forms are to be submitted to ADB for clearance prior to the commencement of any construction works associated with the components/activities covered by them. Since some subprojects may be implemented by WBSEDCL/contractors on a rolling basis not all components/activities may be confirmed upfront. In the case additional subproject components/activities are identified following initial submission, the consolidated forms can be updated and resubmitted to ADB for clearance.

Part A. General information – provide for all

subprojects.

## Part B. Project description

- Conversion to ABC subprojects, complete Form 1
- Feeder segregation and bifurcation subprojects, complete Form 2

#### Part C. Baseline

- Conversion to ABC following existing alignment with no diversion, complete bolditems of form only
- Conversion to ABC with minor diversion, complete one form for each component/activity
- 11 kV feeder segregation and bifurcation complete one form for each component/activity

## Part D. Screening checklists

- Environment one checklist per subproject
- · Involuntary resettlement one checklist per subproject
- Indigenous peoples one checklist per subproject

Provide requested maps and photographs as separate files using clear naming protocol to identify them.

## A. GENERAL INFORMATION

Subproject Name:	_
Contract Package:	_
Contractor:	
Construction timeline:	_

- Spreadsheet of all components/activities included in the subproject to be attached.
- For ABC conversions list by division and district the names of the villages included with latitude/longitude grid coordinates for each, flagging any that will involve a minor diversion.
- For feeder separation list by division and district the feeder name together with the substation and names of villages connected to it with latitude/longitude grid coordinates for each.

### B. PROJECT DESCRIPTION

**Form 1.** If the subproject involves conversion to ABC complete this checklist on a division wise basis, reflecting all components/activities included under that division.

Items	Details
Division wise description:	
Length of LTOH Bare Conductor to be replaced with ABC	Ckm:
Map of line alignments (map to be provided for each village/ - location)	Provide as a separate file a map for each village/location showing the line alignment,including details of any minor diversion,at a readable scale.
Confirm all ABC works within village boundaries	yes/no
Existing 11kV/400 V transformers utilised (details to be provided for all transformers used, photo(s) of transformers provided as a separate file)	Type: ground mounted/pole mounted  Model and date of manufacture:  Date of last oil change or maintenance, if known:  Evidence of oil leak: none/minor/major  Existing safety features: fence/warning sign/climb deterrent  Pollution prevention features for ground mounted transformers: none/concrete platform/bund  Photo of the transformer (if available)
New poles on existing alignments	Number of poles:
New poles on diverted routes, required in order to meet conductor clearances (maps to show details of any diversions)	Number of poles:
Construction camp location/size, if any (may be used for multiple components)	
Temporary workers camp location/size, if any (may be used for multiple components)	

**Form 2.** If the subproject involves 11 kV segregation & bifurcation complete this checklist for each component/activity included in the subproject.

Items	Details
Subproject component description:	1
Length of 11kV feeder line required	Ckm above ground line:
	Bare Conductor :     HT ABC :
	Ckm underground line:
	Number of railway crossings:
	Number of SH/NH crossings
	Number of River crossings :
Map of feeder line route (map(s) to be provided for entire route)	Insert or provide as a separate file map showing the line alignment at readable scale
Existing substation connection	Name:
(details provided for all substations; photo(s) of substations provided as a separate file)	New feeder required: no/control panel/outdoor cabling and circuit breaker
	Photo of the substation (if available)
Existing 11kV/400 V transformer used	Type: ground mounted/pole mounted
(details provided for all transformers; photo(s) of transformers provided as a	Model and date of manufacture:
separate file)	Date of last oil change or maintenance, if known:
	Evidence of oil leak: none/minor/major
	Existing safety features: fence/warning sign/climb deterrent
	Pollution prevention features for ground mounted transformers: none/concrete_platform/bund
	Photo of the transformer (if available)
New 11kV/440 V transformer	New transformer required: yes/no
(details to be provided for all transformers)	Type: ground mounted/pole mounted
Construction camp location/size, if any	
(may be used for multiple components)  Temporary workers camp location/size, if any (may be used for multiple components)	

#### C. BASELINE

For each minor diversion related to conversion to ABC and 11 kV feeder segregation—and bifurcation component/activity included in the subproject complete all questions in the following form.

For conversion to ABC following existing alignment with no diversion, complete only the questions in **bold**.

Land Use and Sensitive Receptors	Details
Existing road reserve inside habitation	km of line:
Existing road reserve outside habitation	km of line:
Existing field boundaries	km of line:
Agricultural land traversed	km of line:
	number of poles:
Community or private forest land traversed	km of line:
	number of poles:
	tree cutting required: yes/no
Other land type traversed: (detail land types)	km of line:
Crossing of waterbodies e.g. rivers, streams, canals, drains, ponds etc.	Number of waterbody crossings:
Cariais, drairis, porius etc.	Insert of provide as a separate file a clear photo of each waterbody to cross
Presence of critically endangered or endangered flora and fauna in the district, confirmed by forest officials etc.	yes/no
Presence of legally protected areas, other nationally or internationally recognized important ecosystems, natural or critical habitat, including the following:  • legally protected areas such as National Parks, Wildlife Sanctuaries,	List any within 1 km, together with minimum distance to linealignment <sup>30</sup>
ecosensitivezonesetc, <sup>27</sup> • natural World Heritage Sites,	
· Ramsar sites,	
<ul><li>important bird areas,</li><li>key biodiversity areas,</li></ul>	
Roy blodiversity dieds,	

<sup>27</sup> This does not apply to the purchase and use of bonded asbestos cement sheeting where the asbestoscontent is less than 20%.

<sup>&</sup>lt;sup>30</sup> IBAT to be run for a wider study area of 10km around village latitude/longitude grid coordinates using itsmultiple sites function to identify the presence of legally protected areas, important bird areas etc. IBAT report to be attached to confirm search undertaken.

<ul> <li>elephant or tiger reserves,<sup>28</sup></li> <li>defined elephant and tiger corridors,<sup>29</sup></li> <li>reserve/protected forest areas,</li> <li>biodiversity heritage sites,</li> <li>wetlands etc.</li> </ul>	
Internationally and nationally important physical cultural resources	List any Cultural World Heritage Sites and ASI monuments including buffer zones within 1 km, together with the minimum distance to line alignment
Locally important physical cultural resources	yes/no
in the line alignment e.g. shrines, trees etc.	If yes, provide details of these physical cultural resources including photos as separate files
Private/public trees located within the safety	Number:
clearance and requiring to be cut	Confirm species cut do not include CR, EN, endemic, restricted range species: yes/no
School compounds and/or buildings	yes/no
located within the safety clearances	If yes, provide photos clearly showing baseline situation (attach as separate files) with a map clearly showing details of the line alignment, and how safety clearances will be achieved by project
School compounds and/or buildings situated	yes/no
within 5m of the line alignment	If yes, provide photos clearly showing baseline situation (attach as separate files) with maps clearly showing details of the line alignment, and how safety clearances will be achieved by project
Other public/private buildings that are situated	yes/no
within 5m of the line alignment	If yes, provide photos clearly showing baseline situation (attach as separate files) with maps clearly showing details of the line alignment, and how safety clearances will be achieved by project

<sup>&</sup>lt;sup>28</sup> This does not apply to the purchase and use of bonded asbestos cement sheeting where the asbestoscontent is less than 20%.

Details of defined elephant corridors available from <a href="https://wti.org.in/project\_docs/WTI\_101\_corridors\_map.jpg">https://wti.org.in/project\_docs/WTI\_101\_corridors\_map.jpg</a> with details of defined tiger corridors available from <a href="https://www.conservationindia.org/wp-content/files\_mf/Tiger\_corridors-2.pdf">https://www.conservationindia.org/wp-content/files\_mf/Tiger\_corridors-2.pdf</a>

For each 11 kV feeder segregation & bifurcation component/activity involving an existing substation complete the following form, provide the requested maps and photographs as separate filesusing clear naming protocol to identify them.

Substation Name:					
Year of establishment:					
Grid Reference:					
Aerial map of substation					
Photo of substation co	mpour				
Photo of control building and details of					
wall/roof materials:	_				
No. transformers and	dates o	f mai	nufactui	re	
with photo of rating pl	late:				
Area of substation and	l layou	t map	):		
Nearest residence and distance in m):	l habita	ation	(name a	nd	
	n (took	nico	l and no	<u> </u>	
Total staff at substatio technical):	iii (teci	IIIICa	and no	11-	
Audit Checks:	Yes	No	Don't	N/A	Remarks, including the need for
Addit Checks.	162	INO	Know	IN/A	short-term or long-term corrective
			KIIOW		actions from the project-level EMP
					(attach photos to support findings)
Housekeeping / Waste I	Manage	moni	<u> </u>		(attach photos to support infairigs)
Tiousekeeping / Waste I	viariage	HILOHI	-	Cor	rective action: short term/long term/none
la the authoration kent				Con	
Is the substation kept neat and tidy?					
Are there any trip					
hazards on the ground					
e.g. open channels,					
materials, equipment,					
trash laying around?					
Is there any general					Provide details of general waste
waste storage and/or					storage and how it is disposed of:
disposal on-site?					
Is there any waste					
burning on site?					
Are there any					How are any hazardous wastes
hazardous wastes					(solid/liquid/gas) being stored and
(solid/liquid/gas) being					disposed of?
stored and/or					·
disposed of?					
Is end of life or					
unused equipment					
being stored on site?					
Is there a dedicated,					
labelled storage area					
for this equipment?					
Are fuel, oil or					
chemicals being					
stored on site?					
Are there empty					
drums or old					
transformers on site?					

	T T	
Is there a dedicated,		
labelled storage area		
for fuel, oil, and		
chemicals, empty		
drums, and/or old		
transformers?		
Does the storage area		
have an impermeable		
floor?		
Is the storage area		
uncover?		
Is the storage area		
locked?		
Does the storage area		
have a spill		
containment bund of		
110% capacity?		
Are material data		Provide copies transformer oil material
sheets for the fuels, oil		data sheets:
or chemicals		data snocts.
displayed?		
Has there been any		
pest problem on site?		
Are any pest control		Provide details of control measures
measures undertaken		and how often undertaken:
on site?		
I rangtormar i III i aakad	Δ	
Transformer Oil Leakag	<u>e</u>	Corrective action: short term/long term/none
	e 	Corrective action: short term/long term/none
Do the transformers	e 	Corrective action: short term/long term/none
	e	Corrective action: short term/long term/none
Do the transformers	e	Corrective action: short term/long term/none
Do the transformers have a label indicating	e	Corrective action: short term/long term/none
Do the transformers have a label indicating it contains PCB or is PCB free?	e	
Do the transformers have a label indicating it contains PCB or is PCB free?  Is any other evidence	e	Provide copies of any documentary
Do the transformers have a label indicating it contains PCB or is PCB free?  Is any other evidence available to confirm	e	
Do the transformers have a label indicating it contains PCB or is PCB free?  Is any other evidence available to confirm transformers are PCB	e	Provide copies of any documentary
Do the transformers have a label indicating it contains PCB or is PCB free?  Is any other evidence available to confirm	e	Provide copies of any documentary evidence:
Do the transformers have a label indicating it contains PCB or is PCB free?  Is any other evidence available to confirm transformers are PCB free?  Is it known when the		Provide copies of any documentary
Do the transformers have a label indicating it contains PCB or is PCB free?  Is any other evidence available to confirm transformers are PCB free?  Is it known when the transformer oil was		Provide copies of any documentary evidence:
Do the transformers have a label indicating it contains PCB or is PCB free?  Is any other evidence available to confirm transformers are PCB free?  Is it known when the		Provide copies of any documentary evidence:
Do the transformers have a label indicating it contains PCB or is PCB free? Is any other evidence available to confirm transformers are PCB free? Is it known when the transformer oil was last changed?		Provide copies of any documentary evidence:  Confirm date:
Do the transformers have a label indicating it contains PCB or is PCB free?  Is any other evidence available to confirm transformers are PCB free?  Is it known when the transformer oil was last changed?  Is a maintenance		Provide copies of any documentary evidence:
Do the transformers have a label indicating it contains PCB or is PCB free?  Is any other evidence available to confirm transformers are PCB free?  Is it known when the transformer oil was last changed?  Is a maintenance logbook kept on the		Provide copies of any documentary evidence:  Confirm date:
Do the transformers have a label indicating it contains PCB or is PCB free?  Is any other evidence available to confirm transformers are PCB free?  Is it known when the transformer oil was last changed?  Is a maintenance logbook kept on the premises?		Provide copies of any documentary evidence:  Confirm date:
Do the transformers have a label indicating it contains PCB or is PCB free?  Is any other evidence available to confirm transformers are PCB free?  Is it known when the transformer oil was last changed?  Is a maintenance logbook kept on the premises?  Are the transformers		Provide copies of any documentary evidence:  Confirm date:
Do the transformers have a label indicating it contains PCB or is PCB free?  Is any other evidence available to confirm transformers are PCB free?  Is it known when the transformer oil was last changed?  Is a maintenance logbook kept on the premises?  Are the transformers mounted on an		Provide copies of any documentary evidence:  Confirm date:
Do the transformers have a label indicating it contains PCB or is PCB free?  Is any other evidence available to confirm transformers are PCB free?  Is it known when the transformer oil was last changed?  Is a maintenance logbook kept on the premises?  Are the transformers mounted on an impermeable		Provide copies of any documentary evidence:  Confirm date:
Do the transformers have a label indicating it contains PCB or is PCB free?  Is any other evidence available to confirm transformers are PCB free?  Is it known when the transformer oil was last changed?  Is a maintenance logbook kept on the premises?  Are the transformers mounted on an		Provide copies of any documentary evidence:  Confirm date:
Do the transformers have a label indicating it contains PCB or is PCB free?  Is any other evidence available to confirm transformers are PCB free?  Is it known when the transformer oil was last changed?  Is a maintenance logbook kept on the premises?  Are the transformers mounted on an impermeable		Provide copies of any documentary evidence:  Confirm date:
Do the transformers have a label indicating it contains PCB or is PCB free?  Is any other evidence available to confirm transformers are PCB free?  Is it known when the transformer oil was last changed?  Is a maintenance logbook kept on the premises?  Are the transformers mounted on an impermeable platform?  Does the transformer		Provide copies of any documentary evidence:  Confirm date:
Do the transformers have a label indicating it contains PCB or is PCB free?  Is any other evidence available to confirm transformers are PCB free?  Is it known when the transformer oil was last changed?  Is a maintenance logbook kept on the premises?  Are the transformers mounted on an impermeable platform?  Does the transformer platform have a spill		Provide copies of any documentary evidence:  Confirm date:
Do the transformers have a label indicating it contains PCB or is PCB free?  Is any other evidence available to confirm transformers are PCB free?  Is it known when the transformer oil was last changed?  Is a maintenance logbook kept on the premises?  Are the transformers mounted on an impermeable platform?  Does the transformer platform have a spill containment		Provide copies of any documentary evidence:  Confirm date:
Do the transformers have a label indicating it contains PCB or is PCB free?  Is any other evidence available to confirm transformers are PCB free?  Is it known when the transformer oil was last changed?  Is a maintenance logbook kept on the premises?  Are the transformers mounted on an impermeable platform?  Does the transformer platform have a spill containment bund/sump of 110%		Provide copies of any documentary evidence:  Confirm date:
Do the transformers have a label indicating it contains PCB or is PCB free?  Is any other evidence available to confirm transformers are PCB free?  Is it known when the transformer oil was last changed?  Is a maintenance logbook kept on the premises?  Are the transformers mounted on an impermeable platform?  Does the transformer platform have a spill containment bund/sump of 110% capacity?		Provide copies of any documentary evidence:  Confirm date:
Do the transformers have a label indicating it contains PCB or is PCB free?  Is any other evidence available to confirm transformers are PCB free?  Is it known when the transformer oil was last changed?  Is a maintenance logbook kept on the premises?  Are the transformers mounted on an impermeable platform?  Does the transformer platform have a spill containment bund/sump of 110% capacity?  Is there any evidence		Provide copies of any documentary evidence:  Confirm date:
Do the transformers have a label indicating it contains PCB or is PCB free?  Is any other evidence available to confirm transformers are PCB free?  Is it known when the transformer oil was last changed?  Is a maintenance logbook kept on the premises?  Are the transformers mounted on an impermeable platform?  Does the transformer platform have a spill containment bund/sump of 110% capacity?		Provide copies of any documentary evidence:  Confirm date:

previously leaked from transformers					
Is there any spill equipment available on site (e.g. sand, cloths, or other					
absorbent materials)?					
Lighting and Ventilation			•		
				Cori	rective action: short term/long term/none
Is adequate ventilation provided in control building?					
Are all vents free of blockages?					
Is heating and/or air con available?					
Is adequate natural or artificial lighting provided in control building?					
Is adequate lighting provided in the substation compound at night?					
Are all lights in working order?					
First Aid Equipment	ı				
				Cori	rective action: short term/long term/none
Is a first aid kit available on site?					Elaborate on contents:
Is it clearly labelled where the first aid kit is stored?					
Is the first aid equipment within its expiry date?					
Do any staff on site have first aid training?					Confirm how many and the extent of training received:
Is one staff with first aid training present on site at all times?					
Are there any posters showing first aid procedures especially for electrocution?					
Fire Safety Equipment		1	1	1	
				Cori	rective action: short term/long term/none
Does the control building have fire detectors and alarm?					
Is the alarm system operational?					
ls fire fighting equipment present?					Elaborate on equipment provided, No. fire extinguishers

		No. of fire buckets filled with sand
Do fire extinguishers		
have an in-date		
service record?		
Is a record of fire		
alarm testing and fire		
drills available on		
site?		
Do any staff on site		
have fire training?		
Are there any notices		
or posters describing		
procedures to be		
followed in the event		
of a fire?		
Community Health and Sa	fety	
, , , , , , , , , , , , , , , , , , , ,	•	Corrective action: short term/long term/none
Is there a coourity		Solutions action office terminoling terminoling
Is there a security		
fence and gates?		
Does the security		
fence have any gaps		
permitting entry?		
Are the gates kept		
locked?		
Is 24/7 security guard		
present?		
Is the door to the		
control room kept		
locked?		
Are there written or		
graphic "danger of		
electrocution" signs		
posted on the		
fence/gates?		
Are there written or		
graphic "danger of		
electrocution" signs		
posted on electrical		
equipment?		
Can any noise from		
transformer hum be		
heard?		
ls shielding		
equipment/materials		
installed to decrease		
electromagnetic field		
exposure?		
Handling Emergencies		
		Corrective action: short term/long term/none
Is an emergency plan		Provide copies of any documentary
available?		evidence:
Are emergency exits		
signed and clear of		
blockages?		
DIOCKages:		

Is the location and		Distance to nearest doctor / clinic:
phone number of		Distance to nearest hospital able to
doctor and hospital		treat electrocution accidents and other
posted in a clear		serious conditions:
location?		
Is there an emergency		
eye wash or shower?		
Is an accident book		Elaborate on incidents recorded:
available on site?		Elaborate of incluents recorded.
Health and Safety of Sta	<del>3</del> 11	
	1 1	Corrective action: short term/long term/none
Does the control		
building look to be		
structurally sound?		
Is there any evidence		
of asbestos on site?		
Did auditor receive an		
OHS site induction?		
Have staff on site		Clarify division of labour between an
		Clarify division of labour between on-
received OHS		site workers and other in-coming
training?		specialised DISCOM maintenance
		workers:
Are staff on site		
wearing PPE?		
Is there a store of		
PPE available on site?		
Do staff avail of		
personal exposure		
monitoring equipment		
to warn of exceeding		
exposure levels to		
electromagnetic		
fields?		
Drainage		
		Corrective action: short term/long term/none
Is there any standing		
water visible on site?		
Is a drainage system		
provided?		
Sanitation and Welfare	Facilities	
	<del>-</del>	Corrective action: short term/long term/none
Is a toilet available on		Are there facilities for male and
site?		female?
		iemaie:
Is the toilet inside staff		
building or outside it?		
Does the toilet		
connect to septic tank		
with soakaway or		
sewerage system?		
Are handwashing		
facilities available?		
Is hot and cold water		
available?		
Is soap provided?		
is soup provided:		

Does the toilet have lock or vacant indicator?	
Is potable water available on site?	Elaborate on the source:
Is there any evidence of potable water meeting Drinking Water Standards?	Provide copies of any documentary evidence:
Are staff stationed at substation during on shift hours and how many, including security guards?	If so, how many? How long are staffs' shifts? How long are security guards' shifts?
Is a food preparation and clean eating area available?	Is the area free from any contamination from work processes?
Is cooking fuel used at site?	Describe fuel(s) used:
Are staff staying at the substation overnight (out of hours) and how many?	
Is there dedicated workers accommodation and/or shelters?	Describe worker accommodation and facilities provided including for security guards e.g. does it protect from rain and sun; does it have a bed; heating; air conditioning etc.

## D. SCREENING CHECKLISTS

## D-1. Screening of Subprojects for Environment

One environmental screening checklist is to be completed for each subproject, informed by the project description and baseline forms completed in respect of all components/activities included under it.

Potential environmental impacts for both conversion to ABC and feeder lines have already been identified at the Project level and mitigation for these impacts has been identified in the project-level EMP so only locations issues need further consideration. If the answer to any of the screening questions below is a yes or not known, then as part of updating the IEE a site-specific assessment might be required for any components/activities of concern to determine the significance of potential impacts and any site-specific mitigation measures required.

Subprojects may only be categorized C for environment without further consultation with the ADB environment safeguards specialist if the response to all screening questions is no.

Subproject Specific Screening	Yes	No	Not Known	Remarks
A. Subproject Siting Does any subproject component/activity extend beyond boundaries of one village?				

Does any subproject			
component/activity extend			
beyond the built-up area of			
existing habitations?			
· · · · · · · · · · · · · · · · · · ·			
component/activity adjacent to or			
within 1 km of any of the			
following or any other legally			
protected areas, other nationally			
or internationally recognized			
important ecosystems, natural or			
critical habitat?			
Informed by Environment			
Baseline Form/IBAT Check			
<ul> <li>National Park</li> </ul>			
<ul> <li>Wildlife Sanctuary</li> </ul>			
Eco Sensitive Area			
World Heritage Site			
(natural or cultural)			
ASI monument			
Other National Protected Area			
(state type)			
` '			
Buffer Zone of Protected Area     (at the which)			
(state which)			
Ramsar Site			
<ul> <li>Important Bird Area</li> </ul>			
<ul> <li>Key Biodiversity Area</li> </ul>			
<ul> <li>Elephant Reserve</li> </ul>			
Tiger Reserve			
Defined elephant corridor			
Defined tiger corridor			
Reserve/protected forest area			
Biodiversity heritage site			
Other forest area (not protected)			
· Wetland			
B. Potential Environmental			
Impacts			
Will any of the subproject			
components/activities			
<ul> <li>involve the construction of a</li> </ul>			
new line i.e. 11 kV segregation			
and bifurcation?			
· result in the conversion or			
degradation of natural habitat?			
<ul> <li>encroach on any legally</li> </ul>			
protected areas, other nationally or			
internationally recognized			
important ecosystems, natural or			
critical habitat per Section A?			
encroach on any buffer zones			
or connecting corridors of			
legally protected areas, other			
nationally or internationally			
recognized important ecosystems,			
1			
natural or critical habitat per Section A?			
Section A?		<u> </u>	

<ul> <li>encroach on community or private forest?</li> </ul>	
<ul> <li>result in damage to physical cultural resources or require their removal?</li> </ul>	
<ul> <li>encroach on any historical/cultural areas per Section A?</li> </ul>	
encroach on or within the	
safety clearances for school	
compounds or buildings?	
C. Subproject	
Components/Activities	
Will any of the subproject	
components/activities cause	
additional site-specific impacts to	
those detailed in the IEE and	
covered by the project-level	
EMP	
Component A [insert details]	
Component B [insert details]	
Component C [insert details]	
·	

# D-2 Screening of Subprojects for Involuntary Resettlement

One involuntary resettlement screening checklist is to be completed for each subproject, informed by the project description and baseline forms completed in respect of all components/activities included under it.

Probable Involuntary Resettlement				
Effects	Yes	No	Not Known	Remarks
Involuntary Resettlement Impacts				
1. Does the subproject component have any impact on private land (i.e. installation of poles on and lines over the land)?				If no, then C as only government or public land affected, and the record of land ownership should be collected and kept. If yes, then B as there is impacts on private land, then social due diligence required as per Appendix 7.
2. If there is an impact on private land. Was alternative route by utilizing within an existing public Right of Way (ROW) explored?				
3. Is the site for the impact known?				
4. Is the ownership status and current usage of land to be acquired known?				
5. Will there be loss of shelter and residential land due to land acquisition?				
6. Will there be loss of agricultural and other productive assets due to land acquisition?				
7. Will there be losses of crops, trees, and fixed assets due to land acquisition?				
8. Will there be loss of businesses or enterprises due to land acquisition?				
9. Will there be loss of income sources and means of livelihoods due to land acquisition?				
Involuntary restrictions on land use of protected areas	or on ac	cess to	legally de	signated parks and
10. Will people lose access to natural resources, communal facilities and services?				
11. If land use is changed, will it have an adverse impact on social and economic activities?				
12. Will access to land and resources owned communally or by the state be restricted?				

Information on Displaced Persons:			
Any estimate of the likely number of persons that will be displaced by the Subproject?			
[] No [] Yes			
If yes, approximately how many?			
Are any of them poor, female-heads of households, or vulnerable to poverty risks?			
[] No [] Yes			
Are any displaced persons from indigenous or ethnic minority groups?			
[] No [] Yes			

# D-3. Screening of Subprojects for Indigenous Peoples Resettlement as per ADB

One indigenous people screening checklist is to be completed for each subproject, informed by the project description and baseline forms completed in respect of all components/activities included under it.

KEY CONCERNS (Please provide elaborations on the Remarks column)	YES	NO	NOT KNOWN	Remarks
A. Indigenous Peoples Identification				
1. Are there socio-cultural groups present in or use the subproject area who may be considered as scheduled tribes (hill tribes, schedules tribes, tribal peoples, and indigenous people or communities) in the subproject area?				
2. Are there national or local laws or policies as well as anthropological research/studies that consider these groups present in or using the subproject area as belonging scheduled tribes, tribal peoples, or cultural communities?				
3. Do such groups self-identify as being part of a distinct social and cultural group?				
4. Do such groups maintain collective attachments to distinct habitats or ancestral territories and/or to the natural resources in these habitats and territories?				
5. Do such groups maintain cultural, economic, social, and political institutions distinct from the dominant society and culture?				
6. Do such groups speak a distinct language or dialect?				
7. Has such groups been historically, socially and economically marginalized, disempowered, excluded, and/or discriminated against?				
8. Will the project target any of the groups and communities identified?				
9. Will the subproject directly or indirectly impact on their livelihood?				

SUBPROJECTS MAY ONLY PROCEED IF 'NO' WAS SELECTED FOR ALL THEABOVE INDIGENOUS PEOPLES SCREENING QUESTIONS.

#### **APPENDIX 2: IEE UPDATE OUTLINE**

Unless a site-specific assessment is required the consolidated screening forms, together with any consultation proformas, will comprise the basis for the IEE update for each subproject. The IEE update for each subproject will be attached to the IEE in the form of anannex.

If a site-specific assessment is required for any components/activities, then a detailed assessment of the potential impacts and risks is to be included in the update annex, together with a site-specific EMP to accompany the project-level EMP for implementation by the contractor.

- **Description of the Project**, attach project description section based on completed project description forms for the subproject.
- Description of the Environment, attach baseline section based on completed baseline forms for all subproject components/activities together with a short elaboration of the locational aspects of the baseline environment supported by the zone/division which the subproject covers with being attention paid to land use, population and vulnerabilities, presence of protected areas, KBAs, reserved forest areas, elephant and tiger corridors, physical cultural resources etc.
- Existing Facilities Audit, in relation to 11kV feeder lines attach completed environment audit form for all existing substations in subproject, identifying applicablecorrective actions.
- Site-Specific Environmental Impacts and Mitigation Measures, required only when screening identifies a site-specific assessment is required due to the presence of any sensitive receptors.
- Information Disclosure, Consultation, and Participation, for all subproject components/activities provide summary per below table and attach copies of completed consultation proformas.

Consultation Activities	Yes	No	
Meaningful consultations with community were conducted before finalizing the alignment			Details of consultations undertaken, Table 1 and 2
Suggestions received in finalizing the alignment			Suggestions provided, Table 3
If suggestions received, are they incorporated into design			

 Site-Specific EMP, not required unless site-specific EMP is required based on site-specific assessment.

# **APPENDIX 3: SOCIAL DUE DILIGENCE REPORT OUTLINE**

# **Due Diligence for Construction of Feeders (11kV Lines)**

#	Particulars	Description/Details/Status
1	Length of feeders and numbers of poles	-
2	Name of villages	
3	Name of circle/block	
4	Name of district	
5	Is it a tribal area? The answer must be in Y/N	
6	Type of area (road/agricultural/ plantation/residential /commercial and etc.) in the corridor?	
7	Ownership of land (private/Government)	
8	If private land, how many poles are erected and how much private land occupied by the poles?	
9	Land use pattern for the locations of pole erection.	
10	Have the owner(s) provided consent to support <sup>31</sup> on erecting the poles?	
11	If consent not given, then has compensation been provided to how many households and how much per each household?	
12	Is the feeder passing over houses or buildings?	
13	If yes, how many structures affected approximately?	
14	What type of the structures (residential/commercial/Others)?	
15	What are the impacts on the structures (i.e. number of structures affected, number of households affected and size of damages)?	
16	If damaged, has compensation been provided to how many households and how much per each household? Or damages repaired?	
17	Is the feeder passing over religious or cultural properties?	
18	What are the impacts on these properties (i.e. numbers of structures and size of damages)?	
19	If damaged, has it properly repaired or has compensation for repair been given to how many households and how much per household?	
20	Does the feeder require tree cutting?	
21	If yes, approximate number of trees to be cut	
22	Types and names of trees to be cut	
23	Has compensation been provided to how many households and how much per each household?	
24	Does the feeder require tree trimming?	
25	If yes, approximate number of trees to be trimmed	
26	Have the owner(s) agreed the tree trimming?	
27	If not, then has compensation been provided to how many households and how much per each household?	
28	Does the feeder have any impact on crops?	

 $^{\rm 31}$  The format for consent to support is included in section C of Appendix 8.

29	If yes, how much of the crop area affected?	
30	What are the types of crops?	
31	Have the owner(s) agreed to bear the crop losses?	
32	If not, then has compensation been provided to how many households and how much per each household?	
33	Any other impacts? Please specify.	
34	Have consultations undertaken how may times and with how many participants (men and women)?	
35	Remarks	

# Submitted by:

(Name of the TKC: Name and signature: Position:

Date:

## Verified by:

Name of the PMA: Name and signature:

Position: Date:

# Reviewed by:

Project Manager,
.....RE Project
Name and signature:

Position: Date: