

TENDER DOCUMENT FOR

**CONVERSION OF EXISTING TOWERS & RAISING
OF HEIGHT OF 66 KV O/H LINE OF CIRCUIT 1 & 2
BETWEEN OLD KONDLI GRID TO DALLUPURA GRID
BY ERECTING 04 NOS MONO POLE ALONG THE
DRAIN**

IN

BSES YAMUNA POWER LTD.

NIT NO CMC/BY/19-20/RB/SV/53

Due Date for Submission: 17.12.2019, 14:30 HRS

**BSES YAMUNA POWER LIMITED (BYPL)
SHAKTI KIRAN BUILDING, KARKARDOOMA,
DELHI-110032
CIN: U40109DL2001PLC111525
TEL: 011 3999 7111
WEBSITE: www.bsedelhi.com**

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INDEX

S NO	DOCUMENT DESCRIPTION	PAGE NO
VOLUME – I		
1	INSTRUCTION TO BIDDER(ITB)	1 To 14
1.2	APPENDIX I (<u>FORMAT FOR EMD BANK GUARANTEE</u>)	1 To 08
1.2.1	FORMAT FOR EMD BANK GUARANTEE	
1.2.2	BID FORM	
1.2.3	ACCEPTANCE FORM FOR PARTICIPATION IN REVERSE AUCTION EVENT	
1.2.4	LITIGATION HISTORY, CURRENT CONTRACT COMMITMENTS / WORK IN PROGRESS, FINANCIAL DATA	
1.2.5	VENDOR CODE OF CONDUCT	
2	SPECIAL CONDITION OF CONTRACT	1 To 15
3	GENERAL CONDITION OF CONTRACT-SUPPLY	1 To 16
3	ERECTION CONDITION OF CONTRACT	1 To 27
4	APPENDIX II	1 To 10
4.1	FORMAT OF ADVANCE BANK GUARANTEE	
4.2	FORMAT FOR PERFORMANCE BANK GUARANTEE	
4.3	BENEFICIARY'S BANK DETAIL WITH IFSC CODE	
4.4	FORMAT OF WARRANTY/GUARANTEE CERTIFICATE	
5	PRICE BID FORMATS (SUPPLY & SERVICES)	1 To 08
VOLUME – II – TECHNICAL SPECIFICATIONS		1 To 20



VOLUME – I

INFORMATION TO BIDDER (ITB)

OF

CONVERSION OF EXISTING TOWERS & RAISING OF HEIGHT OF 66 KV O/H LINE OF CIRCUIT 1 & 2 BETWEEN OLD KONDLI GRID TO DALLUPURA GRID BY ERECTING 04 NOS MONO POLE ALONG THE DRAIN

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Due Date for Submission: 17.12.2019, 14:30 HRS

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Table of Contents

VOLUME – I: INFORMATION TO BIDDER (ITB) 3

1.00 EVENT INFORMATION..... 3

2.00 QUALIFICATION CRITERIA..... 4

3.00 BIDDING AND AWARD PROCESS 5

3.01 BID SUBMISSION 5

3.02 TIME SCHEDULE 7

4.00 AWARD DECISION 8

5.00 MARKET INTEGRITY..... 8

6.00 SUPPLIER CONFIDENTIALITY..... 9

7.00 CONTACT INFORMATION 9

8.00 BID FORM 9

9.00 EMD 9

10.00 BID PRICES 10

11.00 BID CURRENCIES 10

12.00 PERIOD OF VALIDITY OF BIDS 10

13.00 ALTERNATIVE BIDS 11

14.00 FORMAT AND SIGNING OF BID 11

15.00 SEALING AND MARKING OF BIDS 11

16.00 DEADLINE FOR SUBMISSION OF BIDS 11

17.00 ONE BID PER BIDDER 11

18.00 LATE BIDS 12

19.00 MODIFICATIONS AND WITHDRAWAL OF BIDS 12

20.00 THE PURCHASER’S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS .. 12

21.00 AWARD OF CONTRACT 12

22.00 LETTER OF INTENT/ NOTIFICATION OF AWARD..... 12

23.00 CONTRACT PERFORMANCE BANK GAURANTEE 12

24.00 PACKAGE COMPLETION PERIOD (PROJECT) 12

25.00 GENERAL 13

VOLUME – I: INFORMATION TO BIDDER (ITB)

1.00 EVENT INFORMATION

- 1.01 BSES Yamuna Power Ltd (hereinafter referred to as “**BYPL**”) invites sealed tenders in 2 envelopes for following scope of works:

Sr.	Scheme Description Location Scheme Description	Estimate Cost Value In INR	EMD Value In INR	Qty.
1	CONVERSION OF EXISTING TOWERS & RAISING OF HEIGHT OF 66 KV O/H LINE OF CIRCUIT 1 & 2 BETWEEN OLD KONDLI GRID TO DALLUPURA GRID BY ERECTING 04 NOS MONO POLE ALONG THE DRAIN	2.29 Crore	4.58 Lakh	AS PER BOQ (Bidder is requested to verify the same before bidding by visiting the site)

The bidder must qualify the requirements as specified in clause 2.0 stated below.

All envelopes shall be duly super scribed “CONVERSION OF EXISTING TOWERS & RAISING OF HEIGHT OF 66 KV O/H LINE OF CIRCUIT 1 & 2 BETWEEN OLD KONDLI GRID TO DALLUPURA GRID BY ERECTING 04 NOS MONO POLE ALONG THE DRAIN”.

Bid shall be submitted in two (02) parts. Details of part are as follow:

Part A – Techno Commercial Bid
Part B – Price Bid

- 1.1. The schedule of specifications with detail terms & conditions can be obtained from address given below against submission of non-refundable demand draft of **Rs.1,180/-** drawn in favour of BSES Yamuna Power Ltd, payable at Delhi. The tender documents & detail terms and conditions can also be downloaded from the website www.bsesdelhi.com --> **BSES YAMUNA POWER LTD --> Tender --> Open Tenders**

In case tender papers are downloaded from the above website, then the bidder has to enclose a demand draft covering the cost of bid documents.

- 1.2. Bids will be received up to **17.12.2019, 14:30 PM.** at the address given below.

Part A of the Bid shall be opened on **17.12.2019, 15:00 PM.**

Part B of the Bid will be opened in case of Techno-Commercially qualified Bidders and the date of opening of same shall be intimated in due course. It is the sole responsibility of the bidder to ensure that the bid documents reach this office on or before the last date.

Head of Department

(CMC/BY/19-20/RB/SV/53)	Page 3 of 14	MONO POLE’S ON TURNKEY BASIS
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**Contracts & Materials Deptt.
BSES Yamuna Power Ltd
Ground Floor
Shaktikiran Building, Karkardooma
Delhi 110032**

- 1.3 BSES Yamuna Power Ltd reserves the right to accept/reject any or all tenders without assigning any reason thereof in the event of following:
- a) Tender fee of requisite value.
 - b) Earnest Money Deposit (EMD) of value 2% of the estimated value of quoted package is not deposited in shape of Demand Draft/Pay Order/Banker's Cheque /Bank Guarantee drawn in favor of BSES Yamuna Power Ltd, payable at Delhi.
 - c) The offer does not contain prices indicating break-up towards all taxes & duties in prescribed format
 - d) Complete Technical details are not enclosed.
 - e) Tender is received after due date and time.
 - f) Technical offer contains any prices
 - g) Prices are not FIRM and subject to Price Variation.

2.00 QUALIFICATION CRITERIA

The prospective bidder must qualify all of the following requirements and shall be eligible to participate in the bidding who meets following requirements and management has a right to disqualify those bidders who do not meet these requirements.

2.02 Technical Criteria:

SI No.	Criteria	Documents to be submitted by bidder
1	Bidder must have designed & supplied 66KV or higher rating Monopole in last 5 years.	Manufacturer self certificate and factory incorporation certificate
2	Bidder shall procure monopoles as per enclosed specification and for major equipments, line items, accessories etc shall be procured from BYPL approved Vendor.	i. Undertaking meeting the qualifying criteria
3	The bidder should have established project management, field quality assurance system & safety organization designed to achieve high level of reliability at various stages of field services required for successful erection, testing & commissioning and shall have designed, supplied, installed & commissioned project (of 66KV or higher), having minimum 05 Nos Mono Pole's in last 3 years. The list of such projects shall be furnished as per Format attached in SCHEDULE I (List of Projects).	i. Turnkey Purchase order/Work order copy ii. Work completion certificate copy

4	Performance certificate for 1 (One) year satisfactory performance from at least 02 companies should be submitted (of 66KV or higher)	Performance certificate
5	The bidder must possess valid ISO 9001 certification	Valid copy of ISO Certificate
6	The bidder should possess valid Electrical Contractor License issued by competent statutory agency to undertake work in NCT Delhi. In case bidder is not having this license, Bidder to give the undertaking that it will be obtained by them before the start of the work at site or suitable sub-contractor having the valid license shall be engaged for works at site where copy of valid license shall be submitted to BYPL before the start of the work.	<ul style="list-style-type: none"> i. Electrical Contractor License Copy ii. Undertaking meeting the qualifying criteria

2.02 Commercial Criteria:

SI No.	Criteria	Documents to be submitted by bidder
1	The bidder must have adequate Financial Stability and status to meet the financial obligation pursuant to the scope of work and shall have average annual turnover of minimum Rs 3 Crores during last three (3) Financial Years preceding the date of opening of bid	Duly certified CA certificate to be submitted
2	An undertaking (self certificate) that the bidder has not been blacklisted/debarred by any central/state government institution including electricity boards.	Undertaking
3	The bidder should have registered under GST ACT and shall submit PAN, EPF and GST Registration Number, in addition to other statutory compliances. The bidder must submit the copy of registrations and submit an undertaking that the bidder shall comply all the statutory compliances as per the applicable laws/rules etc before the start of the work.	<ul style="list-style-type: none"> i. Relevant Statutory Documents Copy ii. undertaking

Notwithstanding anything stated above, BYPL reserves the right to assess bidder's capability to perform the contract, assess the capability and installed capacity of the Bidder for carrying out the supplies, should the circumstances warrant such assessment in the overall interest of the purchaser. In this regard the decision of the purchaser is final.

3.00 BIDDING AND AWARD PROCESS

Bidders are requested to submit their offer strictly in line with this tender document. **NO DEVIATION IS ACCEPTABLE.** BYPL shall response to the clarifications raised by various bidders and the will be distributed to all participating bidders through website.

3.01 BID SUBMISSION

The bidders are required to submit the bids in 2(two) parts and submitted in **1 original + 1 Duplicate** to the following address:

(CMC/BY/19-20/RB/SV/53)	Page 5 of 14	MONO POLE'S ON TURNKEY BASIS
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**Head of Department
Contracts & Material Deptt.
BSES Yamuna Power Ltd
3rd Floor, A Block
Shaktikiran Building, Karkardooma
Delhi 110032**

PART A :: TECHNICAL **BID** comprising of following:

Sr. No	Descriptions	Type of Documents
Commercial :		
1	Tender Fee - Demand Draft (Rs.1180/-) (Incl GST)	Non-refundable demand draft for Rs 1180/- in case the forms are downloaded from website
2	EMD	In prescribed format
3	Power-of-Attorney	In prescribed stamp paper & format
4	PQR Compliances	Documentary evidence in support of qualifying criteria like : 1. Details of constitution of the company (Proprietary/Limited/etc along with the details), Memorandum of Association of the company 2. Bidders shall submit the certified annual Balance sheets for the last completed three (3) financial years 3. Supportive document on Positive Net worth. Credit rating/solvency certificate from competent authority. 4. Copies of Orders, Execution /Performance Certificate & Other Documents to support qualification Criteria
5	Signed Tender document	Original Tender documents duly stamped & signed on each page as token of acceptance
6	Black listing undertaking	Bidder should submit a Self undertaking signed by its Authorized Signatories that the Bidder or any of their sub contractor has not been blacklisted/barred by any Govt. Organization or Regulatory Agencies in India or abroad.
7	No litigation Certificate	Duly signed No Litigation Certificate as per attached format.
8	Commercial Terms and Conditions	Acceptance on Commercial Terms and Conditions viz Delivery schedule/period, Payment terms, PBG etc.
9	Acceptance on Reverse Auction	Duly signed Acceptance Form For Participation In Reverse Auction Event as per attached format
10	Bid Form (Unpriced) Duly Signed	Duly Signed Bid Form as per attached format

Sr. No	Descriptions	Type of Documents
11	Un price Bid Duly Signed	Duly Signed Un price Bid as per attached format
Technical:		
12	Technical Details/ Filled in GTP/Drawings	Bidder shall submit duly filled GTP with all Technical documents and Drawings.
13	Field Quality and assurance Plan (QAP)	Bidder shall submit the detailed QAP plan in their technical proposal.
14	Type Test Reports	Bidders shall submit the copy of type test reports in their technical bids in support of PQR conditions
15	Project Implementation Plan and Methodology	Bidder shall submit detail Project Implementation plan and methodology in their technical bid.
16	Testing Facilities	Bidder shall submit the details of testing facilities available at their works/factory.
17	Organization Chart & Manpower Details.	Bidder shall submit the details of Manpower to be deployed for project management with qualification and experience.
18	List of Current Commitments/ Work In Progress.	Bidder shall submit the list of projects (Current Commitments/Work in Progress)

- PART B** :: **FINANCIAL BID** comprising of (01 original only)
- Price strictly in the Format enclosed indicating Break up of basic price, taxes & duties, transportation etc

3.02 TIME SCHEDULE

The bidders should complete the following within the dates specified as under:

S.No.	Steps	Due date
1	Last Date of Sale of Bid Documents	16.12.2019
2	Date of Site Visit (If require)	04.12.2019, 10:00HRS
3	Pre-Bid Meeting	04.12.2019, 15:00HRS
4	Last Date of Queries, if any	05.12.2019
5	Last Date of Receipt of Bid Documents	17.12.2019, 14:30HRS
6	Date & Time of Opening of PART A - Technical and Commercial Bid	17.12.2019, 15:00HRS

This is a two part bid process. Bidders are to submit the bids in 2(Two) parts
Both these parts should be furnished in separate sealed covers super scribing NIT no. DUE DATE OF SUBMISSION, with particulars as **PART-A TECHNICAL BID & COMMERCIAL TERMS &**

(CMC/BY/19-20/RB/SV/53)	Page 7 of 14	MONO POLE'S ON TURNKEY BASIS
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CONDITIONS and **Part-B FINANCIAL BID** and these sealed envelopes should again be placed in another sealed cover which shall be submitted before the due date & time specified.

Part – A:: Technical Bid should not contain any cost information whatsoever and shall be submitted within the due date.

PART B:: This envelope will be opened internally after techno-commercial evaluation and only of the qualified bidders.

Bidder has to submit the item wise price bifurcation in bid. Un priced copy must be attached with the Part A (Technical Bid). Reverse Auction will be carried out on Lump sum Basis/Total Landed Cost i.e. Supply + Services

REVERSE AUCTION CLAUSE :: Purchaser reserves the right to use reverse auction as optional tool through SAP – SRM as an integral part of the entire tendering process. All techno-commercially qualified bidders shall participate in reverse auction.

Notwithstanding anything stated above, the Purchaser reserves the right to assess bidder's capability to perform the contract, should the circumstances warrant such assessment in the overall interest of the purchaser. In this regard the decision of the purchaser is final. Bidder to submit their acceptance as per format attached ANNEXURE-C

Bidder shall bids for one or more packages, however bid to be submitted for complete package comprising of Supply, Installation, testing and Commissioning of Grid, In-feed and Outgoing feeders as per scope of work/ BOQ of respective package for each and every items & activities.

BIDS RECEIVED AFTER DUE DATE AND TIME MAY BE LIABLE TO REJECTION

4.00 AWARD DECISION

- 4.01 Purchaser intends to award the business on a lowest bid basis, so suppliers are encouraged to submit the bid competitively. The decision to place purchase order/LOI solely depends on purchaser on the cost competitiveness across multiple lots, quality, delivery and bidder's capacity, in addition to other factors that Purchaser may deem relevant.
- 4.02 In the event of your bid being selected by purchaser (and / or its affiliates) and you subsequent DEFAULT on your bid; you will be required to pay purchaser (and / or its affiliates) an amount equal to the difference in your bid and the next lowest bid on the quantity declared in NIT/RFQ.
- 4.03 In case any bidder is found unsatisfactory during the Project execution, the award will be cancelled and BYPL reserves the right to award other bidders who are found fit.
- 4.05 The purchaser reserves all the rights to award the contract to one or more bidders so as to meet the Project execution requirement or nullify the award decision without citing any reason.
- 4.06 Qty Variation: The purchaser reserves the rights to vary the quantities to +/- 30%

5.00 MARKET INTEGRITY

We have a fair and competitive marketplace. The rules for bidders are outlined in the Terms &

(CMC/BY/19-20/RB/SV/53)	Page 8 of 14	MONO POLE'S ON TURNKEY BASIS
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Conditions. Bidders must agree to these rules prior to participating. In addition to other remedies available, we reserves the right to exclude a bidder from participating in future markets due to the bidder’s violation of any of the rules or obligations contained in the Terms & Condition. Bidders who violate the marketplace rules or engage in behavior that disrupts the fair execution of the marketplace restricts a bidder to length of time, depending upon the seriousness of the violation. Examples of violations include, but are not limited to:

- Failure to honor prices submitted to the marketplace.
- Breach of the terms of the published in Request For Quotation/NIT.

6.00 SUPPLIER CONFIDENTIALITY

All information contained in this RFQ is confidential and shall not be disclosed, published or advertised in any manner without written authorization from BYPL. This includes all bidding information submitted.

All RFQ documents remain the property of BYPL and all suppliers are required to return these documents to BYPL upon request.

Suppliers who do not honor these confidentiality provisions will be excluded from participating in future bidding events.

7.00 CONTACT INFORMATION

Technical clarification, if any, as regards this RFQ shall be sought in writing and sent by post/courier to following address. The same shall not be communicated through phone

	Technical	Commercial
Contact Person	Mr Ashwani Aggarwal & Gaurav Sharma Copy to : Mr. Rakesh Bansal	Mr Rakesh Bansal & Rajesh Srivastava
Address	BSES Yamuna Power Ltd , 3 rd floor, B Block, Shaktikiran Building, Karkardooma, Delhi 110032	C&M Deptt. 3 rd Floor , A-Block, BSES Yamuna Power Ltd Shaktikiran Building, Karkardooma, Delhi 110032
E-Mail ID	ashwani.aggarwal@relianceada.com gaurav.a.sharma@relianceada.com	rakesh.bansal@relianceada.com rajesh.r.srivastava@relianceada.com

8.00 BID FORM

The Bidder shall submit one “Original”, “Copy- 1”, of the Un price Bid Form, Supporting Documents & Technical Data Sheets duly filled in as per attached specification/BOM etc enclosed.

9.00 EMD

The bidder shall furnish, as part of its bid, an EMD amounting as specified in the RFQ. The EMD is required to protect the Purchaser against the risk of Bidder’s conduct which would warrant forfeiture.

The EMD shall be denominated in any of the following form:

- Bank Guarantee drawn in favour of BSES Yamuna Power Ltd, payable at Delhi.
- EMD shall be valid for One Hundred Eighty (180) days after due date of submission or amended due date of submission drawn in favour of BSES Yamuna Power Ltd

The EMD may be forfeited in case of:

(a) the Bidder withdraws its bid during the period of specified bid validity

or

(b) the case of a successful Bidder, if the Bidder does not

(i) accept the Purchase Order, or

(ii) furnish the required contract performance BG.

10.00 BID PRICES

10.01 Bidders shall quote for the entire Scope of Supply/Work with a break-up of prices for individual items and Taxes & Duties. The total Bid Price shall also cover all the Supplier's obligations mentioned in or reasonably to be inferred from the Bidding Documents in respect of Design, Supply, Transportation to site, all in accordance with the requirement of Bidding Documents. The Bidder shall complete the appropriate Price Schedules included herein, stating the Unit Price for each item & total Price with taxes, duties & freight upto destination.

10.02 The prices offered shall be inclusive of all costs as well as Duties, Taxes and Levies paid or payable during execution of the supply work, breakup of price constituents, should be there.

10.03 Prices quoted by the Bidder shall be "**Firm**" and not subject to any price adjustment during the performance of the Contract. **A Bid submitted with an adjustable price/ Price Variation Clause will be treated as non-responsive and rejected.**

10.04 The qty break-up shown else-where in Price Schedule is tentative. The bidder shall ascertain himself regarding material required for completeness of the entire work. Any item not indicated but is required to complete the job, shall be deemed to be included in the prices quoted.

10.05 The format for price bid is attached as Annexure B.

11.00 BID CURRENCIES

11.01 Prices shall be quoted in Indian Rupees Only.

12.00 PERIOD OF VALIDITY OF BIDS

12.01 Bids shall remain valid for 180 days from the due date of submission of the Bid & subsequent corrigendum/amendment/extension of due date of submission.

12.02 Notwithstanding Clause above, the Purchaser may solicit the Bidder's consent to an extension of the Period of Bid Validity. The request and the responses thereto shall be made in writing and sent by post/courier/e-mail.

13.00 ALTERNATIVE BIDS

13.01 Bidders shall submit Bids, which comply with the Bidding Documents. Alternative Bids will not be considered. The attention of Bidders is drawn to the provisions regarding the rejection of Bids in the terms and conditions, which are not substantially responsive to the requirements of the Bidding Documents.

14.00 FORMAT AND SIGNING OF BID

14.01 The original Bid Form and accompanying documents, clearly marked "Original Bid" plus copy1, must be received by the Purchaser at the date, time and place specified pursuant to Clauses 15.0 and 16.0. In the event of any discrepancy between the original and the copies, the original shall govern.

14.02 The original and copies of the Bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to sign on behalf of the Bidder. Such authorization shall be indicated by written Power-of-Authority accompanying the Bid.

14.03 The Bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the Bidder, in which case such corrections shall be initialed by the person or persons signing the Bid.

15.00 SEALING AND MARKING OF BIDS

15.01 Bid submission: One original, & copy1 (hard copies) of all the Bid Documents shall be sealed and submitted to the Purchaser before the closing time for submission of the bid.

15.02 The Technical Documents and the EMD shall be enclosed in a sealed envelope and the said envelope shall be superscribed with —"Technical & EMD". The price bid shall be inside another sealed envelope with superscribed "Financial Bid". Both these envelopes shall be sealed inside another big envelope. All the envelopes should bear the Name and Address of the Bidder and marking for the Original, & copy1. The envelopes should be superscribed with —"Tender Notice No. & Due date of opening".

15.03 The Bidder has the option of sending the Bids in person. Bids submitted by Email/Telex/Telegram /Fax will be rejected. No request from any Bidder to the Purchaser to collect the proposals from Courier/Airlines/Cargo Agents etc shall be entertained by the Purchaser.

16.00 DEADLINE FOR SUBMISSION OF BIDS

16.01 The original Bid, together with the required copies, must be received by the Purchaser at the address specified earlier.

16.02 The Purchaser may, at its discretion, extend the deadline for the submission of Bids by amending the Bidding Documents, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline will there after be subject to the deadline as extended.

17.00 ONE BID PER BIDDER

17.01 Each Bidder shall submit only one Bid by itself. No **Joint Venture/consortium is acceptable.**

(CMC/BY/19-20/RB/SV/53)	Page 11 of 14	MONO POLE'S ON TURNKEY BASIS
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A Bidder who submits or participates in more than one Bid will cause all those Bids to be rejected.

18.00 LATE BIDS

18.01 Any Bid received by the Purchaser after the deadline for submission of Bids prescribed by the Purchaser, pursuant to Clause 16.0, will be declared "Late" and may be rejected and returned unopened to the Bidder.

19.00 MODIFICATIONS AND WITHDRAWAL OF BIDS

19.01 The Bidder is not allowed to modify or withdraw its Bid after the Bid's submission.

20.00 THE PURCHASER'S RIGHT TO ACCEPT ANY BID AND TO REJECT ANY OR ALL BIDS

20.01 The Purchaser reserves the right to accept or reject any Bid and to annul the Bidding process and reject all Bids at anytime prior to award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Purchaser's action.

21.00 AWARD OF CONTRACT

The Purchaser will award the Contract to the successful Bidder whose Bid has been Determined to be the lowest-evaluated responsive Bid, provided further that the Bidder has been determined to be qualified to satisfactorily perform the Contract. Purchaser reserves the right to award order to other bidders in the tender, provided it is required for timely execution of project & provided he agrees to come to the lowest rate.

22.00 LETTER OF INTENT/ NOTIFICATION OF AWARD

The letter of intent/ Notification of Award shall be issued to the successful Bidder whose bids have been considered responsive, techno-commercially acceptable and evaluated to be the lowest (L1). The successful Bidder shall be required to furnish a letter of acceptance within 7 days of issue of the letter of intent /Notification of Award by Purchaser. The date of LOI/LOA shall be treated as Start date of Project.

23.00 CONTRACT PERFORMANCE BANK GAURANTEE

Within 15 days of the receipt of Notification of Award/ Letter of Intent/PO from the Purchaser, the successful Bidder shall furnish Contract Performance Bank Guarantee towards faithful performance of Contract for an amount of 10% (Ten percent) of the Contract Price. The Performance Bond shall be valid upto completion period/handing over, whichever is earlier plus 3 months claim period. Upon submission of the performance security, the EMD shall be released. 03 (three) nos. separate CPBG's shall be submitted against Supply, ETC & Civil Contract.

24.00 PACKAGE COMPLETION PERIOD (PROJECT)

24.01 Vendor require to complete the project as per package wise schedule as under

(CMC/BY/19-20/RB/SV/53)	Page 12 of 14	MONO POLE'S ON TURNKEY BASIS
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Package Name	Total Months for Handling over of the Package, From Zero Date	Total No. of Day for Handling over of the Package From Zero Date
Conversion of Existing Towers & Raising of Height of 66 kV O/H line of Circuit 1 & 2 between Old kondli Grid to Dallupura grid by erecting 04 Nos Mono Pole along the drain	4 months	120 days

25.00 GENERAL

All the Bids shall be prepared and submitted in accordance with these instructions.

- 25.01 Bidder shall bear all costs associated with the preparation and delivery of its Bid, and the Purchaser will in no case shall be responsible or liable for these costs.
- 25.02 The Bid should be submitted by the Bidder in whose name the bid document has been issued and under no circumstances it shall be transferred /sold to any other party.
- 25.03 The Purchaser reserves the right to request for any additional information and also reserves the right to reject the proposal of any Bidder, if in the opinion of the Purchaser, the data in support of NIT requirement is incomplete.
- 25.04 The Bidder is expected to examine all instructions, forms, terms & conditions and specifications in the Bid Documents. Failure to furnish all information required in the Bid Documents or submission of a Bid not substantially responsive to the Bid Documents in every respect may result in rejection of the Bid. However, the Purchaser's decision in regard to the responsiveness and rejection of bids shall be final and binding without any obligation, financial or otherwise, on the Purchaser.

APPENDIX I

(FORMAT FOR EMD BANK GUARANTEE)

(To be issued in a Non Judicial Stamp Paper of Rs.50/-purchased in the name of the bank)

Whereas [*name of the Bidder*] (herein after called the "Bidder") has submitted its bid dated [*date of submission of bid*] for the supply of [*name and/or description of the goods*] (here after called the "Bid").

KNOW ALL PEOPLE by these presents that WE [*name of bank*] at [*Branch Name and address*],having our registered office at [*address of the registered office of the bank*](herein after called the "Bank"),are bound unto BSES Yamuna Power Ltd., with it's Corporate Office at Shaktikiran Building, Karkardooma, Delhi - 110032, (herein after called —the "Purchaser")in the sum of Rs..... (Rupees..... only) for which payment well and truly to be made to the said Purchaser, the Bank binds itself, its successors, and assigns by these presents.

Sealed with the Common Seal of the said Bank this_____ day of_____ 20_____.

The conditions of this obligation are:

- 1 If the Bidder withdraws its Bid during the period of bid validity specified by the Bidder on the Bid Form ; or
2. If the Bidder, having been notified of the acceptance of its Bid by the Purchaser during the period of bid validity:
 - (a) fails or refuses to execute the Contract Form ,if required; or
 - (b) fails or refuses to furnish the performance security, In accordance with the Instructions to Bidders/ Terms and Conditions;

We undertake to pay to the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that is its demand the purchaser will note that amount claimed by it is due to it, owing to the occurrence of one or both of the two condition(s), specifying the occurred condition or condition(s).

This guarantee will remain in force up to and including One Hundred Eighty (180) days after the due date of submission bid, and any demand in respect thereof should reach the Bank not later than the above date.

(Stamp & signature of the bank)

Signature of the witness

APPENDIX I (CMC/BY/19-20/RB/SV/53)	Page 1 of 8	MONO POLE'S ON TURNKEY BASIS
---------------------------------------	-------------	------------------------------



BID FORM

To

Head of Department
Contracts & Material Deptt.
BSES Yamuna Power Ltd
Shaktikiran Building, Karkardooma,
Delhi 110032

Sir,

1 We understand that BYPL is desirous of procuring..... for it's licensed distribution network area in Delhi

2 Having examined the Bidding Documents for the above named works, we the undersigned, offer to deliver the goods in full conformity with the Terms and Conditions and technical specifications for the sum indicated in Price Bid or such other sums as may be determined in accordance with the terms and conditions of the contract .The amounts are in accordance with the Price Schedules attached herewith and are made part of this bid.

3 If our Bid is accepted, we under take to deliver the entire goods as) as per delivery schedule mentioned in Section IV from the date of award of purchase order/letter of intent.

4 If our Bid is accepted, we will furnish a performance bank guarantee for an amount of 10% (Ten)percent of the total contract value for due performance of the Contract in accordance with the Terms and Conditions.

5 We agree to abide by this Bid for a period of 180 days from the due date of bid submission and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

6 We declare that we have studied the provision of Indian Laws for supply of equipments/materials and the prices have been quoted accordingly.

7 Unless and until Letter of Intent is issued, this Bid, together with your written acceptance there of, shall constitute a binding contract between us.

8 We understand that you are not bound to accept the lowest, or any bid you may receive.

9 There is provision for Resolution of Disputes under this Contract, in accordance with the Laws and Jurisdiction of Contract.

Dated this..... day of..... 20

Signature..... In the capacity of

.....duly authorized to sign for and on behalf of

(IN BLOCK CAPITALS)

APPENDIX I (CMC/BY/19-20/RB/SV/53)	Page 2 of 8	MONO POLE'S ON TURNKEY BASIS
---------------------------------------	---------------------------	------------------------------

ACCEPTANCE FORM FOR PARTICIPATION IN REVERSE AUCTION EVENT

(To be signed and stamped by the bidder)

BSES Yamuna Power Ltd (hereinafter referred to as "**BYPL**") intends to use the reverse auction through SAP-SRM tool as an integral part of the entire tendering process. All the bidders who are found as techno commercial qualified based on the tender requirements shall be eligible to participate in the reverse auction event.

The following terms and conditions are deemed as accepted by the bidder on participation in the bid event:

1. BYPL shall provide the user id and password to the authorized representative of the bidder. (Authorization letter in lieu of the same be submitted along with the signed and stamped acceptance form)
2. BYPL will make every effort to make the bid process transparent. However, the award decision by BYPL would be final and binding on the bidder.
3. The bidder agrees to non-disclosure of trade information regarding the purchase, identity of BYPL, bid process, bid technology, bid documentation, bid details, and etc.
4. The bidder is advised to understand the auto bid process to safeguard themselves against any possibility of non-participation in the auction event.
5. In case of bidding through internet medium, bidders are further advised to ensure availability of the entire infrastructure as required at their end to participate in the auction event. Inability to bid due to telephone line glitch, internet response issues, software or hardware hangs; power failure or any other reason shall not be the responsibility of BYPL.
6. In case of intranet medium, BYPL shall provide the infrastructure to bidders, further, BYPL has sole discretion to extend or restart the auction event in case of any glitches in infrastructure observed which has restricted the bidders to submit the bids to ensure fair & transparent competitive bidding. In case of an auction event is restarted, the best bid as already available in the system shall become the start price for the new auction.
7. In case the bidder fails to participate in the auction event due any reason whatsoever, it shall be presumed that the bidder has no further discounts to offer and the initial bid as submitted by the bidder as a part of the tender shall be considered as the bidder's final no regret offer. Any offline price bids received from a bidder in lieu of non-participation in the auction event shall be out rightly rejected by BYPL.
8. The bidder shall be prepared with competitive price quotes on the day of the reverse auction event.
9. The prices as quoted by the bidder during the auction event shall be inclusive of all the applicable taxes, duties and levies and shall be FOR Landed Cost basis at BYPL site.
10. The prices submitted by a bidder during the auction event shall be binding on the bidder.
11. No requests for time extension of the auction event shall be considered by BYPL.
12. The original price bids of the bidders shall be reduced on pro-rata basis against each line item based on the final all inclusive prices offered during conclusion of the auction event for arriving at contract amount.

Signature & seal of the Bidder

APPENDIX I (CMC/BY/19-20/RB/SV/53)	Page 3 of 8	MONO POLE'S ON TURNKEY BASIS
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LITIGATION HISTORY

Year	Name of client	Details of contract & date	Cause of Litigation/arbitration and dispute	Disputed amount

CURRENT CONTRACT COMMITMENTS / WORK IN PROGRESS

Year	Name of client	Details of contract & date	Value of outstanding work	Estimated completion date

FINANCIAL DATA

(Duly Certified by Chartered Accountant)

	Actual in previous 5 financial years				
	FY 18-19	FY 17-18	FY 16-17	FY 15-16	FY 14-15
Total assets					
Current assets					
Total Liability					
Current Liability					
Profit before taxes					
Profit after taxes					

VENDOR CODE OF CONDUCT

Purchaser is committed to conducting its business in an ethical, legal and socially responsible manner. To encourage compliance with all legal requirements and ethical business practices, Purchaser has established this Vendor Code of Conduct (the "Code") for Purchaser's Vendors. For the purposes of this document, "Vendor" means any company, corporation or other entity that sells, or seeks to sell goods or services, to Purchaser, including the Vendor's employees, agents and other representatives.

Fundamental to adopting the Code is the understanding that a business, in all of its activities, must operate in full compliance with the laws, rules and regulations of the countries in which it operates. This Code encourages Vendors to go beyond legal compliance, drawing upon internationally recognized standards, in order to advance social and environmental responsibility.

I. Labour and Human Rights

Vendors must uphold the human rights of workers, and treat them with dignity and respect as understood by the international community.

- Fair Treatment - Vendors must be committed to a workplace free of harassment. Vendors shall not threaten workers with or subject them to harsh or inhumane treatment, including sexual harassment, sexual abuse, corporal punishment, mental coercion, physical coercion, verbal abuse or unreasonable restrictions on entering or exiting company provided facilities.

- Antidiscrimination - Vendors shall not discriminate against any worker based on race, colour, age, gender, sexual orientation, ethnicity, disability, religion, political affiliation, union membership, national origin, or marital status in hiring and employment practices such as applications for employment, promotions, rewards, access to training, job assignments, wages, benefits, discipline, and termination. Vendors shall not require a pregnancy test or discriminate against pregnant workers except where required by applicable laws or regulations or prudent for workplace safety. In addition, Vendors shall not require workers or potential workers to undergo medical tests that could be used in a discriminatory way except where required by applicable law or regulation or prudent for workplace safety.

- Freely Chosen Employment - Forced, bonded or indentured labour or involuntary prison labour is not to be used. All work will be voluntary, and workers should be free to leave upon reasonable notice. Workers shall not be required to hand over government-issued identification, passports or work permits as a condition of employment.

- Prevention of Under Age Labor - Child labor is strictly prohibited. Vendors shall not employ children. The minimum age for employment or work shall be 15 years of age, the minimum age for employment in that country, or the age for completing compulsory education in that country, whichever is higher. This Code does not prohibit participation in legitimate workplace apprenticeship programs that are consistent with Article 6 of ILO Minimum Age Convention No. 138 or light work consistent with Article 7 of ILO Minimum Age Convention No. 138.

- Juvenile Labor - Vendors may employ juveniles who are older than the applicable legal minimum age for employment but are younger than 18 years of age, provided they do not perform work likely to jeopardize their health, safety, or morals, consistent with ILO Minimum Age Convention No. 138.

- Minimum Wages - Compensation paid to workers shall comply with all applicable wage laws, including those relating to minimum wages, overtime hours and legally mandated benefits. Any Disciplinary wage deductions are to conform to local law. The basis on which workers are being paid is to be clearly conveyed to them in a timely manner.

- . Working Hours - Studies of good manufacturing practices clearly link worker strain to reduced productivity, increased turnover and increased injury and illness. Work weeks are not to exceed maximum set by local law. Further, a work week should not be more than 60 hours per week, including overtime, except in emergency or unusual situations. Workers should be allowed at least one day off per seven-day week.
- . Freedom of Association - Open communication and direct engagement between workers and management are the most effective ways to resolve workplace and compensation issues. Vendors are to respect the rights of workers to associate freely and to communicate openly with management regarding working conditions without fear of reprisal, intimidation or harassment. Workers’ rights to join labour unions seek representation and or join worker’s councils in accordance with local laws should be acknowledged.

II. Health and Safety

Vendors must recognize that in addition to minimizing the incidence of work-related injury and illness, a safe and healthy work environment enhances the quality of products and services, consistency of production and worker retention and morale. Vendors must also recognize that ongoing worker input and education is essential to identifying and solving health and safety issues in the workplace.

The health and safety standards are:

- . Occupational Injury and Illness - Procedures and systems are to be in place to prevent, manage, track and report occupational injury and illness, including provisions to: a) encourage worker reporting; b) classify and record injury and illness cases; c) provide necessary medical treatment; d) investigate cases and implement corrective actions to eliminate their causes; and e) facilitate return of workers to work.
- . Emergency Preparedness - Emergency situations and events are to be identified and assessed, and their impact minimized by implementing emergency plans and response procedures, including: emergency reporting, employee notification and evacuation procedures, worker training and drills, appropriate fire detection and suppression equipment, adequate exit facilities and recovery plans.
- . Occupational Safety - Worker exposure to potential safety hazards (e.g., electrical and other energy sources, fire, vehicles, and fall hazards) are to be controlled through proper design engineering and administrative controls, preventative maintenance and safe work procedures (including lockout/tagout), and ongoing safety training. Where hazards cannot be adequately controlled by these means, workers are to be provided with appropriate, well-maintained, personal protective equipment. Workers shall not be disciplined for raising safety concerns.
- . Machine Safeguarding - Production and other machinery is to be evaluated for safety hazards. Physical guards, interlocks and barriers are to be provided and properly maintained where machinery presents an injury hazard to workers.
- .Industrial Hygiene - Worker exposure to chemical, biological and physical agents is to be identified, evaluated, and controlled. Engineering or administrative controls must be used to control overexposures. When hazards cannot be adequately controlled by such means, worker health is to be protected by appropriate personal protective equipment programs.
- .Sanitation, Food, and Housing - Workers are to be provided with ready access to clean toilet, facilities potable water and sanitary food preparation, storage, and eating facilities. Worker dormitories provided by the Participant or a labour agent are to be maintained clean and safe, and provided by the Participant or a labour agent, hot water for bathing and showering, and adequate heat and ventilation and reasonable personal space along with reasonable entry and exit privileges.



- . Physically Demanding Work - Worker exposure to the hazards of physically demanding tasks, including manual material handling and heavy or repetitive lifting, prolonged standing and highly repetitive or forceful assembly tasks is to be identified, evaluated and controlled.

III. Environmental

Vendors should recognize that environmental responsibility is integral to producing world class products In manufacturing operations, adverse effects on the environment and natural resources are to be minimized while safeguarding the health and safety of the public.

The environmental standards are:

- . Product Content Restrictions - Vendors are to adhere to applicable laws and regulations regarding prohibition or restriction of specific substances including labeling laws and regulations for recycling and disposal. In addition, Vendors are to adhere to all environmental requirements specified by Purchaser.
- . Chemical and Hazardous Materials -Chemical and other materials posing a hazard if released to the environment are to be identified and managed to ensure their safe handling, movement storage, recycling or reuse and disposal.
- . Air Emissions - Air emissions of volatile organic chemicals, aerosols, corrosives, particulates, ozone depleting chemicals and combustion by-products generated from operations are to be characterized, monitored, controlled and treated as required prior to discharge.
- . Pollution Prevention and Resource Reduction -Waste of all types, including water and energy, are to reduced or eliminated at the source or by practices such as modifying production, maintenance and facility processes, materials substitution, conservation, recycling and re-using materials.
- . Wastewater and Solid Waste - Wastewater and solid waste generated from operations industrial processes and sanitation facilities are to be monitored, controlled and treated as required prior to discharge or disposal.
- . Environmental Permits and Reporting - All required environmental permits (e.g. discharge monitoring) and registrations are to be obtained, maintained and kept current and their operational and reporting requirements are to be followed.

IV. Ethics

Vendors must be committed to the highest standards of ethical conduct when dealing with workers, Vendors, and customers.

- . Corruption, Extortion, or Embezzlement - Corruption, extortion, and embezzlement, in any form, are strictly prohibited. Vendors shall not engage in corruption, extortion or embezzlement in any form and violations of this prohibition may result in immediate termination as an Vendor and in legal action.
- . Disclosure of Information - Vendors must disclose information regarding its business activities, structure financial situation, and performance in accordance with applicable laws and regulations and prevailing industry practices.
- . No Improper Advantage - Vendors shall not offer or accept bribes or other means of obtaining undue or improper advantage.
- . Fair Business, Advertising, and Competition - Vendors must uphold fair business standards in advertising, sales, and competition.
- . Business Integrity - The highest standards of integrity are to be expected in all business interactions. Participants shall prohibit any and all forms of corruption, extortion and embezzlement. Monitoring and enforcement procedures shall be implemented to ensure conformance.

APPENDIX I (CMC/BY/19-20/RB/SV/53)	Page 7 of 8	MONO POLE’S ON TURNKEY BASIS
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- . Community Engagement - Vendors are encouraged to engage the community to help foster social and economic development and to contribute to the sustainability of the communities in which they operate.
- . Protection of Intellectual Property - Vendors must respect intellectual property rights; safeguard customer information; and transfer of technology and know-how must be done in a manner that protects intellectual property rights.

V. Management System

Vendors shall adopt or establish a management system whose scope is related to the content of this Code. The management system shall be designed to ensure (a) compliance with applicable laws, regulations and customer requirements related to the Vendors’ operations and products; (b) conformance with this Code; and (c) identification and mitigation of operational risks related to this Code. It should also facilitate continual improvement.

The management system should contain the following elements:

- . Company Commitment - Corporate social and environmental responsibility statements affirming Vendor’s commitment to compliance and continual improvement.
- . Management Accountability and Responsibility - Clearly identified company representative[s] responsible for ensuring implementation and periodic review of the status of the management systems.
- . Legal and Customer Requirements - Identification, monitoring and understanding of applicable laws, regulations and customer requirements.
- . Risk Assessment and Risk Management - Process to identify the environmental, health and safety and labour practice risks associated with Vendor’s operations. Determination of the relative significance for each risk and implementation of appropriate procedural and physical controls to ensure regulatory compliance to control the identified risks.
- . Performance Objectives with Implementation Plan and Measures - Areas to be included in a risk assessment for health and safety are warehouse and storage facilities, plant/facilities support equipment, laboratories and test areas, sanitation facilities (bathrooms), kitchen/cafeteria and worker housing /dormitories. Written standards, performance objectives, and targets an implementation plans including a periodic assessment of Vendor’s performance against those objectives.
- . Training - Programs for training managers and workers to implement Vendor’s policies, procedures and improvement objectives.
- . Communication - Process for communicating clear and accurate information about Vendor’s performance, practices and expectations to workers, Vendors and customers.
- . Worker Feedback and Participation - Ongoing processes to assess employees’ understanding of and obtain feedback on practices and conditions covered by this Code and to foster continuous improvement.
- . Audits and Assessments - Periodic self-evaluations to ensure conformity to legal and regulatory requirements, the content of the Code and customer contractual requirements related to social and environmental responsibility.
- . Corrective Action Process - Process for timely correction of deficiencies identified by internal or external assessments, inspections, investigations and reviews.
- . Documentation and Records - Creation of documents and records to ensure regulatory compliance and conformity to company requirements along with appropriate confidentiality to protect privacy.

The Code is modeled on and contains language from the Recognized standards such as International Labour Organization Standards (ILO), Universal Declaration of Human Rights (UDHR), United Nations Convention against Corruption, and the Ethical Trading Initiative (ETI) were used as references in preparing this Code and may be useful sources of additional information

APPENDIX I (CMC/BY/19-20/RB/SV/53)	Page 8 of 8	MONO POLE’S ON TURNKEY BASIS
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**SPECIAL CONDITIONS OF CONTRACT
(SCC)**

OF

**CONVERSION OF EXISTING TOWERS & RAISING
OF HEIGHT OF 66 KV O/H LINE OF CIRCUIT 1 & 2
BETWEEN OLD KONDLI GRID TO DALLUPURA GRID
BY ERECTING 04 NOS MONO POLE ALONG THE
DRAIN**

IN

BSES YAMUNA POWER LTD.

**BSES YAMUNA POWER LIMITED (BYPL)
SHAKTI KIRAN BUILDING, KARKARDOOMA,
DELHI-110032
CIN: U40109DL2001PLC111525
TEL: 011 3999 7111
WEBSITE: www.bsedelhi.com**

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Special Conditions of Contract - SCC (CMC/BY/19-20/RB/SV/53)	Page 1 of 15	MONO POLE'S ON TURNKEY BASIS
--	--------------	------------------------------

Table of Contents

<u>SPECIAL CONDITIONS OF CONTRACT</u>	3
1.0 <u>PRIORITY OF CONTRACT DOCUMENTS:</u>	3
2.0 <u>SCOPE OF WORK:</u>	3
3.0 <u>CONTRACT PRICES:</u>	5
4.0 <u>QUANTITIES VARIATION UNDER THE AWARDED CONTRACT:</u>	5
5.0 <u>FIRM CONTRACT PRICES:</u>	5
6.0 <u>STATUARY VARIATION IN TAXES:</u>	5
7.0 <u>COMPLETION TIME:</u>	5
8.0 <u>BANK GUARANTEE:</u>	6
9.0 <u>LIQUIDATED DAMAGES:</u>	6
10.0 <u>LIABILITY & DAMAGES:</u>	7
11.0 <u>WARRANTEE/DEFECT LIABILITY PERIOD:</u>	7
12.0 <u>LATENT DEFECT LIABILITY PERIOD:</u>	8
13.0 <u>INSURANCE:</u>	8
14.0 <u>DRAWINGS/DOCUMENTS:</u>	9
15.0 <u>TERMS OF PAYMENT:</u>	9
A) <u>FOR SUPPLY OF EQUIPMENT AND MATERIALS:</u>	9
B) <u>FOR ERECTION, INSTALLATION AND TESTING & COMMISSIONING:</u>	9
16.0 <u>ARBITRATION:</u>	10
17.0 <u>UNFORESEEABLE SUB-SURFACE CONDITIONS:</u>	10
18.0 <u>FORCE MAJEURE:</u>	10
19.0 <u>SUSPENSION OF WORK:</u>	13
20.0 <u>FINAL TAKING OVER OF THE PACKAGES:</u>	14
21.0 <u>OPERATION:</u>	14
22.0 <u>CONSTRUCTION WATER AND POWER:</u>	14
<u>ANNEXURE - I</u>	15
<u>EXECUTION SCHEDULE</u>	15

SPECIAL CONDITIONS OF CONTRACT

1.0 PRIORITY OF CONTRACT DOCUMENTS:

The several documents forming the Contract are to be taken as mutually explanatory of one another, but in case of ambiguities or discrepancies, the same shall be explained and adjusted by the Purchaser, who shall thereupon issue to the Contractor instructions thereon. In such event, unless otherwise provided in the Contract, the priority of the documents forming the Contract shall be as follows:

1. The Contract Agreement
2. The Letter of Acceptance/ Intent
3. Agreed Minutes of the Contract Negotiation Meetings
4. Agreed Minutes of the contract Technical Meetings
5. Instruction To Bidders (ITB)
6. Special Condition of Contract (SCC)
7. General Condition of Contract (GCC)
8. Erection Conditions of Contract (ECC)
9. Civil Conditions of Contract
10. The Priced Bill of Quantities
11. The Particular Technical Specifications
12. The General Technical Specifications
13. The Submitted Tender, including all Appendices and/or Addenda, the latest taking precedence.

2.0 SCOPE OF WORK:

The scope of work under this contract shall include the turnkey execution on End to End Basis, including but not limited to design, manufacturing, inspection & testing, dispatches, loading, unloading, storage at site, erection & installation, testing of the installation, associated civil work, commissioning, Handing over to the purchaser including comprehensive marine cum storage cum erection Insurance (MSE) on "Single Point Responsibility Basis"

The entire scope of work under the contract shall be executed strictly as per the NIT conditions and the technical specification.

Scope of work shall mainly include:

1. The Scope of work under the package shall include all Supply, Survey, Design, Engineering, Manufacturing, Shop testing, Inspection, packing, dispatch, loading, unloading and storage at site, Marine cum Storage cum Erection Insurance policy, assembly, Erection, Structural and Civil work, complete pre-commissioning checks, testing and commissioning at site, obtaining statutory clearance & certification from Chief Electrical Inspector of Delhi and any other statutory authority for charging the substation and handing over of complete package.

2. The scope shall also include supply at site of all barricading, free-issued materials if any (including installation, transportation, loading & unloading), dewatering, watch and ward and transportation of scrap (generated at Site), balance free-issued material, dismantled material from site to site , site to BYPL store including loading & unloading and no additional charges shall be paid against these activities. Used barricading material will be taken back by contractor soon after job is handed over or as directed by BYPL Engineering Incharge. No additional cost for these items will be paid to the Bidder. Any leakage, pilferage and damage of the material shall be in vendor's scope.
3. Contractor shall submit the detailed PERT chart/L2 Network for the execution of the package awarded for BYPL review and approval with major intermediate milestone as mentioned in Annexure- I. Contractor shall strictly adhere to the implementation schedule as per the project plan submitted and approved.
4. All the materials supplied against this contract shall be as per BYPL approved "Makes" and "Specifications" ONLY.
5. Wherever BYPL specifications are not available, relevant IS/IEC to be followed. All Drawings mentioned in the Tender Specification and others required for completion of the work shall be submitted and approval of BYPL Engineer in Charge obtained before commencement of any job. Drawing submission process shall not be deemed complete until all the requirements are complied during the submission of the same.
7. The Contractor shall have own testing equipments with valid Calibration Certificates for testing.
8. The Contractor shall have own Safety equipment like Neon Tester, Portable Earth, Earthing discharge rod etc. along with valid Calibration Certificates of all the equipment.
9. The Bidder should have all major tools and tackles required for execution of work like Bench Machine, Rollers, Jack for lifting the Cable drum along with valid test certificates etc.
10. Any material not specifically mentioned In BOQ but required for successful Erection, Testing and Commissioning of the package awarded shall be deemed to be in the scope of the bidder.
11. Successful Bidder shall depute Safety officer and Quality officer at site separately for each package and for the entire duration of the project and they shall submit the safety report and quality report to BYPL Site In charge on weekly basis.
12. Any item/work, not specifically mentioned in the NIT condition and technical specification but essentially required for completion of the work shall be the responsibility of the contractor.
13. All Statuary Compliances (wherever applicable) required to complete the work as defined above are in the scope of contractor.
15. Electrical inspection clearance certification from Chief Electrical Inspector of Delhi and any other statutory authority for charging the substation are in scope of Contractors.

3.0 CONTRACT PRICES:

The contract price shall be including all the detailed scope as specified in the contract for the package awarded and shall be inclusive of all taxes and duties (GST) as applicable.

Prices are inclusive of all taxes and duties including labour cess.

However, IT as per applicable rate will be deducted from your bills as Tax Deduction at Source (TDS).

GST is included in the contract price awarded , however GST payment shall be made on submission of GST Registration and self declaration on your letter head stating that contractor have deposited/or will deposit the Tax as per the applicable GST laws. Contractor shall furnish your GST registration number.

4.0 QUANTITIES VARIATION UNDER THE AWARDED CONTRACT:

Contract Unit rate shall applicable for the any addition/reduction in quantities to the extent as Specified below: Quantities may vary up to (+/-) 30%

5.0 FIRM CONTRACT PRICES:

The contract price shall remain "Firm" throughout the contract execution. No Price Variation and/or escalation on any account shall be payable to the Contractor for any reason whatsoever.

6.0 STATUARY VARIATION IN TAXES:

The total order value shall remain **FIRM**. However in case of any statutory variation in GST, or Taxes, duties and Levies imposed by Competent Authorities by way of fresh notification(s) shall be borne by BYPL on submission of the documentary evidence.

Any variation in taxes shall be applicable only to the direct/price breakup as mentioned in the contract.

7.0 COMPLETION TIME:

Package Name	Total Months for Handling over of the Package, From Zero Date	Total No. of Day for Handling over of the Package From Zero Date
Conversion of Existing Towers & Raising of Height of 66 kV O/H line of Circuit 1 & 2 between Old kondli Grid to Dallupura grid by erecting 04 Nos Mono Pole along the drain	4 months	120 days

Detailed Execution schedule, including intermediate milestone for the execution of the Package is attached as "**Annexure- I**".

8.0 BANK GUARANTEE:

Bank Guarantee	To be submitted on	Valid Upto (tentative)
Contract Performance Guarantee (10% of total Contract value)	Within 15 days of Issue of Order.	Valid till 90 days beyond the Project Completion period/Handing Over.
Bank Guarantee against Advance (For the advance amount)	Invoice for Advance amount along with advance bank guarantee.	Valid till Completion of supplies/work under the contract.
Equipment Performance Bank Guarantee (10% of total Contract value)	Time of claiming the last payment and Issuance of Final Taking over certificate from Purchaser / Owner,	Valid till Completion of Defect Liability Period plus 3 months.

9.0 LIQUIDATED DAMAGES:

9.1 LD FOR DELAY IN COMPLETION OF WORK:

Time is essence of the Contract.

After issuance of the Letter of Intent, the contractual network / L2 network will be finalized and approved by the BYPL. Contractor shall strictly adhere to the completion schedule and intermediate milestones agreed.

If the Contractor fails to successfully hand over the Packages awarded within the agreed contract completion schedule the contractor shall pay to the Purchaser/ Owner, Liquidated damages for the delayed period at the rate of 0.5% of the total contract price per each week of delay or Pro-rata thereof, by which the Completion is delayed.

Maximum LD for delay is 10% of Contract Value.

It is agreed that liquidated damages are a genuine Pre-estimate of damages and not by way of penalty.

9.2 LD ON INTERMEDIATE MILESTONE:

Liquidated Damages shall be applicable on the delay in achieving Intermediate milestone as agreed in the L2 Network which shall be at the rate of **0.5% of the total contract price per each week of delay of Intermediate milestone or Pro-rata** thereof, by which the Milestones are delayed.

LD on delay in milestone activities shall be redeemable if the delays are covered subsequently and the package is handed over within the agreed schedule .

9.3 OVER ALL LIQUIDATED DAMAGES:

The overall Maximum LD for delay is 10% of Contract Value.

However, the total Liquidated Damages for delay will be limited as hereinafter provided below.

Notwithstanding the above, in the event the Contractor fails to complete the package as per the schedule; and delays the "Handling Over" of the package up to a period for which the liquidated damage for time delay becomes more than ten percent (10%) of the Contract Price, then the Purchaser at his sole discretion, shall be entitled to treat the failure as an act of default by the Contractor and same shall entitle the Purchaser to terminate the Contract.

The liquidated damages for delay will be recovered at the sole discretion of the Purchaser from the Contract Price or from other securities/BG's available with the Purchaser or jointly.

10.0 LIABILITY & DAMAGES:

10.1 Limitation of Liability for Clause 9.1 and 9.2 above: The aggregate amount of Supplier liability to Purchaser for all Late Completion Liquidated Damages and Performances (Considered in aggregate), shall not exceed 10% of Contract Price.

10.2 Aggregate Liability of Supplier: Supplier's / Contractor liability to Purchaser under or in connection with the Supply and Erection Contract shall not exceed 110% of the respective Contract Price.

11.0 WARRANTEE/DEFECT LIABILITY PERIOD:

Warranty /Defect Liability Period shall be of **Twenty Four (24) months** from the date of Final Take Over of Packages by Purchaser.

The Contractor shall be liable to rectify all defects in the works done by the Contractor under this Contract, or from any act or omission of the contractors during Warranty / Defect Liability Period.

Contractor shall replace/ Repair all the materials / items supplied under the contract against any defect or failure, which arise due to faulty materials, workmanship or design for the entire defects liability period.

If during the defects liability period any materials / items are found to be defective, these shall be replaced or rectified by the bidder at his own cost within the agreed time schedule from the date of receipt of intimation. The bidder shall depute their service

Special Conditions of Contract - SCC (CMC/BY/19-20/RB/SV/53)	Page 7 of 15	MONO POLE'S ON TURNKEY BASIS
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personnel within 48 hours in case of emergency and shall ensure the availability of manpower/spares for the same during warranty period.

12.0 LATENT DEFECT LIABILITY PERIOD:

At the end of warranty period, the Supplier's Liability ceases except for latent defects.

Notwithstanding the completion of the Warranty Period, the Supplier shall be responsible for expeditiously making good by repair or replacement at its option and at its cost and expense any Latent Defect which appears before the expiry of the Latent Defects Liability Period.

The Contractor's Liability for latent defects warranty shall be limited to a period of Five (5) years from end of Warranty Period for all the supply items and the work executed under the contract.

For the purpose of this clause, the latent defects shall be the defects inherently lying within the material or arising out of design deficiency or the design deficiency of the implementation process adopted, which do not manifest themselves during Warranty period.

13.0 INSURANCE:

Contractor shall, at his own cost shall take Comprehensive Marine cum Storage cum Erection insurance policy for the total Project cost.

Contractor shall take, at his own cost, Third party insurance and suitable insurance policy for his own men and material.

The insurance covers to be taken by the Contractor shall be in a joint name of Purchaser and the Contractor. The Contractor shall, however, be authorized to deal directly with Insurance Company or companies during the contract period and shall be responsible in regard to maintenance of all insurance covers.

Any loss or damage to the equipment during handling, transportation, storage, erection, putting into satisfactory operation and all activities to be performed till the successful completion of and handling over Performance Guarantee tests of the plant shall be to the account of the Contractor. The Contractor shall be responsible for preference of all claims and make good for the damage or loss by way of repairs and/or replacement of the equipment, damaged or lost.

For all the insurance policies taken, Contractor shall be responsible for settlement of claims with the underwriters without any liability on the purchaser and will arrange replacements / rectification expeditiously without waiting for the settlement of insurance claim, at contractor's own cost and this shall not entitle the Contractor for any extension of Time and Cost Overrun.

Special Conditions of Contract - SCC (CMC/BY/19-20/RB/SV/53)	Page 8 of 15	MONO POLE'S ON TURNKEY BASIS
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Marine Transit risk on supply of material on 110% of captioned value & Erection all risk cover on 100% of Project cost which cover include any loss or damage not limited to AOG perils, earthquake and act of terrorism.

14.0 DRAWINGS/DOCUMENTS:

Drawings will be supplied to the Contractor by Purchaser as per Agreed Master Documents List (MDL) , Technical Specifications, BOQ and as mentioned in GCC.

15.0 TERMS OF PAYMENT:

A) FOR SUPPLY OF EQUIPMENT AND MATERIALS:

- A. 65% prorata of supply value item wise shall be payable against R/A bills for supply of equipments and materials within 45 days against receipt & acceptance of material at site and submission of following documents duly certified by BYPL Project-in-charge, complete in all respects:
- a) Signed copy of accepted Purchase Order (for first payment)
 - b) LR / RR / BL as applicable
 - c) Challan as applicable
 - d) Two (02) copies of Supplier's detailed Recipient Invoice showing Commodity description, quantity, unit price, total price and basis of delivery, and being 100% of the value of the consignment claimed.
 - e) Two (02) copies of Supplier's transporter invoice duly receipted by BYPL Stores & Original certificate issued by BYPL confirming receipt of the subject material at Stores/Site and acceptance of the same as per the provisions of the contract.
 - f) Two (02) copies Packing List / Detailed Packing List
 - g) Approved Test certificates / Quality certificates, if applicable
 - h) Certificate of Origin, if applicable
 - i) Material Dispatch Clearance Certificate (MDCC)
 - j) Insurance Policy / Certificate, if applicable
 - k) Warranty / Guarantee Certificate, if applicable
 - l) Check list for bill submission.
 - m) Performance Bank Guarantee equivalent to 10% of Supply value of the Contract valid upto Defect Liability period for 36 months from the date of handing over of the scheme plus 3 months Claim period.
- B. 20% prorata on account of supply value of the actual executed value after installation/erection of material duly certified by BYPL Project-in- charge.
- C. Balance 15% on account of supply value of the actual executed value shall be paid in 30 days

after completion of successful acceptance testing, commissioning and handing over of complete systems duly certified by BYPL Engineer-in-Charge specified in the tender and on submission of performance Bank Guarantee of 10% amount, in our format valid up to a defect liability period from the date of handing over of the scheme including submission of Electrical Inspector Clearance Certificate, Compliance of final punch point, No Demand Certificate, Letter of Indemnity by the supplier (The format of No Demand Certificate and Letter of Indemnity are attached as Annexure) and after reconciliation & adjustments of payments, if any towards quantities of materials issued from purchaser's stock and consumed by the contractor for expeditious completion of the job.

B) FOR ERECTION, INSTALLATION AND TESTING & COMMISSIONING:

Payment shall be made to you as under:

i) 85% pro-rata payment of total installation value of the actual executed value shall be made progressively on submission of your running invoices on Monthly basis duly certified by our Engineer In charge & shall be paid within 30 days on receipt of such bills at our office.

ii) Balance 15% on account of total installation value of the actual executed value payable shall be paid in 30 days after completion of successful acceptance testing, commissioning and handing over of complete systems duly certified by BYPL Engineer-in-Charge specified in the tender and on submission of performance Bank Guarantee of 10% amount, in our format valid up to a defect liability period from the date of handing over of the scheme including submission of Electrical Inspector Clearance Certificate, Compliance of final punch point, No Demand Certificate, Letter of Indemnity by the supplier (The format of No Demand Certificate and Letter of Indemnity are attached as Annexure) and after reconciliation & adjustments of payments, if any towards quantities of materials issued from purchaser's stock and consumed by the contractor for expeditious completion of the job.

16.0 ARBITRATION:

The venue of arbitration shall be New Delhi.

17.0 UNFORESEEABLE SUB-SURFACE CONDITIONS:

Notwithstanding anything contained elsewhere in the contract, if during the execution stage, the Contractor encounters on the Site any sub-surface conditions that are different from those envisaged from the soil testing / data available at the site, or the Contractor's own testing, which necessitates corrective action / changes in the method(s) of work, all costs related with such changes shall be borne by the Contractor. These conditions shall no way be compensated either for time, or costs, by the Purchaser.

18.0 FORCE MAJEURE:

Force Majeure Events:

Special Conditions of Contract - SCC (CMC/BY/19-20/RB/SV/53)	Page 10 of 15	MONO POLE'S ON TURNKEY BASIS
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For the purpose of this Agreement, Force Majeure means any act, event or circumstance, or combination of acts, events or circumstances, which materially and adversely affects the affected

Party's performance of its obligations pursuant to the terms of this Agreement, but only if and to the extent that such acts, events or circumstances are not within the affected Party's reasonable control, were not reasonably foreseeable and could not have been prevented or overcome by the affected Party through the exercise of reasonable skill or care.

18.1 Political Force Majeure Events:

Which shall comprise the following acts, events and circumstances:

i) Act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, blockade, embargo, revolution, riot insurrection, civil commotion, act of terrorism or sabotage, in each case occurring inside or directly involving India:

ii) Strikes, lockouts or other difficulties, which are politically motivated (rather than motivated primarily by a desire to improve compensation or working conditions of those involved) or are caused in whole or part by another event of Political Force Majeure or are part of a nation-wide or regional strike, or other generalised labour action occurring within India; (excluding such events which are site specific and attributable to the Supplier);

iii) Radioactive contamination or ionising radiation or chemical contamination originating from a source in India or resulting from another Political Force Majeure Event;

18.2 Non Political Force Majeure events comprising the following acts, events and circumstances:

i) Flood, cyclone, lightning, earthquake, drought, storm or any other extreme effect of the natural elements;

ii) Epidemic, or plague;

iii) Fire or explosion;

iv) Strikes, lockouts or other labour difficulties not included above (excluding such events which are Site specific and attributable only to the contractor)

v) Air crash, shipwreck or trainwreck or loss of or damage to any major component of the Facility arising in the course of transit.

18.3 Burden of Proof:

Special Conditions of Contract - SCC (CMC/BY/19-20/RB/SV/53)	Page 11 of 15	MONO POLE'S ON TURNKEY BASIS
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In the event that the Parties are unable in good faith to agree that a Force Majeure Event has occurred, the Parties shall submit the dispute for resolution pursuant to clause , provided that the burden of proof as to whether a Force Majeure Event has occurred shall be upon the Party claiming a Force Majeure Event.

18.4 Excused Performance:

The Party claiming Force Majeure shall give notice to the other Party of any Force Majeure Event as soon as reasonably practical after becoming aware of its existence, but not later than **twenty four (24)hours** after the date on which such Party knew or should reasonably have known of the commencement of the Force Majeure Event. Notwithstanding the above, if the Force Majeure Event results in a breakdown of communications rendering it not reasonably practicable to give notice within the applicable time limit specified herein, then the Party claiming Force Majeure shall give such notice as soon as reasonably practicable after the reinstatement of communications, but not later than forty eight (48) hours after such reinstatement.

(a) The Party claiming Force Majeure shall give notice to the other Party of:
i)The cessation of the relevant Force Majeure Event; and
ii) The cessation of the effects of such Force Majeure Event on the enjoyment by such Party of its rights or the performance by it of its obligations under this Agreement;
as soon as practicable after becoming aware thereof.

(b) The suspension of performance shall be of no greater scope and of no longer duration than is reasonably required by the Force Majeure Event.

(c) No liability of either Party which arose before the occurrence of the Force Majeure Event causing the suspension of performance shall be excused as a result of the occurrence, including, without limitation, liability for the timely payment of money otherwise due and earned by performance of tasks required under this Agreement by any Party.

(d) Any Party claiming Force Majeure shall use its reasonable efforts to mitigate and overcome the effects of any act, event or circumstance of Force Majeure as soon as practicable after the occurrence of a Force Majeure Event, including by mutual agreement the expenditure of reasonable sums of money, and to co-operate with the other Party to develop and implement a plan of remedial and reasonable alternative measures to remove the Force Majeure Event, provided, however, that no Party shall be required under this provision, to settle any strike or other labour dispute on terms it reasonably considers to be unfavourable to it. The Party claiming Force Majeure shall furnish weekly written reports to the other Party with respect to its progress in overcoming the effects of the act, event or circumstance of Force Majeure together with such supporting documentation and information as the other Party reasonably requires regarding the claim of Force Majeure.

(e) When the affected Party is able to resume performance of its obligations under this Agreement that Party shall give the other Party written notice to that effect and shall promptly resume performance hereunder.

18.5 Limitations:

Anything in this Agreement to the contrary notwithstanding:

(a) The affected Party shall not be relieved from obligations under this Agreement to the extent that the gross negligence of the affected Party (or, in the case of

Purchaser's Suppliers or any Subcontractor) contributes to or aggravates the Force Majeure Event ; and

(b) The existence of a Force Majeure Event shall not excuse the affected Party from its obligations to make payment of any monies otherwise due and payable by the affected Party pursuant to this Agreement.

18.6 Consequences of Force Majeure

Neither Party shall be considered in default or in breach of its obligations under this Agreement to the extent that performance of such obligations is prevented by any circumstances of a Force Majeure Event.

19.0 SUSPENSION OF WORK:

Purchaser reserves the right to suspend and reinstate execution of the whole or any part of the Works without invalidating the provisions of the Contract. Orders for suspension or reinstatement of the works will be issued to the Contractor in writing. The time for Completion of the Works will be extended for a period equal to duration of the suspension.

For an aggregate suspension period of less than Six (6) months the Contractor shall not claim any reimbursement. Any necessary and demonstrable costs incurred by the Contractor, as a result of suspension of the Works beyond the above period, will be paid by The Purchaser, provided such costs are substantiated to the satisfaction of The Purchaser. For this purpose, only the direct costs incurred shall be considered and this shall exclude any overheads, incidentals or profit. The Purchaser's decision in this regard will be final and binding. The Purchaser shall not be responsible for any liability if suspension or delay is due to some default on the part of the Contractor or its sub-contractor. Purchasers decision in this regard shall be final and binding. Purchaser shall not be responsible for any liability if suspension is caused due to some default on the part of the supplier and its sub suppliers.

Special Conditions of Contract - SCC (CMC/BY/19-20/RB/SV/53)	Page 13 of 15	MONO POLE'S ON TURNKEY BASIS
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20.0 FINAL TAKING OVER OF THE PACKAGES:

Upon successful completion of testing and Commissioning of the all the items/work under the package awarded and all the testing conducted to the Purchaser/Owner's satisfaction, the Purchaser shall issue to the Contractor a "Taking over Certificate" as a proof of the final acceptance of the packages only after receipt of such certificate from the Owner to Purchaser.

21.0 OPERATION:

Not Applicable

22.0 CONSTRUCTION WATER AND POWER:

Construction Water and power shall be arranged by Contractor at his own cost.

ANNEXURE - I

EXECUTION SCHEDULE

Contractor shall submit the detailed PERT chart/L2 Network for the execution of the package awarded for BYPL review and approval.

However the major milestone shall be as under:

SL NO	DESCRIPTION OF MATERIAL	TIMELINE
1	Zero Date (Letter of Award)	Zero Date
2	Mobilization of manpower	10 days from Zero Date
3	Submission of Drawings/Documents/calculations for Engineering Approval	10 days from Zero Date
4	Engineering Approval	20 days from Zero Date
6	Procurement/Supplies	70 days from Zero Date
6	Erection, Testing & Commissioning	100 days from Zero Date
7	Handing Over	120 days from Zero Date

**GENERAL CONDITIONS OF CONTRACT
(GCC-SUPPLY)**

OF

**CONVERSION OF EXISTING TOWERS & RAISING
OF HEIGHT OF 66 KV O/H LINE OF CIRCUIT 1 & 2
BETWEEN OLD KONDLI GRID TO DALLUPURA GRID
BY ERECTING 04 NOS MONO POLE ALONG THE
DRAIN**

IN

BSES YAMUNA POWER LTD.

**BSES YAMUNA POWER LIMITED (BYPL)
SHAKTI KIRAN BUILDING, KARKARDOOMA,
DELHI-110032
CIN: U40109DL2001PLC111525
TEL: 011 3999 7111
WEBSITE: www.bsedelhi.com**

*This document is a property of BYPL. This is not transferable and shall not be
used for any purpose other than, for which it is supplied.*

General Conditions of Contract – GCC SUPPLY (CMC/BY/19-20/RB/SV/53)	Page 1 of 16	MONO POLE'S ON TURNKEY BASIS
---	--------------	------------------------------

Table of Contents

GENERAL CONDITIONS OF CONTRACT (GCC)-SUPPLY	4
1. <u>PRIORITY AND CONTENT OF CONTRACT DOCUMENTS:</u>	4
2. <u>CONTRACT LANGUAGE:</u>	4
3. <u>DEFINITIONS AND INTERPRETATION:</u>	5
4. <u>EXAMINATION OF SITE AND LOCAL CONDITIONS:</u>	6
5. <u>LANGUAGE AND MEASUREMENT:</u>	6
6. <u>TIME – THE ESSENCE OF CONTRACT:</u>	7
7. <u>PROGRESS REPORT:</u>	7
8. <u>SCOPE OF WORK:</u>	7
9. <u>QUANTITY VARIATION AND EXTRA ITEM/WORK:</u>	7
10. <u>FIRM CONTRACT PRICES:</u>	8
11. <u>CONTRACT RATES:</u>	8
12. <u>TAXES AND DUTIES:</u>	8
13. <u>STATUTORY VARIATION:</u>	8
14. <u>CHANGE OF LAW:</u>	9
15. <u>SPECIFICATIONS AND STANDARDS:</u>	9
16. <u>QUALITY ASSURANCE AND INSPECTION:</u>	9
17. <u>ERRORS AND OMISSIONS:</u>	10
18. <u>PACKING, PACKING LIST & MARKING:</u>	10
19. <u>PRICE BASIS FOR SUPPLY OF MATERIALS:</u>	10
20. <u>TERMS OF PAYMENT AND BILLING – SUPPLY:</u>	11
21. <u>COMMISSIONING SPARES AND TOOLS & TACKLES:</u>	11
22. <u>RETURN, REPLACEMENT OR SUBSTITUTION:</u>	11
23. <u>PERFORMANCE GUARANTEE:</u>	11
24. <u>WARRANTY/DEFECTS LIABILITY PERIOD:</u>	11
25. <u>SUPPORT BEYOND THE GUARANTEE PERIOD:</u>	11
26. <u>DOCUMENTATION:</u>	12
27. <u>FORFEITURE:</u>	12
28. <u>SUSPENSION OR EXTENSION:</u>	12
29. <u>TERMINATION DUE TO CONTRACTORS DEFAULT:</u>	12
30. <u>EVENTS OF DEFAULT:</u>	13
31. <u>CONSEQUENCES OF DEFAULT:</u>	13
32. <u>RISK & COST:</u>	14
33. <u>ARBITRATION:</u>	14

34 **TERMINATION FOR CONVENIENCE OF BYPL:**..... 14
35 **LIQUIDATED DAMAGES:** 14
36 **TRANSFER AND SUB-LETTING:** 14
37 **RECOVERIES:** 15
38 **WAIVER:** 15
39 **INDEMNIFICATION:**..... 15
40 **PATENT RIGHTS AND ROYALTY:**..... 15
41 **CONFIDENTIALITY:** 15
42 **DISPUTE RESOLUTION & ARBITRATION:** 16

GENERAL CONDITIONS OF CONTRACT (GCC)-SUPPLY

The General Condition of Contract shall form a part of specifications, contract document.

1. PRIORITY AND CONTENT OF CONTRACT DOCUMENTS:

The several documents forming the Contract are to be taken as mutually explanatory of one another, but in case of ambiguities or discrepancies, the same shall be explained and adjusted by the Purchaser, who shall thereupon issue to the Contractor, instructions thereon. In such event, unless otherwise provided in the Contract, the priority of the documents forming the Contract shall be as follows:

1. The Contract Agreement
2. The Letter of Acceptance/ Intent
3. Agreed Minutes of the Contract Negotiation Meetings.
4. Agreed Minutes of the contract Technical Meetings.
5. Instruction To Bidders (ITB)
6. Special Condition of Contract (SCC)
7. General Condition of Contract (GCC)
8. Erection Conditions of Contract (ECC)
9. Civil Conditions of Contract
10. The Priced Bill of Quantities
11. The Particular Technical Specifications
12. The General Technical Specifications
13. The Submitted Tender, including all Appendices and/or Addenda, the latest taking precedence.

All the materials, literature, data and information of any sort given by the contractor along with its bid proposal subject to the approval of the purchaser.

2. CONTRACT LANGUAGE:

All documents, instructions, catalogues, brochures, pamphlets, design data, norms and calculations, drawings, operation, maintenance and safety manuals, reports, labels, on deliveries and any other data shall be in English Language only.

The Contract documents and all correspondence between the BYPL, Third Parties associated with the contract, and the Bidder shall be in English language.

However, all signboards required indicating "Danger" and/or security at site and otherwise statutory required shall be in English, Hindi.

3. DEFINITIONS AND INTERPRETATION:

Definitions TO BE FOLLOWED UNDER THE CONTRACT shall have following meanings:

3.1 COMPANY / PURCHASER / OWNER: Means BSES Yamuna Power Ltd, a company incorporated under the Companies Act 1956 and having its office at Shaktikiran Building, Karkardooma, Delhi - 110032, which expression shall include its authorized representatives, agents, successors and assigns.

3.2 CONTRACTOR: Shall mean the successful Tenderer / vendor to whom the contract has been awarded.

3.3 Rate: The unit rates for the work to be carried out at site shall be as per finalized unit rates through tender. The finalized rates shall be firm for the entire duration of work to be carried out by the Contractor under the work order and are not subject to escalation for any reason whatsoever.

3.4. CONTRACT SPECIFICATION: The terms "CONTRACT Specification" shall mean the Technical specification of the work as agreed by you and description of work as detailed in Annexure-I enclosed herewith and all such particulars mentioned directly/referred to or implied as such in the contract.

3.5. SITE: The terms "Site" shall mean the working location in BYPL area. Under this tender, working location shall be as mentioned elsewhere.

3.6. ENGINEER IN CHARGE: "Engineer In-charge" means the Company's authorized representative for the purpose of carrying out the work.

3.7 APPLICABLE LAW: Applicable Laws means the constitution of India and any act, rule, regulations, directive, notification, code, order or instruction having its force of law enacted or issued by any competent legislature or Governmental Agency (including those related to taxes, duties, assessments, expropriation and compulsory acquisition) as may be in effect from time to time the implications thereof shall be deemed a Change in Law or Change in Permits.

3.8 OTHER CLEARANCES: Means any consent, approval, permit or other authorisation which is required to be granted by authorities (local, government or any other) essential to start/complete the work.

3.9 DEFECT LIABILITY PERIOD: Shall mean the period during which the contractor shall remain liable for repair or replacement of any defective part of the work performed under the contract, free of cost.

3.10 TENDER SPECIFICATION: The terms "Tender Specification" shall mean the Indian Standard specification of the work and description of work as detailed in Tender document/Tender enclosed and all such particulars mentioned directly/referred to or implied as such in the Tender.

3.11. CONTRACT PRICE shall mean the price referred to in the "Letter of Intent/Purchase Order".

3.12 CONTRACT PERIOD shall mean the period during which the "Contract" shall be executed as agreed between the Supplier and the Purchaser in the Contract inclusive of extended contract period for reason beyond the control of the Supplier and/or Purchaser due to force majeure.

3.13 CODES AND SPECIFICATION shall mean all the applicable codes and standards as indicated in the Specification.

3.14 CHANGE OF WORK means any addition to, deletion from, suspension of or other modification, to the Work, or to the quality, function or as delineated in this Contract, including any such addition, deletion, suspension or other modification, which requires a change in one or more of the Technical Specifications and the completion schedule

3.15 EPC means Engineering, Procurement and Construction wherein the EPC contractor is made responsible for all the activities from design, procurement, supply, storage construction, commissioning and handover of the project to owner.

3.16 EFFECTIVE DATE OF CONTRACT means the date of issue/award of contract shall be the Effective Date of Contract or Contract Commencement date.

3.17 CONTRACT COMMENCEMENT DATE means the date of issue/award of contract shall be the Effective Date of Contract or Contract Commencement date.

3.18 CONTRACT COMPLETION DATE means the date of expiry of Guarantee/defect liability Period shall be deemed as the Contract Completion Date.

4. EXAMINATION OF SITE AND LOCAL CONDITIONS:

The contractor is deemed to have visited the site of the work and ascertained therefore all site conditions and information pertaining to his work.

Before submitting the bid, all bidders will at their expenses make or obtain any additional information, investigations, explorations, test and studies and obtain any additional information and data which pertains to the physical conditions at or contiguous to the site or otherwise which may affect cost, progress, performance of the work and which the bidder deems necessary to determine its Bid for performing the work in accordance with the time and other terms and conditions of the tender/contract documents.

The company shall not accept any claim whatsoever arising out of the difficult site/terrain/local conditions, if an

5. LANGUAGE AND MEASUREMENT:

The CONTRACT issued to the contractor by the company and all correspondence and documents relating to the CONTRACT placed on the Contractor shall be written in English language.

Metric System shall be followed for all dimension, units etc.

General Conditions of Contract – GCC SUPPLY (CMC/BY/19-20/RB/SV/53)	Page 6 of 16	MONO POLE'S ON TURNKEY BASIS
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6. TIME – THE ESSENCE OF CONTRACT:

The time and the date of Contract Execution completion of the "Package" as stipulated in the Letter of Intent/ Purchase order issued to the Supplier shall be deemed to be the essence of the "Contract". The "Entire Package" has to be completed and handed over not later than the aforesaid Schedule.

7. PROGRESS REPORT:

The supplier shall submit weekly/fortnightly/monthly progress report as desired by the Purchaser's Engineer in Charge and in the format mutually agreed between the parties.

8. SCOPE OF WORK:

The scope of work under this contract shall include the turnkey execution on End to End Basis , including but not limited to design, manufacturing, inspection & testing, dispatches, loading , unloading ,storage at site, erection & installation, testing of the installation, associated civil work ,commissioning ,handing over to the purchaser including comprehensive marine cum storage cum erection Insurance (MSE) on "Single Point Responsibility Basis" on turnkey Basis for the following packages:

Package Name	Total Months for Handling over of the Package, From Zero Date	Total No. of Day for Handling over of the Package From Zero Date
Conversion of Existing Towers & Raising of Height of 66 kV O/H line of Circuit 1 & 2 between Old kondli Grid to Dallupura grid by erecting 04 Nos Mono Pole along the drain	4 months	120 days

Brief Scope of Work related to all the supplies for the successful completion, testing & commissioning and final handover for the above packages shall be as per the NIT conditions with the following salient details.

Any item/work, not specifically mentioned in the NIT condition and technical specification but essentially required for completion of the work shall be the responsibility of the contractor. The "Scope of Supply" shall be on the basis of Bidder's responsibility, completely covering the obligations, responsibility and supplies provided in this Bid enquiry whether implicit or explicit.

9. QUANTITY VARIATION AND EXTRA ITEM/WORK:

The purchaser reserves the rights to vary the quantity as below:

General Conditions of Contract – GCC SUPPLY (CMC/BY/19-20/RB/SV/53)	Page 7 of 16	MONO POLE'S ON TURNKEY BASIS
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a) Quantity may vary up to (+/-) 30%.

The Bill of Quantity break-up shown else-where in Price Schedule is tentative. The bidder shall ascertain himself regarding material required for completeness of the entire work. Any item not indicated but is required to complete the job, shall be deemed to be included in the prices quoted.

Payment will be made on the basis of actual quantity of supplies/actual measurement of works accepted by BYPL and not on the basis of contract quantity.

10. FIRM CONTRACT PRICES:

The rates finalized for this order shall be firm for the entire duration of work carried out by the Contractor under the order and are not subject to any variation and escalation for any reason whatsoever.

11 CONTRACT RATES:

The rates finalized for this order shall be firm for the entire duration of work carried out by the Contractor under the order and are not subject to any variation and escalation for any reason whatsoever.

The cost of insurance during loading/unloading of materials/ equipments during its storage and handling/erection at site for installation is included in the contractor's scope and value is included in the unit rates finalized.

The unit rates finalized are also inclusive of Insurance policy taken as defined in Special Conditions Contracts (SCC) Though Bidders shall indicate the value separately.

Cost of operation as per the requirement specified in NIT , for the duration of Six (6) months are included in the contract prices, However Bidder shall indicate the separate value for the same.

12 TAXES AND DUTIES:

Prices are inclusive of all taxes and duties including labour cess.

GST is included in the contract price awarded , however GST payment shall be made on submission of GST Registration and self declaration on your letter head stating that contractor have deposited/or will deposit the Tax as per the applicable GST laws. Contractor shall furnish your GST registration number.

13 STATUTORY VARIATION:

Any statutory variations i.e. increase/decrease in Taxes / Duties introduces by central Govt. / State Govt. of shall be reimbursed/recovered to/from Contractor against documentary evidence and proof. Any variation in taxes shall be applicable only to the direct/price breakup as mentioned in the contract.

14 CHANGE OF LAW:

"Change in Law" means:

- a) any enactment or issue of any new Applicable Law,
- b) any amendment, alteration, modification, or repeal of any existing Applicable Law or any new or modified directive or order there under,
- c) any change or variation in taxes payable in connection with and under this Agreement in each case with respect to a), b), and c) above coming into effect after the date of this Agreement.

15 SPECIFICATIONS AND STANDARDS:

The Bidder shall follow all codes and standards referred in the Contract Document. Codes and standards not specifically mentioned in the Contract Document may be followed by the Bidder with the prior written approval of BYPL, provided materials, supplies and equipment according to the standard are equal to or better than the corresponding standards specified in the Contract.

Product manufactures /makes names mentioned in the Contract documents are for the purpose of establishing the type and quality of products to be used. The Bidder shall not change the brand name and qualities of the bought out items without the prior written approval of the BYPL. All such products and equipment shall be used or installed in strict accordance with original manufacturer's recommendations, unless otherwise directed by the BYPL. In any circumstances the codes, specimen and standards prescribed by any government agency should not be violated.

16 QUALITY ASSURANCE AND INSPECTION:

Immediately on award of contract, the bidder shall prepare detailed quality assurance plan/test procedure identifying the various stages of manufacture, quality checks performed at each stage, raw material inspection and the Customer hold points. The document shall also furnish details of method of checking, inspection and acceptance standards / values and get the approval of Purchaser before proceeding with manufacturing. However, Purchaser shall have right to review the inspection reports, quality checks and results of suppliers' in house inspection department which are not Customer hold points and the supplier shall comply with the remarks made by purchaser or his representative on such reviews with regards to further testing, rectification or rejection, etc. In case of standard items, BYPL shall forward the standard QAP which is to be followed by vendor during manufacturing.

Witness and Hold points are critical steps in manufacturing, inspection and testing where the supplier is obliged to notify the Purchaser in advance so that it may be witnessed by the Purchaser. Final inspection is a mandatory hold point. The supplier to proceed with the work past a hold point only after clearance by purchaser or a witness waiver letter from BYPL.

The performance of waiver of QA activity by Purchaser at any stage of manufacturing does not relieve the supplier of any obligation to perform in accordance with and meet all the requirements of the procurement documents and also all the codes & reference documents mentioned in the procurement document nor shall it preclude subsequent rejection by the purchaser.

General Conditions of Contract – GCC SUPPLY (CMC/BY/19-20/RB/SV/53)	Page 9 of 16	MONO POLE'S ON TURNKEY BASIS
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On completion of manufacturing, the items can only be dispatched after receipt of dispatch instructions issued by the Purchaser.

All in-house testing and inspection shall be done without any extra cost. The in-house inspection shall be carried out in presence of BYPL/BYPL authorized third party inspection agency. Cost of Futile/abortive visit(s) shall be debited from the invoices.

Purchaser reserves the right to send any material being supplied to any recognized laboratory for testing, wherever necessary and the cost of testing shall be borne by the Bidder. In case the material is found not in order with the technical requirement / specification, the charges along with any other penalty which may be levied is to be borne by the bidder.

17 ERRORS AND OMISSIONS:

The Supplier shall be responsible for all discrepancies, errors and omissions in the drawings, documents or other information submitted by him, irrespective of whether these have been approved, reviewed or otherwise accepted by the BYPL or not. However any error in design/drawing arising out of any incorrect data/written information from BYPL will not be considered as error and omissions on part of the Supplier.

18 PACKING, PACKING LIST & MARKING:

Packing: Supplier shall pack or shall cause to be packed all Commodities in crates/boxes/drums/containers/cartons and otherwise in such a manner as shall be reasonably suitable for shipment by road or rail to BYPL, Delhi/New Delhi stores/site without undue risk of damage in transit.

Packing List: The contents of each package shall be itemized on a detailed list showing the exact weight, extreme outside dimensions (length, width & weight) of each container/box/drum/carton, Item SAP Code, PO No & date. One copy of the packing list shall be enclosed in each package delivered.

19 PRICE BASIS FOR SUPPLY OF MATERIALS:

Bidders shall quote their prices on Landed Cost Basis and separate price for each item.

Bidders shall quote FIRM prices for supply to BYPL Delhi/New Delhi stores inclusive of all packing, forwarding, loading at manufacturer's premises, unloading at site/stores and payment of GST. Storage of material is under the bidder Scope. Bidder shall arrange transit Insurance as per clause nos. 8 mentioned in Volume -1 Special Condition of Contract (SCC).

20 TERMS OF PAYMENT AND BILLING – SUPPLY:

Terms of payment and Billing shall be as specified in Volume –I, Special Condition of Contract.

21 COMMISSIONING SPARES AND TOOLS & TACKLES:

Commissioning Spares shall be deemed to be included in the quoted price.

22 RETURN, REPLACEMENT OR SUBSTITUTION:

BYPL shall give Supplier notice of any defective Commodity promptly after becoming aware thereof. BYPL may in its discretion elect to return defective Commodities to Supplier for replacement, free of charge to BYPL, or may reject such Commodities and purchase the same or similar Commodities from any third party. In the latter case BYPL shall furnish proof to Supplier of the cost of such substitute purchase. In either case, all costs of any replacement, substitution, shipping, labour and other related expenses incurred in connection with the return and replacement or for the substitute purchase of a Commodity hereunder should be for the account of Supplier. BYPL may set off such costs against any amounts payable by BYPL to Supplier. Supplier shall reimburse BYPL for the amount, if any, by which the price of a substitute Commodity exceeds the price for such Commodity as quoted in the Bid.

23 PERFORMANCE GUARANTEE:

Performance Guarantee shall be as specified in Volume –I, Special Condition of Contract.

24 WARRANTY/DEFECTS LIABILITY PERIOD:

All supplies made/Work executed shall be guaranteed against any defect or failure which may arise due to faulty materials, design or workmanship for a period of 24 months from the date of final handing over of the entire package as defined in SCC.

If during the Defect Liability Period any work are found to be defective, shall be immediately rectified or repaired, upto BYPL satisfaction, by the contractor at his own cost within 10 days from the date of receipt of intimation from BYPL.

Under no circumstances any extra claim in terms of time and cost shall be entertained for such repair/rectification.

25 SUPPORT BEYOND THE GUARANTEE PERIOD:

The Bidder shall ensure availability of spares and necessary support for a period of at least Twenty (20) years post completion of guarantee period of equipments supplied against the contract.

26 DOCUMENTATION:

The Bidder's shall procure all equipment from BYPL approved sources as per attached specifications. The Bidder shall submit 5 copies of Material/Type Test Certificates, O&M Manuals, and Approved & As-built drawings. The Bidder shall ensure for the strict compliance to the specifications and Field Quality Procedures issued by BYPL Engineer in-charge.

27 FORFEITURE:

Each Performance Bond established under the contract shall contain a statement that it shall be automatically and unconditionally forfeited without recourse and payable against the presentation by BYPL of this Performance Bond, to the relevant bank referred to above, together with a simple statement that supplier has failed to comply with any term or condition set forth in the Contract. Each Performance BG established under will be automatically and unconditionally forfeited without recourse if BYPL in its sole discretion determines that supplier has failed to comply with any term or condition set forth in the contract.

28 SUSPENSION OR EXTENSION:

Purchaser reserves the right to suspend and reinstate execution of the whole or any part of the Works without invalidating the provisions of the Contract. Orders for suspension or reinstatement of the works will be issued to the Contractor in writing. The time for Completion of the Works will be extended for a period equal to duration of the suspension.

For an aggregate suspension period of less than Six (6) months the Contractor shall not claim any reimbursement. Any necessary and demonstrable costs incurred by the Contractor, as a result of suspension of the Works beyond the above period, will be paid by The Purchaser, provided such costs are substantiated to the satisfaction of The Purchaser. For this purpose, only the direct costs incurred shall be considered and this shall exclude any overheads, incidentals or profit. The Purchaser's decision in this regard will be final and binding. The Purchaser shall not be responsible for any liability if suspension or delay is due to some default on the part of the Contractor or its sub-contractor. Purchasers decision in this regard shall be final and binding. Purchaser shall not be responsible for any liability if suspension is caused due to some default on the part of the supplier and its sub suppliers.

29 TERMINATION DUE TO CONTRACTORS DEFAULT:

The Purchaser may terminate the contract after giving 7(seven) days notice if any of following occurs

- a) Contractor fails to complete execution of works within the approved schedule of works, terms and conditions
- b) In case the contractor commits any Act of Insolvency, or adjudged insolvent
- c) Has abandoned the contract
- d) Has failed to commence work or has suspended the progress of works
- e) Has failed to proceed the works with due diligence and failed to make such due progress

30 EVENTS OF DEFAULT:

BYPL may, without prejudice to any of its other rights or remedies under the Work Order or in law, terminate the whole or any part of this Work Order by giving written notice to the Contractor, if in the opinion of BYPL, contractor has neglected to proceed with the works with due diligence or commits a breach of any of the provisions of this work order including but not limited to any of the following cases:

- a) Failing to complete execution of work within the terms specified in this work order.
- b) Failing to complete works in accordance with the approved schedule of works.
- c) Failing to meet requirements of specifications, drawings, and designs as approved by BYPL.
- d) Failing to comply with any reasonable instructions or orders issued by BYPL in connection with the works.
- e) Failing to comply with any of the terms or conditions of this work order.
- (f) Supplier fails or refuses to deliver supplies conforming to this NIT / specifications, or fails to deliver supplies within the period specified in PO or any extension thereof
- (g) Supplier becomes insolvent or unable to pay its debts when due, or commits any act of bankruptcy, such as filing any petition in any bankruptcy, winding-up or reorganization proceeding, or acknowledges in writing its insolvency or inability to pay its debts; or the Supplier's creditors file any petition relating to bankruptcy of Supplier;
- (i) Supplier otherwise fails or refuses to perform or observe any term or condition of the Contract and such failure is not remediable or, if remediable, continues for a period of 30 days after receipt by the Supplier , of notice of such failure from BYPL.

In the event BYPL terminates this work order, in whole or in part, on the occurrence of any event of default, BYPL reserves the right to engage any other subcontractor or agency to complete the work or any part thereof, and in addition to any other right BYPL may have under this work order or in law including without limitation the right to penalize for delay under clause 15.0 of this work order, the contractor shall be liable to BYPL for any additional costs that may be incurred by COMPANY for the execution of the Work.

31 CONSEQUENCES OF DEFAULT:

- (a) If an Event of Default shall occur and be continuing, BYPL may forthwith terminate the Contract by written notice.
- (b) In the event of an Event of Default, BYPL may, without prejudice to any other right granted to it by law, or the Contract, take any or all of the following actions;
- (c) present for encashment to the bank the relevant Performance Bond;

General Conditions of Contract – GCC SUPPLY (CMC/BY/19-20/RB/SV/53)	Page 13 of 16	MONO POLE’S ON TURNKEY BASIS
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- (d) Purchase the same or similar Commodities from any third party; and/or
- (e) Recover any losses and/or additional expenses BYPL may incur as a result of Supplier's default

32. RISK & COST:

If the Contractor fails to execute the work as per NIT specification / as agreed in the contract within the scheduled period and even after the extended period, the contract shall get terminated and BYPL reserves the right to get the work executed from any other source at the Risk & Cost of the Contractor.

The Extra Expenditure so incurred shall be debited to the Contract.

33 ARBITRATION:

To the best of their ability, the parties hereto shall endeavor to resolve amicably between themselves all disputes arising in connection with this LOA. If the same remain unresolved within thirty (30) days of the matter being raised by either party, either party may refer the dispute for settlement by arbitration. The arbitration to be undertaken by two arbitrators, one each to be appointed by either party. The arbitrators appointed by both the parties shall mutually nominate a person to act as presiding arbitrator before entering upon the reference in the event of a difference between the two arbitrators and the award of the said presiding arbitrator in such a contingency shall be conducted in accordance with this provisions of the Indian Arbitration & Conciliation Act, 1996 and the venue of such arbitration shall be in the city of New Delhi only.

34 TERMINATION FOR CONVENIENCE OF BYPL:

BYPL at its sole discretion may terminate the contract by giving 30 days prior notice in writing or through email to the Supplier. BYPL shall pay the Supplier for all the supplies/ services rendered till the actual date of contract termination against submission of invoice by the Supplier to that effect.

35 LIQUIDATED DAMAGES:

Liquidated damages shall be as per Volume –I, Special Condition of Contract.

36 TRANSFER AND SUB-LETTING:

The Supplier shall not sublet, transfer, assign or otherwise part with the Contract or any part thereof, either directly or indirectly, without prior written permission of the Purchaser

General Conditions of Contract – GCC SUPPLY (CMC/BY/19-20/RB/SV/53)	Page 14 of 16	MONO POLE'S ON TURNKEY BASIS
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37 RECOVERIES:

Whenever under this contract any money is recoverable from and payable by the bidder, the purchaser shall be entitled to recover such sum by appropriating in part or in whole by deducting any sum due to which any time thereafter may become due from the supplier in this or any other contract. Should the sum be not sufficient to cover the full amount recoverable the bidder shall pay to the purchaser on demand the remaining balance.

38 WAIVER:

Failure to enforce any condition herein contained shall not operate as a waiver of the condition itself or any subsequent breach thereof.

39 INDEMNIFICATION:

Notwithstanding contrary to anything contained in this NIT, Supplier shall at his costs and risks make good any loss or damage to the property of the Purchaser and/or the other Supplier engaged by the Purchaser and/or the employees of the Purchaser and/or employees of the other Supplier engaged by the Purchaser whatsoever arising out of the negligence of the Supplier while performing the obligations under this contract.

40 PATENT RIGHTS AND ROYALTY:

If, in the course of performance of its functions and duties as envisaged by the scope of the present GCC, the Bidder acquires or develops, any unique knowledge or information which would be covered, or, is likely to be covered within the definition of a trademark, copyright, patent, business secret, geographical indication or any other form of intellectual property right, it shall be obliged, under the terms of this present GCC, to share such knowledge or information with BYPL. All rights, with respect to, or arising from such intellectual property, as afore mentioned, shall solely vest in BYPL.

Moreover, the Bidder undertakes not to breach any intellectual property right vesting in a third party/parties, whether by breach of statutory provision, passing off, or otherwise. In the event of any such breach, the Bidder shall be wholly liable to compensate, indemnify or make good any loss suffered by such third party/parties, or any compensation/damages arising from any legal proceeding/s, or otherwise. No liability of BYPL shall arise in this respect, and any costs, damages, expenses, compensation payable by BYPL in this regard to a third party/parties, arising from a legal proceeding/s or otherwise, shall be recoverable from the Bidder.

41 CONFIDENTIALITY:

Bidder and its employees or representatives thereof shall strictly maintain the confidentiality of various information they come across while executing the contract as detailed below.

Documents

General Conditions of Contract – GCC SUPPLY (CMC/BY/19-20/RB/SV/53)	Page 15 of 16	MONO POLE’S ON TURNKEY BASIS
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All maps, plans, drawings, specifications, schemes and other documents or information related to the Contract/Project and the subject matter contained therein and all other information given to the Bidder by BYPL in connection with the performance of the contract shall be held confidential by the Bidder and shall remain the property of the BYPL and shall not be used or disclosed to third parties by the Bidder for any purpose other than for which they have been supplied or prepared. The Bidder may disclose to third parties, upon execution of confidentiality agreements, such part of the drawings, specifications or information if such disclosure is necessary for the performance of the Work provided such third parties agree in writing to keep such information confidential to the same extent and degree as provided herein, for the benefit of the BYPL.

Geographical Data

Maps, layouts and photographs of the site including its surrounding regions showing vital installation for national security of country or those of BYPL shall not be published or disclosed to the third parties or taken out of the country without prior written approval of the BYPL and upon execution of confidentiality agreements satisfactory to the BYPL with such third parties prior to disclosure.

Violation

In case of violation of this clause, the Bidder is liable to pay compensation and damages as may be determined by the competent authority of BYPL.

42 DISPUTE RESOLUTION & ARBITRATION:

To the best of their ability, the parties hereto shall endeavor to resolve amicably between themselves all disputes arising in connection with this contract. If the same remain unresolved within thirty (30) days of the matter being raised by either party, either party may refer the dispute for settlement by arbitration. The arbitration to be undertaken by two arbitrators, one each to be appointed by either party. The arbitrators appointed by both the parties shall mutually nominate a person to act as presiding arbitrator before entering upon the reference in the event of a difference between the two arbitrators and the award of the said presiding arbitrator in such a contingency shall be conducted in accordance with the provisions of the Indian Arbitration & Conciliation Act, 1996 and the venue of such arbitration shall be in the city of New Delhi only. The language of proceedings, documents and communication shall be English.

Suspension of Work on Account of Arbitration

The reference to negotiation/arbitration shall proceed notwithstanding that the Works shall not then be or be alleged to be complete, provided always that the obligations of the Purchaser and the Supplier shall not be altered by reasons of arbitration being conducted during the progress of the Works. In no event shall the Supplier be entitled to suspend the Execution of the Works or part of the Works to which the Dispute relates on account of arbitration and payments to the Supplier shall continue to be made in terms of the Contract.

The laws and jurisdiction of contract

Where recourse to a Court is to be made in respect of any matter, the courts at Delhi shall have exclusive jurisdiction.

**ERECTION CONDITIONS OF CONTRACT
(ECC)**

OF

**CONVERSION OF EXISTING TOWERS & RAISING
OF HEIGHT OF 66 KV O/H LINE OF CIRCUIT 1 & 2
BETWEEN OLD KONDLI GRID TO DALLUPURA GRID
BY ERECTING 04 NOS MONO POLE ALONG THE
DRAIN**

IN

BSES YAMUNA POWER LTD.

**BSES YAMUNA POWER LIMITED (BYPL)
SHAKTI KIRAN BUILDING, KARKARDOOMA,
DELHI-110032
CIN: U40109DL2001PLC111525
TEL: 011 3999 7111
WEBSITE: www.bsesdelhi.com**

*This document is a property of BYPL. This is not transferable and shall not be
used for any purpose other than, for which it is supplied.*

Erection Conditions of Contract - ECC (CMC/BY/19-20/RB/SV/39)	Page 1 of 27	MONO POLE'S ON TURNKEY BASIS
---	--------------	------------------------------

Table of Contents

GENERAL TERMS & CONDITIONS - ERECTION, TESTING & COMMISSIONING 3

1. PRIORITY OF CONTRACT DOCUMENTS: 3

2. DEFINITIONS AND INTERPRETATION: 3

3. EXAMINATION OF SITE AND LOCAL CONDITIONS: 5

4. LANGUAGE AND MEASUREMENT: 5

5. SCOPE OF WORK: 6

6. CONTRACT RATES: 8

7. TAXES AND DUTIES: 8

8. ACCOMODATION & CONVEYENCE FOR THE STAFF: 9

9. STORAGE AT SITE: 9

13. COMPLETION PERIOD: 10

14. CLEANLINESS & PRECAUTIONS AT SITE TO PREVENT DUST POLLUTION: 11

17. PENALTY AND LIQUIDATED DAMAGES 13

18. SAFETY CODE: 13

19. STATUTORY OBLIGATIONS: 14

20. WORKMAN COMPENSATION: 14

21. STAFF AND WORKMAN: 15

22. HUMAN RESOURCE ISSUES: 16

23. INSURANCE: 18

24. SECURITY 19

25. ENVIRONMENTAL, HEALTH & SAFETY PLAN: 19

26. TEST CERTIFICATE & QUALITY ASSURANCE: 20

27. SUB-CONTRACTING / SUBLETTING: 20

28. INDEMNITY: 20

29. EVENTS OF DEFAULTS: 21

30. RISK & COST: 21

31. ARBITRATION: 22

32. SECRECY CLAUSE: 22

33. TERMINATION DUE TO NON PERFORMANCE: 22

34. TERMINATION BY EOMPLOYER CONVENIENCE: 22

35. QUALITY: 23

36. CONSTRUCTION WATER & POWER: 24

37. PROGRESS REPORTS OF WORK EXECUTION: 24

Annexure - I 27

GENERAL TERMS & CONDITIONS - ERECTION, TESTING & COMMISSIONING

The Erection Condition of the contract shall form a part of the specifications, contract documents.

1. PRIORITY OF CONTRACT DOCUMENTS:

The several documents forming the Contract are to be taken as mutually explanatory of one another, but in case of ambiguities or discrepancies, the same shall be explained and adjusted by the Purchaser, who shall thereupon issue to the Contractor, instructions thereon. In such event, unless otherwise provided in the Contract, the priority of the documents forming the Contract shall be as follows:

1. The Contract Agreement
2. The Letter of Acceptance/ Intent
3. Agreed Minutes of the Contract Negotiation Meetings.
4. Agreed Minutes of the contract Technical Meetings.
5. Instruction to Bidders (ITB)
6. Special Condition of Contract (SCC)
7. General Condition of Contract (GCC)
8. Erection Conditions of Contract (ECC)
9. Civil Conditions of Contract
10. The Priced Bill of Quantities
11. The Particular Technical Specifications
12. The General Technical Specifications
13. The Submitted Tender, including all Appendices and/or Addenda, the latest taking precedence.

All the materials, literature, data and information of any sort given by the contractor along with its bid proposal subject to the approval of the purchaser.

2. DEFINITIONS AND INTERPRETATION:

Definitions TO BE FOLLOWED UNDER THE CONTRACT shall have following meanings:

2.1 COMPANY / PURCHASER / OWNER: Means BSES YAMUNA Power Ltd, a company incorporated under the Companies Act 1956 and having its office at Shaktikiran Building, Karkardooma, Delhi -110032, which expression shall include its authorized representatives, agents, successors and assigns.

Erection Conditions of Contract - ECC (CMC/BY/19-20/RB/SV/39)	Page 3 of 27	MONO POLE'S ON TURNKEY BASIS
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2.2 CONTRACTOR: Shall mean the successful Tenderer / vendor to whom the contract has been awarded.

2.3 Rate: The unit rates for the work to be carried out at site shall be as per finalized unit rates through tender. The finalized rates shall be firm for the entire duration of work to be carried out by the Contractor under the work order and are not subject to escalation for any reason whatsoever.

2.4. CONTRACT SPECIFICATION: The terms "CONTRACT Specification" shall mean the Technical specification of the work as agreed by you and description of work as detailed in Annexure-I enclosed herewith and all such particulars mentioned directly/referred to or implied as such in the contract.

2.5. SITE: The terms "Site" shall mean the working location in BYPL area. Under this tender, working location shall be as mentioned elsewhere

2.6. ENGINEER IN CHARGE: "Engineer In-charge" means the Company's authorized representative for the purpose of carrying out the work.

2.7 APPLICABLE LAW: Applicable Laws means the constitution of India and any act, rule, regulations, directive, notification, code, order or instruction having its force of law enacted or issued by any competent legislature or Governmental Agency (including those related to taxes, duties, assessments, expropriation and compulsory acquisition) as may be in effect from time to time the implications thereof shall be deemed a Change in Law or Change in Permits.

2.8 OTHER CLEARANCES: Means any consent, approval, permit or other authorisation which is required to be granted by authorities (local, government or any other) essential to start/complete the work.

2.9 DEFECT LIABILITY PERIOD: Shall mean the period during which the contractor shall remain liable for repair or replacement of any defective part of the work performed under the contract, free of cost.

2.10 TENDER SPECIFICATION: The terms "Tender Specification" shall mean the Indian Standard specification of the work and description of work as detailed in Tender document/Tender enclosed and all such particulars mentioned directly/referred to or implied as such in the Tender.

2.11. CONTRACT PRICE shall mean the price referred to in the "Letter of Intent/Purchase Order".

2.12 CONTRACT PERIOD shall mean the period during which the "Contract" shall be executed as agreed between the Supplier and the Purchaser in the Contract inclusive of extended contract period for reason beyond the control of the Supplier and/or Purchaser due to force majeure.

Erection Conditions of Contract - ECC (CMC/BY/19-20/RB/SV/39)	Page 4 of 27	MONO POLE'S ON TURNKEY BASIS
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2.13 CODES AND SPECIFICATION shall mean all the applicable codes and standards as indicated in the Specification.

2.14 CHANGE OF WORK means any addition to, deletion from, suspension of or other modification, to the Work, or to the quality, function or as delineated in this Contract, including any such addition, deletion, suspension or other modification, which requires a change in one or more of the Technical Specifications and the completion schedule

2.15 EPC means Engineering, Procurement and Construction wherein the EPC contractor is made responsible for all the activities from design, procurement, supply, storage construction, commissioning and handover of the project to owner.

2.16 EFFECTIVE DATE OF CONTRACT means the date of issue/award of contract shall be the Effective Date of Contract or Contract Commencement date.

2.17 CONTRACT COMMENCEMENT DATE means the date of issue/award of contract shall be the Effective Date of Contract or Contract Commencement date.

2.18 CONTRACT COMPLETION DATE means the date of expiry of Guarantee/defect liability Period shall be deemed as the Contract Completion Date.

3 EXAMINATION OF SITE AND LOCAL CONDITIONS:

The contractor is deemed to have visited the site of the work and ascertained therefore all site conditions and information pertaining to his work.

Before submitting the bid, all bidders will at their expenses make or obtain any additional information, investigations, explorations, test and studies and obtain any additional information and data which pertains to the physical conditions at or contiguous to the site or otherwise which may affect cost, progress, performance of the work and which the bidder deems necessary to determine its Bid for performing the work in accordance with the time and other terms and conditions of the tender/contract documents.

The company shall not accept any claim whatsoever arising out of the difficult site/terrain/local conditions, if an

4 LANGUAGE AND MEASUREMENT:

The CONTRACT issued to the contractor by the company and all correspondence and documents relating to the CONTRACT placed on the Contractor shall be written in English language.

Metric System shall be followed for all dimension, units etc.

Erection Conditions of Contract - ECC (CMC/BY/19-20/RB/SV/39)	Page 5 of 27	MONO POLE'S ON TURNKEY BASIS
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5 SCOPE OF WORK:

The scope of work under this contract shall include the turnkey execution on End to End Basis , including but not limited to design, manufacturing, inspection & testing, dispatches, loading , unloading ,storage at site, erection & installation, testing of the installation, associated civil work ,commissioning ,handing over to the purchaser including comprehensive marine cum storage cum erection Insurance (MSE) on "Single Point Responsibility Basis

Package Name	Total Months for Handling over of the Package, From Zero Date	Total No. of Day for Handling over of the Package From Zero Date
Conversion of Existing Towers & Raising of Height of 66 kV O/H line of Circuit 1 & 2 between Old kondli Grid to Dallupura grid by erecting 04 Nos Mono Pole along the drain	4 months	120 days

Brief Scope of Work related to Erection and Installation work including testing and commissioning and final handover for the above packages shall be as per the NIT conditions with the following salient details.

5.1 Survey, design, engineering, manufacture, shop testing, inspection, packing, dispatch, loading, unloading and storage at site including comprehensive SCE (Storage cum Erection) insurance, assembly, erection, civil structural, architectural work, complete pre-commissioning checks, testing & commissioning at site, also includes all statutory clearances & certification from State Electrical Inspector, Municipal corporation department, Fire officer, Horticulture department , various local bodies like RWA and handing over to the Owner after satisfactory commissioning of complete Packages as defined above **on Turnkey Basis.**

- Schedule of work shall be as mentioned in the Bill of quantity attached herewith.
- After completion of Erection, Testing & Commissioning of the package awarded, contractor has to obtain the Electrical Inspectorate's Clearance from the Electrical Inspector of Delhi Govt.
- Contractor shall arrange any permission like Road cutting clearance etc. from the Delhi Civic authorities. All Statutory charges and direct fees shall be borne by BYPL.
- All the Labour, plant appliance, ladder, scaffoldings, materials, tool, tackles etc are included in your scope of work.
- Adequate number of engineers, supervisors and labours shall be posted at site and the list of the same along with certificate of Qualification of technical staff should be submitted by the Contractor to the Engineer In Charge for checking the adequacy immediately (with in seven days) after award of contract.

Erection Conditions of Contract - ECC (CMC/BY/19-20/RB/SV/39)	Page 6 of 27	MONO POLE'S ON TURNKEY BASIS
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Detailed Organisation chart , along with the qualification of the manpower to be deployed shall submitted along with Bid.

- The Contractor shall also make his own arrangement for the accommodation/conveyance requirements for its staff at site.
- Contractor shall arrange storage for storing the materials, tools, tackles etc. Contractor shall be responsible for all the unloading of the material, marking, staking and storage at site. The insurance for all the storage material shall be included in the policy taken by Contractor. Contractor shall submit the copy of insurance policy to BYPL. In case of any mishappening/damage to the storage material contractor shall be responsible to lodge the claim. Under no circumstances no delay in execution shall be allowed and contractor shall immediately arrange for the replacement without waiting for the settlement.
- All the incoming and outgoing materials, equipment, tools, tackles and any other items related to said work shall be entered into the register kept for this purpose and shall be in the custody of Contractor, however company does not hold any responsibility for any loss or damage of Contractor's material etc.
- All loading/unloading, of materials at work-site shall be contractors responsibility. Involvement of Crane/Hydra/Tractor/Trailer for this type of work shall be in contractors scope. Adequate weather protection shall be provided by the contractor to keep the materials safe from sun & rain by providing covered storage space as well as using tarpaulins.

While carrying out trenchless / open digging works the existing underground cables are liable to get damaged leading to High Risk Safety Hazard to the working people.

To arrest above problem to the best degree possible, there are technology support available, like Cable Route Tracer which is an important tool to detect the live / dead cables underground to the depth upto 3 meters, comfortably. The vendor must employ Cable Route Tracer before start of excavation / trenchless job and submit reports to the Engineer-in-charge for clearance to start the job. The above will minimize the risk of cable damage and improve safety of the working people.

It may please be noted that in case bidders have no "Cable Route Tracers" with him, as a basic necessity tool. Heavy penalty will be imposed on the vendors, if the vendor damages the cables. The cable route tracer shall be of approved make of BYPL.

Special Instruction for cable laying related works:-

- a. Contractor need to conduct sheath voltage test after finishing the cable laying to check integrity of outer sheath in presence of project engineer.
- b. All cable laying tools and tackles and testing equipment shall be available with contractor in event of order.

Erection Conditions of Contract - ECC (CMC/BY/19-20/RB/SV/39)	Page 7 of 27	MONO POLE'S ON TURNKEY BASIS
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c. Contractor shall submit copy of cable laying schedule to BSES in event of order so that quality checks can be done on sample basis.

6 CONTRACT RATES:

The rates finalized for this order shall be firm for the entire duration of work carried out by the Contractor under the order and are not subject to any variation and escalation for any reason whatsoever.

The cost of insurance during loading/unloading of materials/ equipments during its storage and handling/erection at site for installation is included in the contractor's scope and value is included in the unit rates finalized.

The unit rates finalized are also inclusive of barricading and watch & ward during execution and no separate charges shall be paid for the same.

The cost of training of BYPL Official shall be included in the prices quoted by vendor.

7 TAXES AND DUTIES:

Prices are inclusive of all taxes and duties including labour cess.

However, IT as per applicable rate will be deducted from your bills as Tax Deduction at Source (TDS).

GST is included in the contract price awarded , however GST payment shall be made on submission of GST Registration and self declaration on your letter head stating that contractor have deposited/or will deposit the Tax as per the applicable GST laws. Contractor shall furnish your GST registration number.

Any statutory variations i.e. increase/decrease in Taxes / Duties introduces by central Govt. / State Govt. of shall be reimbursed/recovered to/from Contractor against documentary evidence and proof.

Any variation in taxes shall be applicable only to the direct/price breakup as mentioned in the contract.

CHANGE OF LAW:

"Change in Law" means:

- a) any enactment or issue of any new Applicable Law,
- b) any amendment, alteration, modification, or repeal of any existing Applicable Law or any new or modified directive or order there under,
- c) any change or variation in taxes payable in connection with and under this

Erection Conditions of Contract - ECC (CMC/BY/19-20/RB/SV/39)	Page 8 of 27	MONO POLE'S ON TURNKEY BASIS
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Agreement in each case with respect to a), b), and c) above coming into effect after the date of this Agreement.

8 ACCOMODATION & CONVEYENCE FOR THE STAFF:

The Contractor shall also make his own arrangement for the accommodation/conveyance requirements for its staff at site.

9 STORAGE AT SITE:

Contractor shall arrange the storage at site with the adequate open space / closed storage for contractor's site store for storing the materials, tools, tackles etc.

All the Contractor's storage will be within the site premises. All the incoming and outgoing materials, equipment, tools, tackles and any other items related to said work shall be entered into the register kept for this purpose and shall be in the custody of Contractor, however company does not hold any responsibility for any loss or damage of Contractor's material etc. All loading/unloading, of materials at work-site shall be your responsibility. Involvement of Crane/Hydra/Tractor/Trailer for this type of work shall be in your scope.

Adequate weather protection shall be provided by the contractor to keep the materials safe from sun & rain by providing covered storage space as well as using tarpaulins. Water and Electricity Power shall be arranged by the Contractor at his own. The cost of insurance during loading/unloading of materials/ equipments during its storage and handling/erection at site for installation is included in the contractor's scope and value is including in the above mentioned

Tender value. The unit rates mentioned in annexure is inclusive of barricading and watch & ward during execution and no separate charges shall be paid for the same.

10 SECURITY, WATCH & WARD:

The contractor, at his own cost, shall arrange for the security and watch and ward of the materials, men and machineries at site. Round the clock security alongwith the CCTV shall be provided for the materials stored at the site.

11 DEFECT LIABILITY PERIOD:

Work executed shall be guaranteed against any defect or failure which may arise due to faulty materials, design or workmanship for a period of Twenty Four (24) months from the date of final handing over of the entire package as defined in SCC. If during the Defect Liability Period any works are found to be defective, shall be immediately rectified or repaired, upto BYPL satisfaction, by the contractor at his own cost within Ten (10) days from the date of receipt of intimation from BYPL.

Erection Conditions of Contract - ECC (CMC/BY/19-20/RB/SV/39)	Page 9 of 27	MONO POLE'S ON TURNKEY BASIS
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Under no circumstances any extra claim in terms of time and cost shall be entertained for such repair/rectification.

12 PERFORMANCE GUARANTEE:

12.01 Bank guarantee shall be drawn in favour of "BSES YAMUNA Power Ltd" as applicable. The performance Bank guarantee shall be in the format as specified by BYPL.

12.02 Contract performance bank guarantee of total 10% of the contract price shall be submitted within 15 days of award of contract with the validity till completion of the contract period.

12.03 Contractor shall submit the workmanship / equipment performance bank guarantee equivalent to the 10% of the contract value at the time of claiming the last payment as per TERMS OF PAYMENT (Erection, Testing & Commissioning)), with the validity of the bank guarantee till Defect Liability Period i.e. 24 months from the date of Handing over of entire package plus 3 months.

13 COMPLETION PERIOD:

Contractor is required to mobilize your manpower and Tools & Tackles and furnish a list of equipments to be used for erection and commence the execution activity as per instructions of Engineer In-charge. The detailed schedule and milestone completion dates would be as per the contract schedules given from time to time by Engineer In-charge at site.

The time schedule for carrying out this work and period for mobilization shall be as under:

13.1 The Contractor's team should be mobilized at site for commencement of work immediately on receipt of the order.

13.2 The entire work under this order as indicated in the scope of work shall be carried out and completed within 120 days for entire package as defined in SCC. Total completion schedule for Engineering, manufacturing, inspection & testing, packing and forwarding and Transportation till site and Erection Testing & Commissioning shall be as per the milestones timelines defined in SCC.

13.3 A detailed L2 Schedule shall be submitted by the supplier within Fifteen(15) days of LOI. The contractor shall plan parallel working (round the clock working) for completion of work as per schedule and mobilize manpower accordingly.

13.4 Progress Review Meeting between the Contractor and the Engineer In charge shall be held at site at least once in a week. Also a weekly progress report giving the

Erection Conditions of Contract - ECC (CMC/BY/19-20/RB/SV/39)	Page 10 of 27	MONO POLE'S ON TURNKEY BASIS
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details of the manpower engaged at site and the details of the major job completion shall be submitted to Engineer In-charge.

13.5 The above time schedule must be strictly adhered to and improved upon wherever possible. In the event we find that your work is not progressing in quality or time frame as per above agreed schedule and to our satisfaction, we reserve the right to withdraw the work in whole or in part without further notice and liability of the Company.

13.6 The completion of the work shall have to be certified by Engineer In charge.

13.7 In order to maintain the time schedule, if necessary the Contractor shall carry out the work on all Sunday & Holiday except National Holiday with prior written permission from Engineer-in-Charge.

14 CLEANLINESS & PRECAUTIONS AT SITE TO PREVENT DUST POLLUTION:

All debris shall be removed and disposed of at assigned areas on daily basis. Surplus excavated earth shall be disposed of in an approved manner. In short, the contractor shall be fully responsible for keeping the work site clean at all times. In case of non-compliance, company shall get the same done at Contractor's risk and costs.

While carrying out any civil work including road/ pit digging, plinth/ fence making, road restoration etc contractor shall adhere to below mentioned guidelines.

14.1 No construction material/ debris shall be stored on metalled road.

14.2 Wind breakers of appropriate height on all sides of ear marked area using CGI sheets shall be raised to ensure that no construction material dust fly outside ear marked area.

14.3 The construction material i.e. coarse sand, stone aggregates, excavated earth, cement and any other material to and from the site shall be transported under wet and covered condition to ensure their non-slippage en-route to avoid air contamination.

14.4 The contractor shall provide mask and helmet to every worker working on the construction site and involved in loading/unloading and carriage of construction material and construction debris to prevent inhalation of dust particles.

14.5 Over loading of vehicles shall be strictly prohibited.

14.6 The construction material at site shall be stored under wet and covered condition.

Erection Conditions of Contract - ECC (CMC/BY/19-20/RB/SV/39)	Page 11 of 27	MONO POLE'S ON TURNKEY BASIS
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14.7 The dumping sites for temporarily storing the excavated earth shall be properly levelled, watered and rehabilitated by plantation to avoid flying of dust.

14.8 The worker at the site shall be sensitized to adopt / observe the dust controlled measures in true spirit.

14.9 If any C&D waste is generated at site the same will be transported to the C&D waste site only and the record for the same will be maintained by the agency.

14.10 Wet jet in grinding and stone cutting is being permitted at site.

14.11 The necessary record for dust control is being maintained by the department on day to day basis and being monitored regularly.

The Execution vendors shall be responsible for all the preventive and protective environmental steps as per guidelines. Any violations from the above guidelines have been viewed very seriously by the authorities. Concerned agency is liable for the penalties / other action by the authorities, The Agency shall indemnify BYPL from all liabilities on this account

15 COMMISSIONING & ACCEPTANCE TEST:

After completion of the work, the Contractor shall conduct trial run/ operation in the presence of Engineer In charge. During such trial run the system shall be operated under the supervision of the Contractor. If any rectification/modification required during this period the Contractor shall do all necessary measures.

On satisfactory completion of above, the system shall be deemed to have energized and placed in commercial operation. The Engineer In Charge will issue an acceptance certificate.

16 WORK COMPLETION CERTIFICATION, HANDING OVER:

The work carried out by the Contractor under this order has to be certified by Engineer In-charge for satisfactory completion of work allotted to the contractor with respect to specifications / Field Quality Procedures as per applicable standards. In case of modification/correction to be carried out, contractor shall carry out the said modifications/correction without additional cost. The Contractor shall remain in close contact with Engineer In-Charge at site to report the general findings of the fieldwork during the initial as well as later stage of the work at site.

The contractor shall be solely responsible for any shortage or damage of materials issued to them handling of and / or in storage and erection at site and cost of the same will be recovered from the contractor as certified by Engineer In-Charge. Contractor must submit a periodical material reconciliation statement in the approval format with every Running Bill raise by him or end of every month whichever is

Erection Conditions of Contract - ECC (CMC/BY/19-20/RB/SV/39)	Page 12 of 27	MONO POLE'S ON TURNKEY BASIS
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earlier. The contractor shall maintain an accurate and exhaustive record detailing out the list of all items received by him for the purpose of erection and keep such record open for the inspection of the company.

17 PENALTY AND LIQUIDATED DAMAGES

17.1 Penalty: A penalty of 2.5% of bill amount shall be levied in each case of non-compliance of safety practices and site cleanliness.

17.2 Liquidated Damages: In the event of any delay in completion of the work beyond the stipulated time given by in order due to reasons solely attributable to the Contractor, the Contractor shall pay to the Company liquidated damages as per the clause defined in SCC

18 SAFETY CODE:

The Contractor shall ensure adequate safety precautions at site as required under the law of the land and shall be entirely responsible for the complete safety of their workman as well as other workers at site and premises. The contractor shall not deploy any worker below the age of 18 years.

The contractor shall observe the safety requirements as laid down in the contract and in case of sub-contract (only after written approval of company); it shall be the responsibility of main contractor that all safety requirements are followed by the employees and staff of the sub-contractor.

The contractor employing two hundred employees or more, including contract workers, shall have a safety coordinator in order to ensure the implementation of safety requirements of the contract and a contractor with lesser number of employees, including contract workers, shall nominate one of his employees to act as safety coordinator who shall liaise with the safety officer on matters relating to safety and his name shall be displayed on the notice board at a prominent place at the work site.

The contractor shall be responsible for non-compliance of the safety measures, implications, injuries, fatalities and compensation arising out of such situations or incidents.

In case of any accident, the contractor shall immediately submit a statement of the same to the owner and the safety officer, containing the details of the accident, any injury or casualties, extent of properly damage and remedial action taken to prevent recurrence and in addition, the contractor shall submit a monthly statement of the accidents to the owner at the end of each month.

19. STATUTORY OBLIGATIONS:

The Contractor shall take all steps as may be necessary to comply with the various applicable laws/rules including the provisions of contract labour (Regulation & Abolition Act) 1970 as amended, minimum wages Act, 1984, Workman Compensation Act, ESI Act, PF Act, Bonus Act and all other applicable laws and rules framed there under including any statutory approval required from the Central/State Govt. Ministry of Labour. Broadly, the compliance shall be as detailed below, but not limited to:

- a) An Electrical license issued by Govt.of Delhi.
- b) PF Code No. and all employees to have PF A/c No. under PF every Act, 1952.
- c) All employees to have a temporary or permanent ESI Card as per ESI Act.
- d) ESI Registration No.
- e) PAN No.
- f) Work Contract Tax Registration Number/ GSTN Registration. g) Labour License under Contract Labour Act (R & A) Act 1970

(Engineer-in-charge responsible for execution of the job should obtain a copy of Labour License before start of the work by the contractor.)

The Contractor must follow:

- a) Third party Insurance Policy before start of work.
- b) To follow Minimum Wages Act prevailing in the state.
- c) Salary / Wages to be distributed in presence of representative of Company's representative not later than 7th of each month.
- d) To maintain Wage- cum - Attendance Register.
- e) To maintain First Aid Box at Site.
- f) Latest P.F. and E.S.I. challans pertaining to the period in which work was undertaken along with a certificate mentioning that P.F. and E.S.I. applicable to all the employees has been deducted and deposited with the Authorities within the time limits specified under the respective Acts.
- g) Workman Compensation Policy. {If applicable}
- h) Labour license before start of work. {If applicable}

20. WORKMAN COMPENSATION:

The Contactor shall take insurance policy at his own cost under the Workman Compensation Act to cover such workers who are not covered under ESI and PF by the Contractor however engaged to undertake the jobs covered under this order and a copy of this insurance policy will be given to Company for reference and records. This insurance policy shall be kept valid at all times. In case there are no worker involve other than those who are covered under ESI and PF by the Contractor, the Contractor shall certify for the same,

The contractor shall keep the company indemnified at all times, against all claims of compensation under the provision of Workmen Compensation Act 1923 and as amended from time to time or any compensation payable under any other law

Erection Conditions of Contract - ECC (CMC/BY/19-20/RB/SV/39)	Page 14 of 27	MONO POLE'S ON TURNKEY BASIS
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for the time being workman engaged by the contractor/sub-contractor/sub-agent in carrying out the job involved under this work order and against costs and expenses, if any, incurred by the company in connection therewith and without prejudice to make any recovery.

The company shall be entitled to deduct from any money due to or to become due to the Contractor, moneys paid or payable by way of compensation as aforesaid or cost or expenses in connection with any claims thereto and the Contractor shall abide by the decision of the Company as to the sum payable by the Contractor under the provisions of this clause.

21. STAFF AND WORKMAN:

It shall be responsibility of contractor

(a) To obtain Contract Labour License from the concerned authorities and maintain proper liaison with them. Necessary Forms for obtaining Labour License would be issued by the company. However you will bear all expenses for obtaining Labour license and registration in PF Department for your scope of work. You will deposit PF of your staff/laborer each month and all related documents should be furnished to us.

b) To obtain workman insurance cover against deployment of workers etc.

(II) To maintain, proper records relating to workmen employed, in the form of various Registers, namely,

- a) Register of workmen.
- b) Register of muster roll.
- c) Register of overtime.
- d) Register of wages.
- e) Any other register as per latest amendment Labour Act.

The records shall be in the prescribed formats only.

(III) To disburse monthly wages to your workers/ supervisors in time and in the presence of Company representatives or as directed by the Labour authorities.

(IV) To maintain proper liaison with the Project authorities, local police and all other government and local bodies.

(V) To pay your workmen at least not less than the minimum prescribed wages as per state/Central Labour laws as may be, applicable. The contractor shall, be responsible for compliance of all the provisions of minimum Wages Act, PF, ESIC Act workmen Compensation Act and Contract Labour Regulation & Abolition Act the rules made there under. In case of non-compliance of the statutory requirements. The company would take necessary action at the risk and cost of the Contractor.

Erection Conditions of Contract - ECC (CMC/BY/19-20/RB/SV/39)	Page 15 of 27	MONO POLE'S ON TURNKEY BASIS
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(VI) To employ required number of skilled/semi-skilled and unskilled workmen as per site requirement to complete the entire project as per schedule. To provide safety shoes, safety helmets, safety belts, gloves etc. to your worker/staff as per requirement during erection work.

(VII) To employ necessary engineering and supervisory staff for completion of the Project in time. While day-to-day management of the site and supervision of the works shall be the responsibility of your Engineer - In charge, he will report to the Engineer in charge to assist him to discharge the overall responsibility of the execution of the project.

22. HUMAN RESOURCE ISSUES:

22.1 The CONTRACTOR would execute these works through their own resources.

22.2 The CONTRACTOR shall bear all expenses/cost to be incurred towards salary, allowances, perks, traveling allowances, advances, insurance, safety measures, security, transportation and all other misc. expenses etc. of their employees/ workmen during the tenure of AMC. Also, the CONTRACTOR shall be sole responsible for making payment for Out-patient department, Hospitalization, Compensation thereof in case of any accident, injury or death.

22.3 ID CARD: No contractor will issue any ID cards to their staff on their own .All ID Cards for the workforce will be issued by BYPL Security ID Card Cell only. Contractors should maintain the records of Identity Cards of their employees and whenever any employee quits / is removed then his/her Identity card should be collected & submitted to BYPL Security ID Card Cell. Penalty will be imposed on the vendor in case of violation of the above rule.Contractors shall submit the detail list of the employees that they are going to be hire to BYPL Security before start of the contract.

22.4 The CONTRACTOR to deploy their manpower immediately for carrying out the work as specified above.

22.5 The CONTRACTOR should ensure that there are no disputes regarding service, payment etc of the persons engaged by him, anytime during the currency of the contract. At no point of time during the currency of contract, the CONTRACTOR's employees shall insist upon the COMPANY for employment, wages, and allowances or any other related matter, payment etc.

22.6 The CONTRACTOR shall not deploy the manpower below the age of 18 years.

22.7 The CONTRACTOR shall not deploy the female manpower between 7 PM to 6 AM.

Erection Conditions of Contract - ECC (CMC/BY/19-20/RB/SV/39)	Page 16 of 27	MONO POLE'S ON TURNKEY BASIS
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22.8 The CONTRACTOR shall be directly responsible for any / all disputes arising between him and his persons and keep the COMPANY indemnified against all losses, damages and claims arising thereof. The CONTRACTOR shall resolve any dispute of their manpower. All the legal dues of their manpower is to be paid on due date or within 8 days on the termination of manpower.

22.9 All safety wears required for the CONTRACTOR's manpower during the execution of work such as safety shoes, safety helmets, hand gloves, safety belt, goggles etc. must be provided by the CONTRACTOR at his own cost and he shall ensure that his employees regularly use such safety gears while executing COMPANY's work.

22.10 The CONTRACTOR shall be responsible for discipline of his manpower and shall adhere to the disciplinary procedure set by the COMPANY at site. The COMPANY shall be at liberty to object to the presence of any representative or employees of the CONTRACTOR at the site, if in the opinion of the COMPANY such manpower has done any act of misconduct or negligence or otherwise undesirable, then the CONTRACTOR shall remove such a person objected to and provide a competent replacement immediately.

22.11 The CONTRACTOR shall ensure that he has complied with the following:
- has paid minimum wages to his manpower as per the rate notified from time to time by the Government of National Capital Territory of Delhi.
- Contractor shall disburse the salary of his staff through ECS only.

22.12 Deduct and deposited ESI and PF contribution. Copies of the same shall be submitted.

22.13 The COMPANY reserves the right to demand the CONTRACTOR's services on holidays as well as beyond the normal working hours. The Engineer In-charge shall communicate in writing for any work required to be done during Holidays.

22.14 The CONTRACTOR will ensure that none of their person is engaged in any unlawful activities subversive of the COMPANY's interest failing which suitable action may be taken against the CONTRACTOR as per the terms and conditions of this tender.

22.15 The CONTRACTOR shall be liable for payment of all taxes and duties as applicable, to the State/ Central Govt. or any local authority.

22.16 The CONTRACTOR's employees shall not be treated as COMPANY's employees / persons for any purpose whatsoever & facilities/ benefits applicable to the COMPANY's employees shall not be applicable to CONTRACTOR's employees. If due to any reasons whatsoever the COMPANY is made liable to meet any obligation under any of the laws & enactment etc, for any reason whatsoever the same shall be recovered from the CONTRACTOR or from any of the bills payable to him or failing which it shall be recovered as per law.

Erection Conditions of Contract - ECC (CMC/BY/19-20/RB/SV/39)	Page 17 of 27	MONO POLE'S ON TURNKEY BASIS
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22.17 The CONTRACTOR shall be responsible and shall comply with the provision of all the STATUTORY ACTS APPLICABLE. Special attention of the CONTRACTOR is drawn towards the compliance of provision of the following statutes: (along with the latest amendments/additions):

- 22.17.1 The Child Labour (Prohibition and Regulation) Act, 1986.
- 22.17.2 The Contract Labour (Regulation and Abolition) Act, 1970.
- 22.17.3 The Employee's Pension Scheme, 1995.
- 22.17.4 The Employee's Provident Funds and miscellaneous provisions Act, 1952.
- 22.17.5 The Employees State Insurance Act, 1948.
- 22.17.6 The Industrial Disputes Act, 1947.
- 22.17.7 The Maternity Benefit Act 1961.
- 22.17.8 The Minimum Wages Act, 1948.
- 22.17.9 The Payment of Bonus Act, 1965.
- 22.17.10 The Payment of Gratuity Act, 1972.
- 22.17.11 The payment of Wages Act, 1936.
- 22.17.12 The Delhi Shops & Establishment Act, 1954.
- 22.17.13 The Workmen's Compensation Act. 1923.
- 22.17.14 The Employer's Liability Act, 1938.

The Contractor shall furnish the above specified compliances as per the format attached as Annexure I.

Contractor shall adhere to the Vendor Code of Conduct as specified in the NIT.

23. INSURANCE:

23 a) THIRD PARTY INSURANCE:

Before commencing the execution of the work the contractor shall take third party insurance policy at his own cost to insure against any damage or loss or injury which may occur to any property / public property or to any person or any employee or representative of any outside Agency/ the company engaged or not engaged for the work of the company, by or arising out of the execution of the work or temporary work or in carrying out of this Agreement. For third party insurance policies, the contractor shall be responsible for settlement of claims with the underwriters without any liability on the purchaser / owner and will arrange replacements / rectification expeditiously without a waiting settlement by insurance claim at contractors own cost.

23 b) ACCIDENTAL INSURANCE POLICY FOR LIFE COVER:

Before commencing the execution of the work the CONTRACTOR shall take Accidental insurance policy for the staff engaged by him for this work to insure against any loss of life which may occur during the contract for the work of the COMPANY. The policy shall have coverage of Rs. 10 Lacs (Table C- Death +

Erection Conditions of Contract - ECC (CMC/BY/19-20/RB/SV/39)	Page 18 of 27	MONO POLE'S ON TURNKEY BASIS
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Permanent Total Disability + Partial permanent Disability due to external accidents). The Contractor shall be responsible for on the spot same day claim settlement with the victim's legal heirs without waiting for settlement by insurance claim without any liability on BYPL. The premium amount for such life cover policy shall be borne by the contractor. The contractor shall furnish copy of policy when demanded by BYPL.

23 C) INSURANCE FOR MAN, MATERIAL & MACHINERY DEPLOYED AT SITE:

Contractor shall be responsible for the insurance for his own man , material and machinery deployed at site for the package awarded. Contractor shall furnish the copy of this insurance policy to the purchaser, prior start of work.

24. SECURITY

Adequate number of trained Security Guards shall be deployed both at the storage yard and stores as well as places of work to prevent theft and pilferage of material and accessories and various other materials. All security rules and safety rules enforced at site by company shall be strictly observed.

25. ENVIRONMENTAL, HEALTH & SAFETY PLAN:

Contractor will make ensure that the Environment, Health & Safety (EHS) requirements are clearly understood and faithfully implemented at all levels at site as per instruction of Company. Contractors must comply with these requirements:

- a) Comply with all of the elements of the EHS Plan and any regulations applicable to the work
- b) Comply with the procedures provided in the interests of Environment, Health and Safety
- c) Ensure that all of their employees designated to work are properly trained and competent
- d) Ensure that all plant and equipment they bring on to site has been inspected and serviced in accordance with legal requirement and manufacturer's or suppliers' instructions
- e) Make arrangements to ensure that all employees designated to work on or visit the site present themselves for site induction prior to commencement of work
- f) Provide details of any hazardous substances to be brought onsite
- g) Ensure that a responsible person accompanies any of their visitors to site

All contractors staff is accountable for the following:

Erection Conditions of Contract - ECC (CMC/BY/19-20/RB/SV/39)	Page 19 of 27	MONO POLE'S ON TURNKEY BASIS
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1. Use the correct tools and equipment for the job and use safety equipment and protective clothing supplied, e.g. helmets, goggles, ear protection, etc. as instructed
2. Keep tools in good condition
3. Report to the Supervisor any unsafe or unhealthy condition or any defects in plant or equipment
4. Develop a concern for safety for themselves and for others
5. Prohibit horseplay
6. Not to operate any item of plant unless they have been specifically trained and are authorized to do so.

26. TEST CERTIFICATE & QUALITY ASSURANCE:

The Contractor shall procure all equipment from genuine sources as approved by the Company and as per Company specifications. The Contractor shall submit all the test certificates and joint inspection reports related to major equipment wherever applicable. The contractor shall ensure for the strict compliance to the specifications and Field Quality Procedures issued by company / Engineer in-charge.

27. SUB-CONTRACTING / SUBLETTING:

CONTRACTOR shall not assign or transfer the whole or any part of this Work Order or any other benefits accruing there from nor shall it subcontract / sublet the whole or any part of the Works without the prior written consent of COMPANY.

In the event the contractor assigns this work order, contractor's assignees shall be bound by the terms and conditions of this work order and shall , if deemed necessary by COMPANY at the time of such assignment, undertake in writing to be so bound by this Work Order.

Notwithstanding the subletting / subcontracting of any portion of the works, contractor shall remain wholly responsible for the carrying out, completion and satisfactory execution of Works in all respects in accordance with this Work Order, specification, approved drawings and data sheets.

28. INDEMNITY:

Contractor shall indemnify and save harmless COMPANY against and from any and all liabilities, claims, damages, losses or expenses arising due to or resulting from:

- a) any breach non-observance or non-performance by contractor or its employees or agents of any of the provisions of this Work Order.
- b) any act or omission of contractor or its employees or agents.
- c) any negligence or breach of duty on the part of contractor, its employees or

Erection Conditions of Contract - ECC (CMC/BY/19-20/RB/SV/39)	Page 20 of 27	MONO POLE'S ON TURNKEY BASIS
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- agents including any wrongful use by it or them of any property or goods belonging to or by COMPANY.
- d) The vendor shall submit an Indemnity Bond against any damages / loss of free issued materials.

Contractor shall at all times indemnify COMPANY against all liabilities to other persons, including he employees or agents of COMPANY or contractor for bodily injury, damage to property or other loss which may arise out of or in consequence of the execution or completion of Works and against all costs charges and expenses that may be occasioned to COMPANY by the claims of such person

29. EVENTS OF DEFAULTS:

COMPANY may, without prejudice to any of its other rights or remedies under the Work Order or in law, terminate the whole or any part of this Work Order by giving written notice to the Contractor, if in the opinion of COMPANY, contractor has neglected to proceed with the works with due diligence or commits a breach of any of the provisions of this work order including but not limited to any of the following cases:

- a) Failing to complete execution of work within the terms specified in this work order.
- b) Failing to complete works in accordance with the approved schedule of works.
- c) Failing to meet requirements of specifications, drawings, and designs as approved by COMPANY.
- d) Failing to comply with any reasonable instructions or orders issued by COMPANY in connection with the works.
- e) Failing to comply with any of the terms or conditions of this work order.

In the event COMPANY terminates this work order, in whole or in part, on the occurrence of any event of default, COMPANY reserves the right to engage any other subcontractor or agency to complete the work or any part thereof, and in addition to any other right COMPANY may have under this work order or in law including without limitation the right to penalize for delay under clause 15.0 of this work order, the contractor shall be liable to COMPANY for any additional costs that may be incurred by COMPANY for the execution of the Work.

30. RISK & COST:

If the Contractor of fails to execute the work as per specification / as per the direction of Engineer's In-charge within the scheduled period and even after the extended period, the contract shall got cancel and company reserves the right to get the work executed from any other source at the Risk & Cost of the Contractor. The Extra Expenditure so incurred shall be debited to the Contract.

Erection Conditions of Contract - ECC (CMC/BY/19-20/RB/SV/39)	Page 21 of 27	MONO POLE'S ON TURNKEY BASIS
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31. ARBITRATION:

To the best of their ability, the parties hereto shall endeavor to resolve amicably between themselves all disputes arising in connection with this LOA. If the same remain unresolved within thirty (30) days of the matter being raised by either party, either party may refer the dispute for settlement by arbitration. The arbitration to be undertaken by two arbitrators, one each to be appointed by either party. The arbitrators appointed by both the parties shall mutually nominate a person to act as presiding arbitrator before entering upon the reference in the event of a difference between the two arbitrators and the award of the said presiding arbitrator in such a contingency shall be conducted in accordance with this provisions of the Indian Arbitration & Conciliation Act, 1996 and the venue of such arbitration shall be in the city of New Delhi only.

32. SECURITY CLAUSE:

The technical information, drawing and other related documents forming part of work order and the information obtained during the course of investigation under this work order shall be the Company's executive property and shall not be used for any other purpose except for the execution of the work order. The technical information drawing, records and other document shall not be copied, transferred, or divulged and/ or disclosed to third party in full/part, not misused in any form whatsoever except to the extent for the execution of this work order.

These technical information, drawing and other related documents shall be returned to the Company with all approved copies and duplicates including drawing/plans as are prepared by the Contractor during the executions of this work order, if any, immediately after they have been used for agreed purpose.

In the event of any breach of this provision, the contractor shall indemnify the Company against any loss, cost or damage or claim by any party in respect of such breach.

33. TERMINATION DUE TO NON PERFORMANCE:

"During the course of the execution, if at any time BSES observe and form an opinion that the work under the order is not being performed in accordance with the terms of this Agreement, BSES reserves its right to cancel this Agreement giving 15 days notice mentioning the reason for the termination of the agreement and BSES will recover all damages including losses occurred due to loss of time from Contractor.

34. TERMINATION BY EEMPLOYER CONVENIENCE:

The owner at any time terminate the contract for any reason, by giving the contractor a notice of termination. Upon receipt of the notice of termination, the contractor shall

Erection Conditions of Contract - ECC (CMC/BY/19-20/RB/SV/39)	Page 22 of 27	MONO POLE'S ON TURNKEY BASIS
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either within 14 days of receipt of such notice, or on the date specified in the notice of termination, carry out the following : Cease all further work, except for such work as the owner 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.

- Terminate all subcontracts, except as mentioned below.
- Remove all Contractor’s equipment from the site, repatriate the contractor’s and its sub-contractor’s 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.
- Deliver to the owner the parts of the facilities executed by the contractor up to date of termination.
- To the extent legally possible, assign to the owner all right , title and benefit of the contractor to the facilities and to the plant and equipment as at the date of termination, and as may be required by the owner, in any subcontracts concluded between the contractor and its sub-contractors.
- Deliver to the owner all non-proprietary drawings, specifications and other documents prepared by the contractor or its sub-contractors as at date of termination in connection with the facilities. In the event of termination of the contract by the owner, under this clause, the owner shall pay to the contractor the following amounts after setting off the owner’s claim if any under the contract:
 - 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 sub contractors personnel.
 - c) Pre- approved and reasonable 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 above.

35. QUALITY:

Contractor shall ensure that strict quality is maintained and execution of works under this Work Order and Works are executed in conformity with the Specification.

All tools, tackles, instruments and other equipments used in the execution of the Works shall be duly calibrated as required and Contractor shall maintain proper records of such tools, tackles, instruments and / or equipment.

Erection Conditions of Contract - ECC (CMC/BY/19-20/RB/SV/39)	Page 23 of 27	MONO POLE’S ON TURNKEY BASIS
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The contractor shall submit SQP indicating Customer Holding Point for design, manufacture, inspection, testing, packing, forwarding, transportation including shop painting and final painting for Purchaser's review and approval.

The contractor shall submit Field Quality Assurance and Filed Quality Control Plan (FQP) indicating Customer Hold Point for unloading, receiving, storage at site, transportation, handling at site, erection, testing, pre-commissioning & commissioning for Purchaser's review and approval as per applicable provisions of Technical Specifications.

The Contractor shall submit a Field Erection Procedure for the scope of work under the Contract Agreement. The same shall be subject to the approval of the Purchaser and the work shall be carried out in accordance with such approved procedures.

36. CONSTRUCTION WATER & POWER:

Construction Water and power shall be arranged by Contractor at his own cost.

37. PROGRESS REPORTS OF WORK EXECUTION:

During the various stages of manufacturing and erection of the critical equipments in the pursuance of the Contract, the Contractor shall at its own cost submit periodic progress reports as may be reasonably required by the Purchaser with such materials as charts, networks, photographs, test certificates, etc. Such progress reports shall be in the form and size as may be required by the Purchaser and shall be submitted in adequate number of copies to be notified by the Purchaser

The quantitative progress report of the works by reference to the project schedule in sufficient detail should permit the Purchaser to assess performance, plan witness dates and evaluate forecasts, including reports on key Sub-contracts (as applicable). Within 7 days of the submission of each such report and at such other times as the Purchaser may reasonably request, the Contractor and the Purchaser shall meet to discuss progress.. Weekly progress reports shall include the following sections:

- a) Executive summary
- b) Description of the work and services performed and goods and materials delivered and erected during the preceding week.
- c) Necessary photographs of work done in the manufacturer's shop and erection site which shall be taken when and where indicated by the Purchaser. Photographs shall be approximately 100 x 125 mm in size including a margin of 5 mm side for fixing. Adequate numbers of photographs shall be submitted indicating

Erection Conditions of Contract - ECC (CMC/BY/19-20/RB/SV/39)	Page 24 of 27	MONO POLE'S ON TURNKEY BASIS
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various stages of manufacture and erection of critical items. Each photograph shall contain the date, the name of the Contractor and the title of the view taken.

d) Updated project schedule showing progress to the end of the week (as percentages completed of the Contractor's activities broken down into significant elements of the works), and the current schedule of activities and the targets for the next week.

e) Identification of areas with foreseeable problems which in the opinion of the contractor may affect the project schedule.

f) Such other information and supporting documentation as the Purchaser may require satisfying himself about the timely manufacture, delivery and erection of equipment as per contract.

The Purchaser shall advise the Contractor about the number of copies of progress reports and, where relevant, photographs he has to submit each week together with the names and addresses of persons to whom they are to be sent. Purchaser will also advise the contractor regarding the format of the Monthly Progress report.

38. FREE ISSUES OF MATERIAL AND /OR EQUIPMENT:

The Purchaser issued Free Issue Material/Equipment to Vendor in order that Vendor may fulfill its obligations under the Agreement, shall remain the property of Purchaser and shall be clearly labelled as such by Vendor until delivery of the completed Goods in accordance with the terms of the Agreement. Risk of loss in respect of all such Free Issue Items shall pass to Vendor upon receipt of such items by Vendor and remain with Vendor until delivery of the completed Goods to Purchaser in accordance with the terms of the Agreement. Vendor shall maintain all such Free Issue Items in good condition and shall use them solely in connection with the requirements of the Agreement. Disposal of surplus items shall be in accordance with written instructions from Purchaser. The vendor shall submit an Indemnity Bond to this effect, as per the format.

39. PROTECTION OF PROPERTY:

The Contractor shall be responsible for any damage resulting from his operation. He shall also be responsible for protection of all persons including members of public; and employees of the PURCHASER & the PURCHASER; employees of the Contractors & Subcontractors; and all public and private property including structures, buildings, other plants and equipment and utilities either above or below the ground.

The Contractor shall ensure provision of necessary safety equipment such as barriers, sign boards, warning lights and alarms, etc to provide adequate protection to persons and property. The Contractor shall be responsible to give reasonable notice to the PURCHASER & the PURCHASER of public or private property and utilities

Erection Conditions of Contract - ECC (CMC/BY/19-20/RB/SV/39)	Page 25 of 27	MONO POLE'S ON TURNKEY BASIS
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when such property and utilities are likely to get damaged or injured during the performance of his works and shall make all necessary arrangements with such PURCHASER, related to removal and/or replacement or protection of such property and utilities.

40. VARIATIONS / AMENDMENTS:

Any additional work beyond the scope enumerated in the work order above shall be carried out as per the instructions of Engineer-In Charge. The company shall not entertain any claim or increase in the Work Order value due to execution of such additional work if the same is not approved by Engineer in Charge, in written form.

41. ACCEPTANCE

Acceptance of this work order implies and includes acceptance of all terms and conditions enumerated in this work order in the technical specification and drawings made available to you consisting of general conditions, detailed scope of work, detailed technical specification & detailed equipment, drawing. Complete scope of work and the Contractor's and Company's contractual obligation are strictly limited to the terms set out in the work order. No amendments

to the concluded work order shall be binding unless agreed to in writing for such amendment by both the parties.

However, during the course of the execution of the work order, if at any time the Company's representative observe and form an opinion that the work under the work order is not being performed in accordance with the terms of this work order, the company reserves its right to cancel this work order forthwith without assigning any reason and the Company will recover all damages including losses occurred due to loss of time from the Contractor.

We request you to please sign the duplicate copy of this work order as a token of your acceptance and return to us.

Erection Conditions of Contract - ECC (CMC/BY/19-20/RB/SV/39)	Page 26 of 27	MONO POLE'S ON TURNKEY BASIS
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Annexure - I

The Contractor must submit the following to Engineer-In-Charge before commencement of work:

- a) An Electrical license. (If applicable)
- b) PF Code No. and all employees to have PF A/c No. under PF every Act, 1952.
- c) All employees to have a temporary or permanent ESI Card as per ESI Act.
- d) ESI Registration No. e) PAN No.
- f) Work Contract Tax/VAT Registration Number.
- g) Labor License under Contract Labor Act (R & A) Act 1970(All Engineer-in-charge responsible for execution of the job should obtain a copy of Labor License as per guidelines of HR department before start of the work by the contractor.)

The Contractor must follow:

- a) Third party Insurance Policy before start of work.
- b) To follow Minimum Wages Act prevailing in the state.
- c) Salary/ Wages to be distributed in presence of Company's representative not later than 7th of each month.
- d) To maintain Wage- cum - Attendance Register.
- e) To maintain First Aid Box at Site.
- f) Latest P.F. and E.S.I. challans pertaining to the period in which work was undertaken along with a certificate mentioning that P.F. and E.S.I. applicable to all the employees has been deducted and deposited with the Authorities within the time limits specified under the respective Acts.
- g) Workman Compensation Policy. (If applicable)
- h) Labor license before start of work. (If applicable)
- i) Group personnel accident insurance shall have coverage of Rs. 10 Lacs (Table C-Death + Permanent Total Disability + Partial permanent Disability due to external accidents).

Erection Conditions of Contract - ECC (CMC/BY/19-20/RB/SV/39)	Page 27 of 27	MONO POLE'S ON TURNKEY BASIS
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APPENDIX II

(To be executed on a Non-Judicial Stamp Paper of appropriate value)

FORMAT OF ADVANCE BANK GUARANTEE

This Guarantee made at _____ this [____] day of [____] 2016

1. WHEREAS M/s BSES Yamuna Power Limited, a Company incorporated under the provisions of Companies Act, 1956 having its Registered Office at Shaktikiran Building, Karkardooma, Delhi 110032, India hereinafter referred to as the " Owner ", (which expression shall unless repugnant to the context or meaning thereof include its successors, administrators, executors and assigns).
2. AND WHEREAS the Owner has entered into a contract for _____(Please specify the nature of contract here) vide Contract No. _____dated _____(hereinafter referred to as the "Contract") with M/s._____, (hereinafter referred to as "the Suppliers", which expression shall unless repugnant to the context or meaning thereof be deemed to mean and include each of their respective successors and assigns) for providing of the services on the terms and conditions as more particularly detailed therein.
3. AND WHEREAS in conformity with the provisions of clause ____ of conditions of Contract, the Suppliers has agreed to furnish a Bank Guarantee for an amount equivalent to the Advance Payment of Rs..... extended by the Owner to the Supplier for the faithful execution of the Contract.
4. AND WHEREAS the Suppliers have agreed to provide the Owner and the Owner has agreed to accept the Advance Bank Guarantee for ____ percent (____%) of the total Contract Value from [_____] (*pl. specify the name of Bank*) having its head/registered office at [_____] through its branch in _____(*pl. specify the name of Branch through which B.G is issued*) hereinafter referred to as "the Bank",

(which expression shall unless it be repugnant to the context or meaning thereof be deemed to include its successors and permitted assigns).

5. NOW THEREFORE, in consideration inter alia of the Owner granting the Suppliers the Contract, the Bank hereby unconditionally and irrevocably guarantees and undertakes, on a written demand, to immediately pay to the Owner any amount so demanded (by way of one or more claims) not exceeding in the aggregate [Rs.].....) *in words*) without any demur, reservation, contest or protest and/or without reference to the Supplier and without the Owner needing to provide or show to the Bank ,grounds or reasons or give any justification for such demand for the sum/s demanded.
6. The decision of the Owner as to whether the Supplier has fulfilled its obligation or not towards set-off of Advance Payment extended by the Owner to the Supplier shall be final and binding on the Bank and the Supplier. The Bank acknowledges that any such demand by the Owner of the amounts payable by the Bank to the Owner shall be final, binding and conclusive evidence in respect of the amounts payable by the Supplier to the Owner. Any such demand made by the Owner on the Bank shall be conclusive and binding, notwithstanding any difference between the Owner and the Supplier or any dispute raised, invoked, threatened or pending before any court, tribunal, arbitrator or any other authority.
7. The Bank also agrees that the Owner at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor without proceeding against the Suppliers notwithstanding any other security or other guarantee that the Owner may have in relation to the Supplier's liabilities.
8. The Bank hereby waives the necessity for the Owner first demanding the aforesaid amounts or any part thereof from the Suppliers before making payment to the Owner and further also waives any right the Bank may have of first requiring the Owner to use its legal remedies against the Suppliers, before presenting any written demand to the Bank for payment under this Guarantee.

9. The Bank's obligations under this Guarantee shall not be reduced by reason of any partial performance of the Contract. The Bank's obligations shall not be reduced by any failure by the Owner to timely pay or perform any of its obligations under the Contract.
10. The Bank further unconditionally and unequivocally agrees with the Owner that the Owner shall be at liberty, without the Bank's consent and without affecting in any manner its rights and the Bank's obligation under this Guarantee, from time to time, to:
- (i) vary and/or modify any of the terms and conditions of the Contract;
 - (ii) forebear or enforce any of the rights exercisable by the Owner against the Suppliers under the terms and conditions of the Contract; or
- and the Bank shall not be relieved from its liability by reason of any such act or omission on the part of the Owner or any indulgence shown by the Owner to the Suppliers or any other reason whatsoever which under the law relating to sureties would, but for this provision, have the effect of relieving the Bank of its obligations under this Guarantee.
11. This Guarantee shall not be discharged by any change in the constitution or composition of the Suppliers, and this Guarantee shall not be affected or discharged by the liquidation, winding-up, bankruptcy, reorganisation, dissolution or insolvency of the Suppliers or any of them or any other circumstances whatsoever.
12. This Guarantee shall be in addition to and not in substitution or in derogation of any other security held by the Owner to secure the obligations of the Suppliers under the Contract.
13. NOTWITHSTANDING anything herein above contained, the liability of the BANK under this Guarantee shall be restricted to _____ (*insert an amount equal to ten percent (10%) of the Contract Value*) and this Guarantee shall be valid and enforceable and expire on _____ (*pl. specify date*) or unless a suit or action to enforce a claim under this Guarantee is filed against the Bank on or before the date of expiry.

14. On termination of this Guarantee, all rights under the said Guarantee shall be forfeited and the Bank shall be relieved and discharged from all liabilities hereunder.
15. The Bank undertakes not to revoke this Guarantee during its validity except with the prior written consent of the Owner and agrees that any change in the constitution of the Bank or the Suppliers shall not discharge our liability hereunder.
16. Owner may assign this Guarantee to any Person or body whether natural, incorporated or otherwise under intimation to the Bank. The Bank shall be discharged of its obligations hereunder by performance in accordance with the terms hereof to such assignee without verifying the validity / legality / enforceability of the assignment.
17. This Guarantee shall be governed by the laws of India. Any suit, action, or other proceeding arising out of, connected with, or related to this Guarantee or the subject matter hereof shall be subject to the exclusive jurisdiction of the courts of **Delhi**, India.

Dated this day of 2016 at

(Signature)

.....

(Name)

.....

(Designation with Bank Stamp)

Attorney as per

Power of Attorney No.....

Date.....

(To be executed on a Non-Judicial Stamp Paper of appropriate value)

FORMAT OF PERFORMANCE BANK GUARANTEE

This Guarantee made at _____ this [____] day of [____] 2016

1. WHEREAS M/s BSES Yamuna Power Limited, a Company incorporated under the provisions of Companies Act, 1956 having its Registered Office at Shaktikiran Building, Karkardooma, Delhi 110032, India hereinafter referred to as the " Owner ", (which expression shall unless repugnant to the context or meaning thereof include its successors, administrators, executors and assigns).
2. AND WHEREAS the Owner has entered into a contract for _____(Please specify the nature of contract here) vide Contract No. _____dated _____(hereinafter referred to as the "Contract") with M/s._____, (hereinafter referred to as "the Supplier", which expression shall unless repugnant to the context or meaning thereof be deemed to mean and include each of their respective successors and assigns) for providing services on the terms and conditions as more particularly detailed therein.
3. AND WHEREAS as per clause ____of conditions of Contract, the Suppliers are obliged to provide to the Owners an unconditional bank guarantee for an amount equivalent to ten percent (10%) of the total Contract Value for the timely completion and faithful and successful execution of the Contract from [_____] *pl. specify the name of Bank*) having its head/registered office at [_____] through its branch in _____(*pl. specify the name of Branch through which B.G is issued*) hereinafter referred to as "the Bank", (which expression shall unless it be repugnant to the context or meaning thereof be deemed to include its successors and permitted assigns).
4. NOW THEREFORE, in consideration inter alia of the Owner granting the Suppliers the Contract, the Bank hereby unconditionally and irrevocably guarantees and undertakes, on a written demand, to immediately pay to the Owner any amount so demanded (by

way of one or more claims) not exceeding in the aggregate [Rs.].....(*in words*) without any demur, reservation, contest or protest and/or without reference to the Supplier and without the Owner needing to provide or show to the Bank ,grounds or reasons or give any justification for such demand for the sum/s demanded.

5. The decision of the Owner to invoke this Guarantee and as to whether the Supplier has not performed its obligations under the Contract shall be binding on the Bank. The Bank acknowledges that any such demand by the Owner of the amounts payable by the Bank to the Owner shall be final, binding and conclusive evidence in respect of the amounts payable by the Supplier to the Owner. Any such demand made by the Owner on the Bank shall be conclusive and binding, notwithstanding any difference between the Owner and the Supplier or any dispute raised, invoked, threatened or pending before any court, tribunal, arbitrator or any other authority.
6. The Bank also agrees that the Owner at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor without proceeding against the Suppliers notwithstanding any other security or other guarantee that the Owner may have in relation to the Supplier's liabilities.
7. The Bank hereby waives the necessity for the Owner first demanding the aforesaid amounts or any part thereof from the Suppliers before making payment to the Owner and further also waives any right the Bank may have of first requiring the Owner to use its legal remedies against the Suppliers, before presenting any written demand to the Bank for payment under this Guarantee.
8. The Bank's obligations under this Guarantee shall not be reduced by reason of any partial performance of the Contract. The Bank's obligations shall not be reduced by any failure by the Owner to timely pay or perform any of its obligations under the Contract.
9. The Bank further unconditionally and unequivocally agrees with the Owner that the Owner shall be at liberty, without the Bank's consent and without affecting in any manner its rights and the Bank's obligation under this Guarantee, from time to time, to:

- (i) vary and/or modify any of the terms and conditions of the Contract;
- (ii) Forebear or enforce any of the rights exercisable by the Owner against the Suppliers under the terms and conditions of the Contract; or
- (iii) Extend and/or postpone the time for performance of the obligations of the Suppliers under the Contract;

and the Bank shall not be relieved from its liability by reason of any such act or omission on the part of the Owner or any indulgence shown by the Owner to the Suppliers or any other reason whatsoever which under the law relating to sureties would, but for this provision, have the effect of relieving the Bank of its obligations under this Guarantee.

- 10. This Guarantee shall be a continuing bank guarantee and shall not be discharged by any change in the constitution or composition of the Suppliers, and this Guarantee shall not be affected or discharged by the liquidation, winding-up, bankruptcy, reorganisation, dissolution or insolvency of the Suppliers or any of them or any other circumstances whatsoever.
- 11. This Guarantee shall be in addition to and not in substitution or in derogation of any other security held by the Owner to secure the performance of the obligations of the Suppliers under the Contract.
- 12. NOTWITHSTANDING anything herein above contained, the liability of the BANK under this Guarantee shall be restricted to _____ (*insert an amount equal to ten percent (10%) of the Contract Value*) and this Guarantee shall be valid and enforceable and expire on _____ (*pl. specify date*) or unless a suit or action to enforce a claim under this Guarantee is filed against the Bank on or before the date of expiry.
- 13. On termination of this Guarantee, all rights under the said Guarantee shall be forfeited and the Bank shall be relieved and discharged from all liabilities hereunder.

- 14. The Bank undertakes not to revoke this Guarantee during its validity except with the prior written consent of the Owner and agrees that any change in the constitution of the Bank or the Suppliers shall not discharge our liability hereunder.

- 15. Owner may assign this Guarantee to any Person or body whether natural, incorporated or otherwise under intimation to the Bank. The Bank shall be discharged of its obligations hereunder by performance in accordance with the terms hereof to such assignee without verifying the validity / legality / enforceability of the assignment.

- 16. This Guarantee shall be governed by the laws of India. Any suit, action, or other proceeding arising out of, connected with, or related to this Guarantee or the subject matter hereof shall be subject to the exclusive jurisdiction of the courts of **Delhi**, India.

Dated this day of20XX at

(Signature)

.....

(Name)

.....

(Designation with Bank Stamp)

Attorney as per

Power of Attorney No.....

Date.....

BENEFICIARY'S BANK DETAIL WITH IFSC CODE:

1. Name of the Bank: Axis Bank Limited
2. Branch Name & Full Address: C-58, Basement & Ground Floor, Preet Vihar, Main Vikas Marg, New Delhi 110092
3. Branch Code: 055
4. Bank Account No: 911020005246567
5. IFSC Code: UTIB0000055



FORMAT OF WARRANTY/GUARANTEE CERTIFICATE

BSES YAMUNA POWER LIMITED Shaktikiran Building, Karkardooma, Delhi -110032.

Ref. Purchase Order No. :

Dear Sir,

We hereby confirm that the.....dispatched to BSES YAMUNA POWER LTD vide invoice no..... DT.....is exactly of the same nature and description as per above mentioned Purchase Order.

We further confirm that we will replace/repair our.....free of cost If found any manufacturing defect during.....months from the date of dispatch of material or.....months from the data of commissioning whichever is earlier.

Vendors Name & Signature

APPENDIX II (CMC/BY/19-20/RB/SV/53)	Page 10 of 10	MONO POLE'S ON TURNKEY BASIS
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PRICE BID FORMATS (SUPPLY & SERVICES)

OF

**CONVERSION OF EXISTING TOWERS & RAISING
OF HEIGHT OF 66 KV O/H LINE OF CIRCUIT 1 & 2
BETWEEN OLD KONDLI GRID TO DALLUPURA GRID
BY ERECTING 04 NOS MONO POLE ALONG THE
DRAIN**

IN

BSES YAMUNA POWER LTD.

NIT NO CMC/BY/19-20/RB/SV/019

Due Date for Submission: 10.06.2019, 14:30 HRS

**BSES YAMUNA POWER LIMITED (BYPL)
SHAKTI KIRAN BUILDING, KARKARDOOMA,
DELHI-110032
CIN: U40109DL2001PLC111525
TEL: 011 3999 7111
WEBSITE: www.bsedelhi.com**

GRAND SUMMARY OF THE QUOTED PACKAGE(S)

ALL PRICES IN INR (₹)

Package Name	Supply Prices-Landed	Erection, Testing and commissioning prices	Total Package Cost (C=A+B)
	(A)	(B)	
Conversion of Existing Towers & Raising of Height of 66 kV O/H line of Circuit 1 & 2 between Old kondli Grid to Dallupura grid by erecting 04 Nos Mono Pole along the drain			
Grand Total			
Grand Total (In words)			

We declare that the following are our quoted prices in INR for the entire packages.

Date:

Bidders Name:

Place:

Bidders Address:

Signature:

Designation:

Printed Name:

Common Seal:

Note:

- 1) All prices for the packages quoted are inclusive of taxes and duties, GST and freight etc. Bidder shall include & indicate any others taxes under the applicable law(s) for supply and services to be performed in the purchaser's country.
- 2) Bidder shall include & indicate any others taxes under the applicable law(s) for supply and services to be performed in the purchaser's country.
- 3) The bidder shall, at its own, handle all imported equipment's and handle all formalities for custom clearances, port charges, etc if any
- 4) All prices for the packages quoted are against the scope of work under the contract shall be executed strictly as per the NIT conditions and the technical specification.

- 5) Quoted prices shall be as per the Bill of quantities (BOQ) as attached. However Any items/material/machinery, not specifically mentioned In BOQ as well as in the technical specifications but required for successful completeness, Erection, Testing and Commissioning of the package awarded shall be deemed to be in the scope of the bidder.
- 6) Insurance as per the clause defined in SCC and other contract conditions, is included in the quoted prices. However Bidder shall indicate the value of the insurance taken, separately.
- 7) Kindly refer the relevant layout drawing of existing foundations in Annexure of tender document. Site visit is advisable prior to submission of quotation.



BSES Yamuna Power Limited

PRICE FORMAT – SUPPLY (A)

DESCRIPTION OF GOODS	HSN CODE	QTY	UoM	UNIT RATE	UNIT GST & CESS AS APPLICABLE (CGST & SGST/UTGST or IGST)		UNIT LANDED COST (₹)	TOTAL LANDED COST (₹)
					%	AMT		
Fabrication, galvanizing, inspection & supply of 66KV Double circuit Monopole with extension and nuts, bolts, washers & anchor plates etc. As per design								
18Mtr (0-15) deg.		1	No's					
23mtr (15-30) deg		2	No's					
18mtr (30-60)deg		1	No's					
Conductor & Earth wire								
ACSR Goat Conductor		3	KM's					
Earth wire		0.5	KM's					
Tower accessories								
Number Plate		4	No's					
Danger Plate		4	No's					
Phase Plate in Set of Red, Blue & Yellow		4	set					
Pipe type Earthing material		8	set					
Hardware suitable for ACSR Goat								
Double tension fitting		60	No's					

160KN tension polymer string		120	No's					
Conductor Accessories suitable for ACSR Goat								
Vibration dampers		60	No's					
Mid span Compression Joint		6	No's					
Repair Sleeve		6	No's					
Earth wire Accessories suitable for 7/10 SWG Earth wire								
Tension clamp		12	No's					
Mid span Compression Joint		6	No's					
Vibration dampers		12	No's					
Copper Bond		6	No's					
GRAND TOTAL LANDED COST								
In words								

PRICE FORMAT – E/T/C (B)

DESCRIPTION OF SERVICES	SAC CODE	QTY	UoM	UNIT RATE	UNIT GST & CESS AS APPLICABLE (CGST & SGST/UTGST or IGST)		UNIT LANDED COST (₹)	TOTAL LANDED COST (₹)
					%	AMT		
Detailed Survey including Tower Profiling		1.00	KM					
Check Survey & final peg marking (Route length)		1.00	KM					

Cost of foundation

18Mtr (0-15) deg.		1.00	no's					
23mtr (15-30) deg		2.00	no's					
18mtr (30-60)deg		1.00	no's					
Cost for setting of foundation bolts & templates		6.00	no's					

Erection of 66kv DC monopoles

18Mtr (0-15) deg.		1.00	no's					
23mtr (15-30) deg		2.00	no's					
18mtr (30-60)deg		1.00	no's					
Tack welding of Foundation Bolts		300	no's					

Laying, tensioning, stringing, clamping, jointing etc. Complete with ACSR Goat DC including hoisting of insulators fitting of all necessary hardware & accessories etc.		3.00	span					
Laying, tensioning, stringing, clamping, jointing etc. Complete with ground wire including hoisting of all necessary hardware & accessories for 01 no. 7/3 15mm G.S. Earth wire		3.00	span					
Grounding work including earth material for pipe type earthing		8.00	no's					
Providing barricades for avoiding any accident during the period of excavation to backfilling of soil & during erection		4.00	job					
Construction of Scaffolding works		4.00	no's					
Design & Vetting charges of Monopoles		2.00	job					

Dismantling of conductors from existing Line		0.50	Kms					
Dismantling of Earth wire from existing Line		0.50	Kms					
Dismantling of Towers of existing line		16.00	MT					
Transportation of Material upto 10 Kms		16.00	MT					
GRAND TOTAL LANDED COST								
In words								

VOLUME – II

TECHNICAL SPECIFICATIONS

FOR

SURVEY, DESIGN, ENGINEERING, SUPPLY, ERECTION, TESTING, & COMMISSIONING OF NEW CONTROL & RELAY PANELS ALONG WITH OTHER MATERIALS, DISMANTLING OF EXISTING EQUIPMENTS AS PER THE SCOPE OF WORK ON TURNKEY BASIS AT 33kV DMS GID AND 66kV KHICRIPUR GRID SUB STATION, DELHI

NIT NO CMC/BY/19-20/RB/SV/39

Due Date for Submission: 22.08.2019, 14:30 HRS

**BSES YAMUNA POWER LIMITED (BYPL)
SHAKTI KIRAN BUILDING, KARKARDOOMA,
DELHI-110032
CIN: U40109DL2001PLC111525
TEL: 011 3999 7111
WEBSITE: www.bsedelhi.com**

TECHNICAL SPECIFICATION FOR STEEL MONOPOLE

**TECHNICAL SPECIFICATION
FOR**

**SITC of 33 and 66 kV Steel Monopole including ACSR
Conductor and Accessories**

Specification No. – SP-MP-172-R0

Prepared by		Reviewed by		Approved by		Rev	Date
Name	Sign	Name	Sign	Name	Sign		
Abhishek Vashistha		Gaurav Sharma		Ashwani Agarwal		R0	20.11.19

TECHNICAL SPECIFICATION FOR STEEL MONOPOLE**INDEX**

1.0	SCOPE	3
2.0	STANDARD & CODES	3
3.0	SERVICE CONDITIONS	4
4.0	DESIGN REQUIREMENT	4
4.0	TESTING AND INSPECTION	12
5.0	DRAWINGS, DATA & MANUALS SUBMISSION	13
6.0	QUALITY ASSURANCE (QA)	13
7.0	DEVIATION	14
ANNEXURE 1 -	GTP OF ACSR CONDUCTOR	14
ANNEXURE 2 -	GTP OF POLYMERIC INSULATOR	16
ANNEXURE 3 -	GTP OF HTGS EARTH WIRE	18
ANNEXURE 4 -	GTP OF HARDWARE FITTINGS	19
ANNEXURE 5 -	LIST OF DRAWINGS TO BE SUBMITTED FOR APPROVAL	20

TECHNICAL SPECIFICATION FOR STEEL MONOPOLE

1. SCOPE

This specification covers the requirement of Supply, Erection, Testing and Commissioning of 66 kV O/H Double circuit Monopole with associated works including all equipments/materials.

Detailed scope shall be as below:

- 1.1. Route Survey, Profiling and Monopole spotting and submission of detailed drawing.
- 1.2. Design, manufacture, testing at manufacturer's works (before dispatch), supply of Monopoles as specified.
- 1.3. Supply of Other Line items/ Accessories such as ACSR Goat conductor, Insulator strings, vibration dampers, hardware, earthing material, earth wire with accessories etc.
- 1.4. Bidder shall supply this material from BYPL approved vendors.
- 1.5. Erection of supplied steel tubular monopoles (including civil work) along with all related accessories as per the approved Monopole spotting/ alignment.
- 1.6. Erection of other Line items/ accessories such as ACSR conductor, Insulator strings, vibration dampers, hardwares, earthing material, earth wire with accessories etc.
- 1.7. Provision of Earthing of monopole and earth wire.
- 1.8. Testing and commissioning of 33/66KV lines on rated voltage.
- 1.9. Dismantling of existing Tower line structure and transport to scrap store of BYPL.

Any item, which may not have been mentioned herein, but necessary for the satisfactory SITC of monopoles shall be deemed to be part of the requirements. The material shall have all essential features prescribed in relevant IS/International or equivalent Standards referred in this specification.

2. STANDARDS & CODES

<p>Indian Standards</p>	<p>IS 5613 -for determining the clearance diagrams for the pole IS 802 - for sag tension and loading calculation IS 875- CEA Safety Regulation 2010</p>
<p>ASTM – American Society for Testing and Materials</p>	<p>A 36 /36 M Standard Specification for Structural Steel, Book 01.04 A 123 Specification for Zinc (Hot-Dip Galvanized) Coatings on iron and Steel Products, Book 01.06, 15.08 A 153 Specification for Zinc Coating (Hot Dip) on Iron and Steel Hardware, Book 01.06.15.08 A 572/572M Specification for High-Strength Low Alloy Columbium Vanadium Steels of Structural Quality A 780 Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings</p>
<p>AWS – American</p>	<p>D1.1-92 Structural Welding Code – Steel. Specification for Carbon Steel Covered Arc-Welding Electrodes A5.17-89. Specification for Carbon Steel Electrodes and Fluxes for</p>

TECHNICAL SPECIFICATION FOR STEEL MONOPOLE

Welding Society	Submerged Arc- Welding
American Society of civil engineers	ASCE SEI 48-05 - Design of Steel Transmission Pole Structures.
ISO – International Standards Organization	ISO 9001-Quality System Model for Quality Assurance in Design/Development, Manufacture and Testing ISO 9002-Quality System Model for Quality Assurance in Production, installation and Servicing
Full scale testing	IEC 60652 – 2002

These codes and standards set forth the minimum requirements which may be exceeded by vendor if, in vendor's judgment and with purchaser's acceptance, superior designs and materials are available for successful and continuous operation of equipment as required by this specification.

3. SERVICE CONDITIONS

Monopole to be supplied against this specification shall be suitable for satisfactory operation under the following conditions-

3.1	Average grade atmosphere	Heavily polluted, Dry
3.2	Maximum altitude above sea level	1000M
3.3	Relative Humidity	100%
3.4	Ambient air temperature	Highest 50 Deg C Average 40 Deg C Minimum 0 Deg C
3.5	Operating temperature	0 Deg C - 50 Deg C
3.6	Rainfall	750mm concentrated in four months
3.7	Seismic Zone	4

4. DESIGN REQUIREMENT

The designs of multi circuit and double circuit steel monopole towers and their extensions should be conforming to the design parameter specified herein. The scope of supply of towers also includes supply of design calculations and test reports for towers and extensions including detailed structural/shop drawings of towers, extensions and stub-setting templates and design

TECHNICAL SPECIFICATION FOR STEEL MONOPOLE

and drawings of foundations in various types of soil, sag templates, sag tension chart for conductor and ground wire etc.

The fabricated steel poles shall include base plate with its required accessories, monopole body (including extensions, if required), Cross Arms. Monopole shall be joined with friction clip or Flanged joint. Cross Arms shall be Polygonal with structural jointing arrangement. The accessories shall include strain plates, D-shackles with nuts, bolts and washers, U-Bolts with nuts and washers, space washers, links for providing attachment to the Earth Wire and Conductor, anti climbing devices and any other equipment/ material / article to complete the works as per the scope given in this specification.

The monopoles shall be fully galvanized. Provision will be made at the Cross Arm level for fixing phase plates and Bird guards. The holes for fixing the Earthing bonds at the peak and for grounding the monopoles at bottom or any other holes, which the purchaser may require, shall be provided at the convenient locations on the monopoles.

4.1. TYPE OF MULTI CIRCUIT AND DOUBLE CIRCUIT STEEL MONOPOLE

The multi circuit monopole will have four circuits (twelve cross arms), self-supporting, designed for the specified loading conditions. There will generally be following type of towers:-

Monopole type MP0: Tangent type tower with maximum line deviation up to 2° to be used with Single/ Double suspension insulator strings.

Monopole type MP30: Medium angle tower to be used for line deviation from 2° to 30° with Single/Double tension insulator strings.

Monopole type MP60: Heavy angle tower to be used for line deviation from 30° to 60° and also as dead end tower with Single/Double tension insulator strings.

The double circuit Monopole will have two circuits (six cross arms), self-supporting, designed for the specified loading conditions. There will generally be following type of towers:-

Monopole type MP0: Tangent type tower with maximum line deviation up to 2° to be used with Single/Double suspension insulator strings.

Monopole type MP30: Medium angle tower to be used for line deviation from 2° to 30° with Single/Double tension insulator strings.

Monopole type MP60: Heavy angle tower to be used for line deviation from 30° to 60° and also as dead end tower with Single/Double tension insulator strings.

The bidder may also quote for up gradation work using the categories of Monopole available with him. In such case the bidder will have to indicate the type of monopoles and extensions proposed to be used by him for up gradation work.

4.2. EXTENSIONS

Monopole shall be designed and provided with extension of 3M height for use with all type of towers.

TECHNICAL SPECIFICATION FOR STEEL MONOPOLE**DESIGN: 33/66 KV as per ASCE-48-05**

The bidder will furnish a design as per ASCE-48-05 for each of the offered monopoles with extensions based on the loading conditions indicated herein. The suspension monopoles shall be designed with using 'I' suspension string.

Please note that in case of suspension monopole, full wind condition is to be considered in the design in case of security requirement i.e. transverse load due to wind action on tower structure, conductors, ground wire and insulators shall be computed as per clause 12.1.1(i), page 10 of IS 802 (Part-1) 1995 or its latest. The mechanical tension of conductor/ground wire is the tension corresponding to 100% design wind pressure at everyday temperature or 36% design wind pressure at minimum temperature after accounting for drag coefficient and gust response factor as defined in clause 11.3.2.1 page 10 of IS 802 (Part-1) 1995 or its latest. The longitudinal loads shall correspond to 50% of mechanical tension of conductor as per clause 11.3.2.1, page 10 of IS 802 (Part-1):1995 or its latest.

The monopole to be designed considering Goat ACSR one conductor per phase (although bidder need to supply ACSR) in vertical formation and one ground-wire of (7/3.15mm) galvanized stranded steel wire of 95kg/sq.mm grade placed on the top of the monopole. The conductor and ground-wire particulars are given in following sections.

The ground-wire at its suspension point shall provide a shielding angle of 30° with respect to the top most conductors. The drop of ground-wire suspension assembly should be taken into account so as to determine the shielding angle.

The minimum mid-span vertical clearance between Ground-wire and Conductor in still air shall be as per relevant standards.

Note: The Monopoles shall be designed as per site requirements and following the guidelines of statutory clearances, CEA's Regulations, 2010.

4.3. DESIGN SPANS:

The wind span for the purpose of computing the wind load on conductors and ground-wire shall be indicated in the offer. Similarly the weight span shall also be indicated.

4.4. WIND LOAD:

The wind load on conductors, earth wire, towers and insulator strings shall be taken as per recommendations of IS: 802 (Part-I) -1995 or its latest with latest revision thereof, for following conditions:-

4.4.1. Wind zone - 4 (47mtrs/sec)

4.4.2. Reliability level –

4.4.2.1. 1.0 (one) for Double circuit monopoles

4.4.2.2. 2.0 (Two) for Multi circuit monopoles.

TECHNICAL SPECIFICATION FOR STEEL MONOPOLE

4.4.2.3. Terrain category - 2 (two)

4.5. TEMPERATURE VARIATION:

The maximum working tension of conductor and ground-wire and the uplift conditions shall correspond to the minimum temperature of 0° C. The maximum conductor sag and ground clearance beneath should correspond to the maximum working temperature of 75° C. The Maximum ground-wire temperature shall be taken as 53°C.

4.6. STRUCTURAL STEEL:

Structural steel shall be conforming to IS: 2062 Grade E-355 JR and weld able quality and plates less than 6mm thickness (to be used for pack plate and pack washer) shall be as per IS: 1079.

Permissible stresses in the design of self-supporting steel monopole tower shall conform to ASCE: 48-05 latest edition or equivalent code of latest edition. The sheets/plates of monopole shall be from TATA/SAIL/JSW/ESSAR.

4.7. LOADS ON MONOPOLES:

Transmission lines are subjected to various loads during their life time. These loads are classified into three distinct categories, namely

4.7.1. Climatic Loads: related to the reliability requirements.

These are random loads imposed on monopole, insulator string; conductor & ground wire due to action of wind on transmission line & do not act continuously. Climatic loads shall be determined under either of the following climatic conditions whichever is more stringent:

100 percent design wind pressure at every day temperature 32°C)

or

36 percent design wind pressure at minimum temperature (0°C)

4.7.2. Failure containment Loads: related to security requirements.

4.7.2.1. Anti-Cascading Loads:

Cascade failure may be caused by failure of items such as insulators, hardware, joints failures of major components such as monopoles, foundations, conductor due to defective material or Workman ship or from climatic overloads sometimes from casual events such as misdirected aircraft, avalanches, sabotage etc. The security measures

TECHNICAL SPECIFICATION FOR STEEL MONOPOLE

adopted for containing cascade failures in the line is to provide angle monopoles at specific intervals which shall be checked for Anti-cascading loads.

4.7.2.2. Anti-cascading checks:

4.7.2.2.1. Suspension monopoles shall be checked for narrow front wind with a wind speed of 2.0 of basic wind speed.

4.7.2.2.2. Angle monopoles shall be checked for the following anti cascading conditions with all the conductors & ground wire intact only on one side of the monopole.

4.7.2.3. Transverse load: These loads shall be taken under no wind condition.

4.7.2.4. Vertical Load: These loads shall be the sum of weight of conductor/ground wire as per weight span of intact conductor/ground wire, weight of insulator strings and accessories.

4.7.2.5. Longitudinal Loads: These loads shall be the pull of conductor/ground wire at every day temperature & no wind applied simultaneously at all points on one side with zero degree line deviation.

4.7.2.6. Torsional & Longitudinal Loads:

These loads are caused by breakage of conductors and/or ground wire. All the monopoles shall be designed for these loads for the number of conductor(s) and or ground wire considered broken as per provisions of this specification.

4.7.3. Construction & Maintenance Loads: related to safety requirements.

These are loads that are imposed on monopoles during constructions & maintenance of transmission lines.

Computation of Loads & loading combinations: The computation of loads is to be done in line with relevant provisions/ sections of IS 802- 1992 (latest amendment)

4.7.4. Tension Limits:

Conductor/ground wire tension at everyday temperature & without external load, should not exceed the following percentage of the ultimate tensile strength of the conductor:

Initial unloaded tension 22 percent, Final unloaded tension 25 percent provided that the ultimate tension under everyday temperature & 100 percent design wind pressure or

TECHNICAL SPECIFICATION FOR STEEL MONOPOLE

minimum temperature & 36 percent design wind pressure does not exceed 70 percent of the ultimate tensile strength of the conductor/ground wire.

4.7.5. TRANSVERSE LOADS

The transverse loads due to wind on conductors and ground-wire shall be calculated

4.7.5.1. The normal span for normal Multi-circuit monopoles (i.e. upto +6m Extension) shall be 200m

4.7.5.2. The wind span is the sum of the two half spans adjacent to the support under consideration. For normal horizontal spans this equal to normal ruling span.

4.7.5.3. The weight span shall be shown in the design report of monopoles. The horizontal distance between the lowest point of the conductors on the two spans adjacent to the tower. The weight spans considered for design of monopoles is as below.

Under broken wire conditions 50% of the intact span and 10% of the broken span shall be assumed as wind span. In addition to this, transverse loads due to line deviation, wind on towers, and wind on insulator strings should also have to be taken into consideration in the design of the towers.

4.8. CONDUCTOR AND GROUND-WIRE SAG:

The maximum sag for the conductor should be calculated for 75° C and no wind with an allowance of 3% of maximum sag to allow for plotting and sagging errors.

4.9. BROKEN WIRE CONDITIONS:

Following broken wire conditions should be assumed in the design of towers:

4.9.1. Suspension monopole- Any one of power conductor broken or ground-wire broken which ever condition is more stringent for design.

4.9.2. Angle Monopole for 2° to 30° deviation - Any two of power conductors broken on the same side and on the same span or any one of the power conductor broken and ground-wire broken on the same span whichever combination constitutes the most stringent condition for design of a particular member.

TECHNICAL SPECIFICATION FOR STEEL MONOPOLE

4.9.3. Angle Monopole for 30° to 60° deviation - Any Three power conductors broken on the same side and on the same span or any two of the power conductor broken and ground-wire broken on the same side and same span which ever combination constitutes the most stringent condition for design. Further this monopole shall also be designed for dead end condition i.e. all conductors and ground wire broken on the same side and same span.

In all type of monopoles, the power conductor's supports and ground-wire supports should be designed for broken wire conditions also.

4.10. FACTORS OF SAFETY FOR MONOPOLES:

The factors of safety for design of monopoles shall be as under:

4.10.1. Normal condition – 1.5.

4.10.2. Broken wire condition – 1.5

4.10.3. DEFLECTION CRITERIA: 1.5% of the height under safety normal condition and 5% of height under ultimate wind for both suspension and tension poles.

4.11. BOLTS, NUTS AND WASHERS:

The design of the monopoles should be based on use of HRH mild steel hot dip galvanized bolts having grade 6.8(for foundation bolts)/8.8(for connection bolts). The connections shall be designed on the basis of use of 24 mm dia bolts. The spring washers shall be provided for insertion under all nuts. These washers shall be of steel, electro galvanized, and positive lock type and of minimum 3.5mm thickness.

The nuts shall be forged and tapped after galvanizing and then lubricated. The nuts shall be chamfered on one face only, the other face shall be machined.

The bolts and nuts shall be free from forging and threading defects such as cuts, splits, burrs, bulging, taper, eccentricity, loose fit etc.

The bolts shall be threaded up to standard length only as per relevant Indian Standard and not to full length.

The bolts and nuts shall conform to IS 1367-1971 Part-III and Part-IV, IS 12427, IS 1363-92, IS 1367 Part-XIII with latest amendment.

The spring washers after coiling shall be suitably heat treated so as to result in the finished washer having hardness 43 to 50 HRC when tested in accordance with IS 1586- 1968.

TECHNICAL SPECIFICATION FOR STEEL MONOPOLE

The surface of the washers shall be free of scales and burrs. The washers shall be coiled without any kinks (except for the shape with turned-up ends). The ends of the washer shall not about when the washers are compressed. The ends shall be so served as to prevent tangling.

4.12. LOAD ON FOUNDATIONS:

The foundations shall withstand the ultimate loads on the superstructure as specified in this specification, for the full footing reactions along the stub angle slopes obtained from the structural stress analysis.

The reactions on the footing shall be composed of the following types of loads for which they shall be required to be checked.

- 4.12.1. Maximum tension or uplift.
- 4.12.2. Maximum compression or down-thrust.
- 4.12.3. Maximum horizontal shear or side thrust.

The additional weight of concrete in the footing below ground level over the earth weight and full weight of concrete above the ground level in the footing and embedded steel parts will also be taken into account adding to the down-thrust.

4.13. STABILITY ANALYSIS:

The following primary types of soil resistances shall be assumed to act in resisting the loads imposed on the footings in earth:

- 4.13.1. Resistance against uplift:

The uplift loads will be assumed to be resisted by weight of earth in an inverted frustum of a conical pyramid of earth on the footings pad whose sides make an angle equal to the angle of repose of the earth with the vertical in average soil. The weight of concrete embedded in earth and that above the ground will also be considered for resisting the uplift. In case where the frustum of earth pyramids of two adjoining legs super-impose each other, the earth frustum will be assumed truncated by a vertical plane passing through the centre line of the tower base.

- 4.13.2. Resistance against down-thrust:

The down -thrust loads combined with the additional weight of concrete above earth will be resisted by bearing strength of the soil assumed to be acting on the total area of the bottom of the footings.

- 4.13.3. Resistance against side thrust:

TECHNICAL SPECIFICATION FOR STEEL MONOPOLE

The bidder shall describe in detail the methods followed by them to check the stability of foundations for horizontal shears.

OR

Side-thrust along with the relevant reference (IS or other standard) in support of their contentions.

In addition to the strength design, stability analysis of the foundation shall be done to check the possibility of failure by over-turning, uprooting, sliding and tilting of the foundation.

4.14. DESIGN OF FOUNDATIONS:

The bidder is requested to submit the design of foundations. It is recommended to give Single Pile Foundation.

4.15. FACTORS OF SAFETY FOR FOUNDATION:

The minimum factors of safety/overload factor based on the ultimate strength of the foundation material when the monopoles are under full working loads under various conditions of loadings combined with the other loads specified for the foundations shall be as given below:-

4.15.1. Normal condition - 1.5

4.15.2. Broken wire condition - 1.5

5. TESTING AND INSPECTION:

All routine & acceptance tests shall be witnessed by the purchaser/his authorized representative.

5.1. Routine Test:

The bidder shall provide material wise routine test reports conducted at their work along with the standards application in their bid.

5.2. Acceptance tests:

Acceptance test shall be carried out as per technical specification and relevant standard.

Following compulsory acceptance test shall be carried out on all items before the supply of material:

5.2.1. Visual Inspection

5.2.2. Physical verification

TECHNICAL SPECIFICATION FOR STEEL MONOPOLE

5.2.3. Dimensional checks

5.3. Type Test

The bidder shall furnish the type test certificates from CPRI/ERDA for suspension & angle Monopoles, as per relevant standards and specification.

The bidder shall furnish the type test certificates from CPRI/ERDA for ACSR conductor, Earth wires, Insulators and All hardware fittings and other accessories as per relevant standards and Technical specification.

Type tests should have been conducted in certified Test laboratories not exceeding 5 years from the date of opening the bid, In the event of any discrepancy In the test reports, i.e. any test report not acceptable, same shall be carried out without any cost implication to the Purchaser.

6. DRAWINGS, DATA & MANUALS SUBMISSION

7.1	Documents	copy of signed documents also shall be part of entire soft file (e-file) or CD.)
7.2	Along with the Bid	Vendor shall submit signed 3 sets (plus 1 set of soft copy) of following documents: a) GTP (duly filled-in) (as per Annexure - A). b) Cross-sectional drawings for components Assembly c) Type Test Certificates d) Complete Catalogue and Instructions. e) Any other document.
7.3	After Award of Contract	Vendor shall submit signed 2 sets (plus 1 set of soft copy) of above mentioned documents within 15 days, for Purchaser's approval.
7.4	"As-Built" documents	Final signed "As-built" documents for the equipment in 3 sets (hardcopy), 1 no. soft copy and 1 no. CD. These documents shall include signed Routine & Acceptance Test Certificates also.
7.5	Packing, Marking, Shipping, Handling and Storage	Every component/kit/box shall be properly sealed/ packed for protection against damage.
7.6	Transit damage	The seller shall be responsible for any transit damage due to improper packing.
Refer Annexure 5 for list of drawing submission		

7. Quality Assurance (QA)

8.1	Vendor's Quality Plan (QP)	To be submitted for Purchaser's approval as well along the bid.
8.2	Sampling Method	Sampling Method for quality checks shall be as per

TECHNICAL SPECIFICATION FOR STEEL MONOPOLE

		manufacturer's standard practice / ESI guidelines and Purchaser's prior approval shall be taken for the same.
8.3	Inspection Hold-Points	To be mutually identified, agreed and approved in Quality Plan.

8. Deviations

9.1	Deviations	<p>A) Deviations from this specification can be acceptable, only where the Seller has listed in his quotation the requirements he cannot, or does not, wish to comply with and which deviations the Buyer has agreed to in writing, before any order is placed.</p> <p>B) In the absence of any list of deviations from the Seller, it will be assumed by the Buyer that the Seller complies with the Specification fully</p>
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ANNEXURE-1

**GURANTEED TECHNICAL PARTICULARS of ACSR Conductor
(SEPARATE DATA SHEET SHALL BE SUBMITTED FOR EACH TYPE OF CONDUCTOR)**

SI.NO.	DESCRIPTION	BYPL Requirement	PARTICULARS
1.	Name of the material offered	ACSR GOAT	
2.	Maker's Name	Required	
3	Address and Phone No.		
4	Reference Standards	IS-398 Pt-3, IS-7098 Pt-1, IS 17778-80	
5	No. of strands/diameter of Galvanized steel wire/Al strand	Required	
6	Apporx. Dia over covered conductor		
7	Minimum Ultimate Tensile Strength of Conductor		
8	Direction Of Lay	Successive layers shall have opposite directions of lay outermost layer being Right Handed	
9	Lay ratio of Aluminum wire		
10	Continuous max.current rating of Conductor in still air at an ambient temperature at 45 Deg C	Required	
11	Temperature rise for the above current	Required	
12	Short Circuit current rating of ACSR	Required	

TECHNICAL SPECIFICATION FOR STEEL MONOPOLE

	Conductor for 1sec		
13	Module of elasticity of complete conductor		
14	Coefficient of linear expansion of complete conductor		
15	Cross sectional area	Required	
16	Nominal aluminum area	Required	
16.1	Conductivity and Grade of Al	61% EC Grade	
16.2	% Composition of steel wire	As Per spec	
17	certificate Chemical composition from NABL approved lab	Required	
18	Minimum breaking load		
18.1	Aluminum strand (After Stranding)	Required	
18.2	Galvanized steel wire (After Stranding)	Required	
19	Total Conductor	Required	
20	Max.Working tension of conductor	75% of UTS	
21	Resistance of Al conductor at 20Deg C(Max)	Required	
22	Weight		
22.1	Aluminum strand	Required	
22.2	Steel Strand	Required	
22.3	Conductor without insulation	Required	
22.4	Conductor with insulation	Required	
23	Purity of AL.rod in %age	Required	
24	Zinc coating on steel wire		
24.1	Grade of Zinc	Electrolytic High Grade Zinc not less than 99.95% purity as per IS209-1992	
24.2	Min wt of Zinc Coating	Required	
24.3	No.& duration of dips of Zinc coating (Before Stranding)	Required	
25	Drum type		
25.1	Ref IS	IS-1778-1980	
25.2	Gross weight of drum including weight of conductor	Required	
25.3	Standard length of each piece of conductor	3Km	
25.4	Non standard length	1% of the ordered quantity & no length less than 50% of the standard length	

TECHNICAL SPECIFICATION FOR STEEL MONOPOLE

ANNEXURE-2

GUARANTEED TECHNICAL PARTICULAR of POLYMERIC INSULATORS

Sl. No.	Descriptions	Unit	Data to be filled by Manufacturer
1	Name & address of manufacture		
2	Weight of single unit	Kg	
3	Size and designation of ball & socket assembly	mm	
4	Core diameter	mm	
5	Tolerance on core diameter	±mm	
6	Nominal length (section length)	mm	
7	Tolerance on Nominal length	±mm	
8	Dry arcing distance	mm	
9	Number of sheds	nos	
10	Sheds profile (type)		
11	Shed spacing	mm	
12	Sheds profile (regular alternating)		
13	Shed diameter	mm	
14	Tolerance on shed diameter	±mm	
15	Minimum creepage distance	mm	
16	Tolerance on creepage distance	±mm	
17	Guaranteed mechanical strength	KN	
18	Routine mechanical load	KN	
19	Materials		
a	FRP Rod		
b	Weather sheds with % contents of silicon		
c	Housing		
d	End Fitting		
e	Grading Ring		
20	Minimum thickness of sheath covering over the core	mm	
21	Power frequency withstand voltage of single unit		
a	Dry	KV (rms)	
b	Wet	KV (rms)	
22	Power frequency flashover voltage of single unit		
a	Dry	KV (rms)	
b	Wet	KV (rms)	
23	Impulse withstand voltage of single unit (dry)		
a	Positive	KV (peak)	
b	Negative	KV	

TECHNICAL SPECIFICATION FOR STEEL MONOPOLE

		(peak)	
24	Impulse flashover voltage of single unit (dry)		
a	Positive	KV (peak)	
b	Negative	KV (peak)	
25	Purity of zinc used for galvanizing end fittings	%	
26	Number of dips which the end fittings can withstand in standard preece test	Nos.	
27	Certified test report of accelerated ageing test of 5000 hours (enclosed) (appendix-C of IEC-61109)	Yes/No	
28	Drawings Enclosed	Yes/No	

TECHNICAL SPECIFICATION FOR STEEL MONOPOLE

ANNEXURE – 3

GUARANTEED TECHNICAL PARAMETERS OF HTGS EARTH WIRE

Sl No.	Particulars	Data to be filled by Vendor
1	Particulars of single steel wire before stranding	
a)	No. of wires	
b)	Diameter (mm)	
c)	Tolerance	
d)	Minimum elongation in 100 mm length	
e)	Breaking load (Kg.)	
f)	Minimum ultimate tensile stress (Kg/mm ²)	
g)	D.C. resistance at 20 deg. C (Ohm/Km)	
2	Stranded Wire	
a)	Length of lay (Max-Min)	
b)	Overall diameter of Earth wire(mm)	
c)	Area of cross section of Earth wire	
d)	Breaking load (Kg.)	
e)	Resistance in Ohms per Km. at 20 deg. C.	
f)	Modulus of elasticity of Earth Wire(Kg/cm ²)	
g)	Weight of Earth wire (Kg/Km)	
h)	Co-efficient of linear expansion (per deg. C)	
3	Quality of zinc used (Specify the grading and percentage)	
4	Coating of zinc on wires In Gms. Per sq. mtrs	
5	Standard Length	

ANNEXURE-4

**GUARANTEED TECHNICAL PARTICULARS OF HARDWARE FITTINGS FOR ACSR
GOAT CONDUCTOR AND EARTH WIRE FOR LINE**

GTP of Hardware fittings to be provided by vendors

TECHNICAL SPECIFICATION FOR STEEL MONOPOLE**ANNEXURE-5****LIST OF DRAWINGS TO BE SUBMITTED for APPROVAL**

S.No	Document / drawing description
1	Dimensional Drawing of offered monopole with design calculation
2	Route map of proposed 33/66KV line to be diverted and associated work of 33/66KV line
3	Details of earthing arrangement.
4	Number plate
5	Circuit plate
6	Phase plate
7	Danger Board
8	Bird guard
9	Anti climbing device
10	Flexible Bond for earth wire.
11	Cross sectional drwg for Conductor
12	Cross sectional drwg for earth wire
13	33/66KV Single & Double suspension insulator string hardware for ACSR conductor
14	33/66KV Single & Double tension insulator string hardware for ACSR conductor
15	Hardware fittings for Earth wire
16	Mid span compression joint for ACSR Conductor
17	Vibration damper for ACSR Conductor
18	Repair sleeve for ACSR conductor
19	Mid span compression joint for earth wire(if any)
20	Vibration damper for earth wire(if any)
21	Repair sleeve for earth wire(if any)
22	Polymeric Insulators
23	Design calculations & drawing of earthing for monopole and earthwire