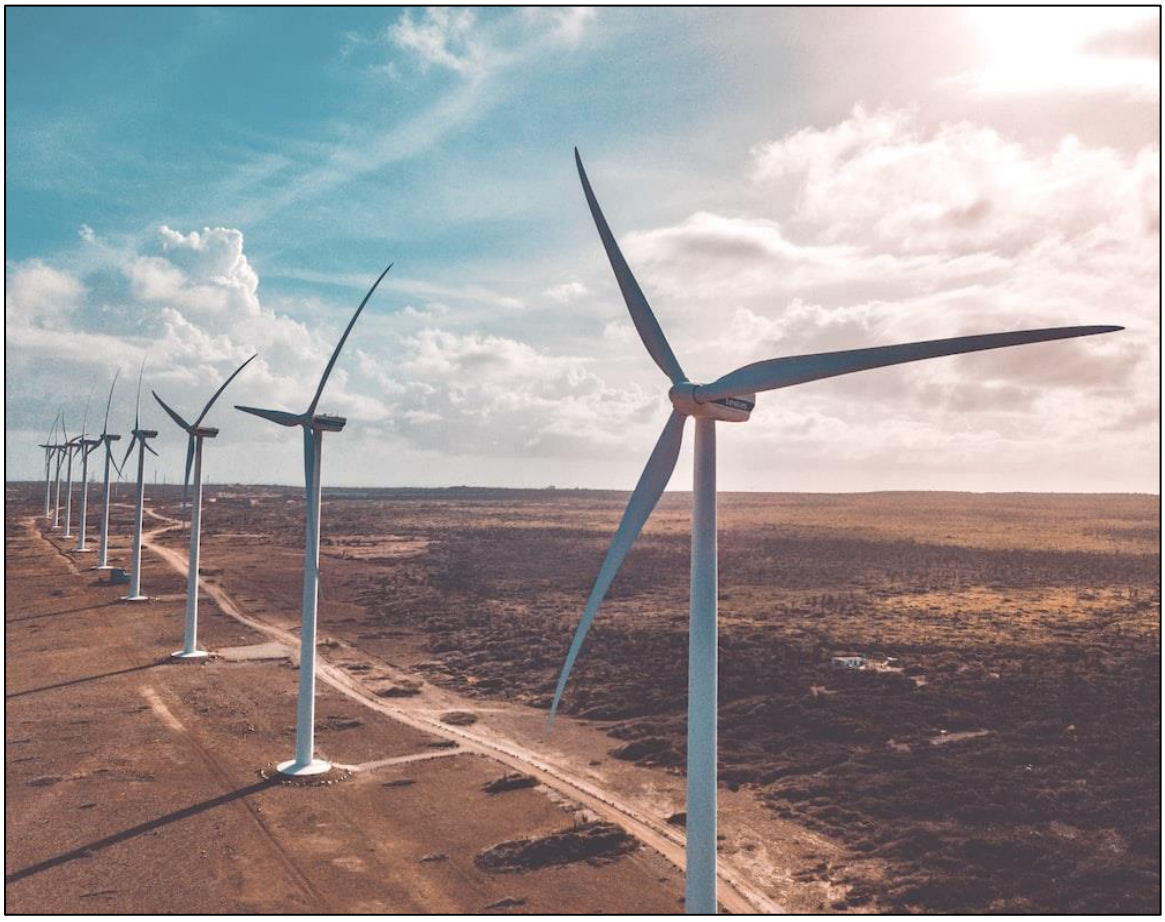
CERTIFICATE NO
BN22530/21306

Bharat Petroleum Corporation Limited
"A" Installation, Sewree Fort Road, Sewree (East), Mumbai, 400015

REQUEST FOR PROPOSAL (RFP)/ NOTICE INVITING TENDER(NIT)

For

Works Contract on LSTK basis for Setting up 50 MW (±5%) Windfarm Projects each in the States of Madhya Pradesh and Maharashtra



CRFQ No : 1000411190 : Tender ID : 14192
TENDER DUE ON: 01.01.2024 (15:00 Hrs)

PRE-BID ON:14.12.2023 (11:00 Hrs. on MS Teams
Bharat Petroleum Corporation Limited

"A" Installation, Sewree Fort Road, Sewree (East), Mumbai, 400015

FORWARDING LETTER

To,

Prospective Bidder

Sub: **Invitation of bids for "Works Contract on LSTK basis for Setting up 50 MW (±5%) Windfarm Projects each in the States of Madhya Pradesh and Maharashtra"**

Dear Sirs / Madam,

1. Bharat Petroleum Corporation Limited (OWNER), invites competitive bids from domestic bidders for Works Contract on LSTK basis for Setting up 25 MW (±5%) Windfarm Projects in the States of Madhya Pradesh (2 Nos.) and Maharashtra (2 Nos.) through its e-Procurement portal : **(https://bpcltenders.eproc.in)**

2. OWNER in Green Energy:

   Bharat Petroleum Corporation Limited (BPCL) is one of the leading Central Public Sector companies in the petroleum sector. BPCL is into exploration, production and retailing of petroleum, petrol related products and Petro-chemical products. As part of its diversification plans, BPCL is planning to enter the Renewable Energy power sector. Renewable Energy (RE) plants at various locations in the country are being planned for building up RE portfolio. BPCL have three refineries, Mumbai Refinery (MR) in Maharashtra, Kochi Refinery (KR) in Kerala and Bina Refinery (BR) in Madhya Pradesh. These are the major installations of BPCL where large quantity of electricity is being consumed for its day-to-day operations. In addition to this there are marketing installations across India, which also consumes electricity. This tender is for setting up wind projects in Maharashtra and Madhya Pradesh for supplying wind power to Mumbai Refinery and Bina Refinery respectively.

   WIND ENERGY:

   Modern day Windfarms are the result of implementation of Renewable Energy projects and saving Nature and Environment. It requires large capital expenditures and extensive R&D. Windfarms comprise many thousands of windmills placed in wind tunnels (High wind speed areas). OWNER has installed total 11.8 MW capacity of windmills in which 11.3 MW is in Karnataka, 0.5 MW in Tamilnadu and are connected to the national grid.

3. The Tender is invited under two-part bid system. The bidders are required to submit both the TECHNO-COMMERCIAL and PRICE BID bids through electronic format in OWNERs e-Tender portal within the Bid Closing date and Time stipulated in the e-Tender.

4. This tender document consists of the following sections, which are enclosed:
   - Notice Inviting Tender
   - General instruction to vendor for e-tendering

- Instructions to Bidders (ITB)
- Special Conditions of Contract for Supply, Erection & Commissioning
- Special Conditions of Contract for Operation & Maintenance (O&M) of Wind Power Project
- Scope of Work (Supply)
- Scope of Work (Erection, Testing& Commissioning)
- Technical Specifications
- Forms and Formats
- General Conditions of Contract
- HSSE Management and Assurance Policy

Sl. No.	Description	
4.1	Type of Job – Service / Works Contract	Works Contract
4.2	Divisibility of lot – Divisible / Non-divisible	Non-divisible
4.3	Purchase Preference (MSE)Applicable / Not Applicable	Not Applicable
4.4	PPP-MII Applicable / Not Applicable	Applicable
4.5	Relaxation in BQC for MSE's Applicable / Not Applicable	Not Applicable

5. All the document associated with Techno-commercial bid (consisting of all the afore-mentioned annexures, documents uploaded by the vendor and Techno-Commercial Information for imports, if applicable) and price bid shall form the part of the tender. The entire bid shall be online only. General Instructions to vendors for e-tendering are as given as one of the Annexure of this tender. Offers should strictly be in accordance with the tender terms & conditions and cur specification. Vendors are requested to carefully study all the document / annexures and understand the conditions, specifications & drawings, before quoting the rates and submitting this tender. In case of doubt, written clarification should be obtained vide Pre-bid queries, but this shall not be a justification for request for extension of due date for submission of bids.

6. Completion Period- 21 months from the date of issuance of LOA.

7. Pre-bid meeting: Pre bid meeting will be held on MS Teams . Link for pre-bid meeting is provided below-

https://teams.microsoft.com/l/meetup-join/19%3ameeting_YzA0MTVjOTItYzQwNi00YjU3LThiMDgtMTVmZTQzMjVlMDBj%40thread.v2/0?context=%7b%22Tid%22%3a%22222f3a7c-d45e-4818-9aa4-33d44420ec32%22%2c%22Oid%22%3a%221eabc708-8109-4806-9e07-a5a21fe68262%22%7d

8. Bids submitted after the due date and time of closing of tender in not in the prescribed format is liable to be rejected. BPCL does not take any responsibility for any delay in submission of online bid due to connectivity problem or non-availability of site. No claims on this account shall be entertained.

9. Price bid of only those vendors shall be opened whose Techno-commercial bid is found to be acceptable to the Tender Inviting Authority.

10. It shall be understood that every endeavour has been made to avoid errors which can materially affect the basis of the tender and the successful vendor shall take upon himself and provide for risk of any error which may subsequently be discovered and shall make no subsequent claim on account thereof.

11. For any clarification on e-tendering / training / uploading of document on e-procurement site, please contract our service provider
M/s. C1 India Help-Desk contact details:

HELPDESK CONTACT INFORMATION			
Primary contact shall be email followed with a call on the numbers given below			
Global support Email ID: bpclsupport[at]c1india[dot]com For ease of participating in tenders watch this video : https://youtu.be/7yXubVOd9Vo			
Bidder Support Team			
Sr. No.	**Name**	**Email ID**	**Number**
1	Diksha Naik	**bpclsupport[at]c1india[dot]com**	+91 8459466186
2	Ujwala Shimpi		+91 8080303831
3	Rahul Naik		+91 9834101181
5	Saranraj Naicker		+91-124-4302000 Ext : 110

12. For any queries / clarification on tender technical specifications / commercial points and other terms and conditions of the tender please contact as under: -

    a. From BPCL :
    Mr. Rajeev Kumar Upadhyay –
    Chief Manager Major Projects & Biofuels, E&P (HQ)
    Contact No. 022-24116361
    Mobile No. 9007914009
    Email – rajeevku@bharatpetroleum.in

Mr. Pritam Kumar
Dy General Manager Elect. (E&P),HQ
Contact No. 022-2416357
Mobile No. 9433063959
Email – kumarpri@bharatpetroleum.in

Mr. Amit Kumar Jha
Sr. Manager Procurement (CPO Mktg.) Group-4
Contact No. 022-24176048
Mobile No. 9633917025
Email – amitkumarjha@bharatpetroleum.in

Mr. Shaju A J
Procurement Leader (CPO Mktg.) Group-4
Contact: (022) 24176464
Mob. 9223301793
Email ID: shajuaj@bharatpetroleum.in

b. From PMC; M/s Power And Energy Consultants India Pvt. Ltd., Delhi has been appointed as consultant for bid evaluation & site supervision works.
Mr. C M Jain
Mobile No. +91 9312262799
Mr. Rajesh Chhangani
Mobile No. 08130865406
Email – info@powerandenergyconsultants.com

INDEX

SECTION–I

NOTICE INVITING TENDER

SECTION – I

1.0 BRIEF DETAILS:

Sl. No.	Description of Item	Particulars
i.	Works Contract on LSTK basis for Setting up 50 MW (±5%) Windfarm Projects each in the States of Madhya Pradesh and Maharashtra	Bidder (s) to propose the most suitable site(s). Offers are invited in 4 lots where 2 lots are for each state (Maharashtra and Madhya Pradesh). Each lot shall have cumulative capacity of 25 (+/-5%) MW with maximum 2 sites of having minimum capacity of 10 (+/-5%) MW at any one site. Bidder (s) may quote for more than one project in different lots based on their eligibility as per Bidder's Qualification Criteria (BQC).
ii.	Duration of Contract	a) EPC contract for 21 (Twenty-One) Months b) Comprehensive O&M Contract for maximum 10 years from the date of stabilization of the complete wind project.
iii.	Sale of Power	Captive Consumption for BPCL's refineries at Bina, Madhya Pradesh and Mumbai, Maharashtra
iv.	Tender No. & Date	CRFQ No. : 1000411190;Tender ID : 14192 dated 04.12.2023
v.	Type / Mode of tendering	**Global open tender** under Two Stage BID system through e-procurement website
vi.	Bid Document	Thie Bid Document comprises of Section -I to IX.
vii.	Tender Fee (non-refundable)	Not applicable
viii.	Earnest Money Deposit (EMD) (Bid Security)	EMD of Rs. 100.00 LAKH / USD 120,000/- to be submitted as NEFT/BG for each lot against which bidders offering the quote.
ix.	Date and time of pre-bid meeting	As mentioned Forwarding letter
x.	Location of Project	Bidder is to propose the most suitable site(s). Each bidder can offer maximum 2 sites in each lot.

Sl. No.	Description of Item	Particulars
		Owner or their consultant may visit the site during evaluation of the bids to ascertain acceptability of site. Decision of the Owner or their consultant on acceptability of proposed land sites shall be binding to the bidders.
xi.	Last Date for bidding (On-line)	01.01.2024
xii.	Last Date for bidding (Physical)	**Not Applicable**
xiii.	Date & time of opening of Priced bid	Technically qualified bidders shall be informed regarding date & time of opening of the price bid.
xiv.	Currency of Offer	Indian Rupees/EURO/USD
xv.	Payment Terms	Payments shall be released against milestones as mentioned in Special Conditions of Contract.
xvi.	Payment for Operation & Maintenance of Wind Power Project	On quarterly basis of annual contract price after expiry of Guarantee / warrantee period on furnishing of Performance Bank Guarantee for contract performance for O&M
xvii.	Security Deposit Cum Performance Bank Guarantee (SPBG)	The Successful bidder shall submit security Deposit Cum Performance bank guarantee for an amount equivalent to 10 % of contract value (except O&M value) within 15 days of issue of Award of contract in the Performa as Annexure-II The list of recognized banks for drawing Bank Guarantee is annexed as Annexure-V
xviii.	O&M Performance Guarantee	The Bidder shall submit a Bank Guarantee one month prior to commencement of paid O & M period for an amount equivalent to 10% (ten percent) annual O&M charges for the year. Every year a fresh bank guarantee shall be submitted by the Bidder, having validity of 13 months, one month prior to expiry of the previous Bank Guarantee or the existing bank guarantee can be extended suitably every year till O&M contract remains with the Bidder
xix.	Evaluation of Bids	Evaluation of Bids of eligible bidders shall be

Sl. No.	Description of Item	Particulars
		done as per details specified in the Bid Evaluation Methodology.
xx.	Validity of Offer	Offers shall be valid for a period of 180 days from bid closing date or extension, if any.
xxi.	Quotation to be on 'Firm' price basis	Price quoted as per price schedule of Price I & VII by bidders shall remain 'Firm' during the bidder's Performance of the contract and not subject to variation on any account. Offer submitted with variable price will be treated as non-responsive and the same shall be rejected.
xxii.	Custom Duty, CVD, etc.	For goods offered from abroad, Custom Duty, CVD and other applicable levies, etc., if payable, will be paid directly by the bidder and shall be included in the offered price only
xxiii.	Goods Service Tax, duties, levies etc.	In case of the bidder offering goods manufactured in India shall include all applicable goods service tax, duties, levies etc. in the quoted price only.
xxiv.	Project Consultant	M/s Power And Energy Consultants India Private Limited, Delhi has been appointed as Project Management Consultant for the project.
xxv.	Queries regarding Pre- Bid conference	Any queries regarding pre bid conference should be forwarded in the prescribed format at Annexure – IX to OWNER and Consultant M/s Power And Energy Consultants India Private Limited, Delhi in advance.

SECTION–II

GENERAL INSTRUCTIONS TO VENDORS FOR E-TENDERING

SECTION – II
General Instructions to vendors for e-tendering

1. Interested parties may download the tender from OWNER website (http://www.bharatpetroleum.in) or the CPP portal (http://eprocure.gov.in) or from the e-tendering website (https://bpcltenders.eproc.in) and participate in the tender as per the instructions given therein, on or before the due date of the tender. The tender available on the OWNER website and the CPP portal can be downloaded for reading purpose only. For participation in the tender, please fill up the tender online on the e-tender system available on https://bpcltenders.eproc.in.

2. For registration on the e-tender site https://bpcltenders.eproc.in, one can be guided by the "Bidder Manual" available under the download section of the homepage of the website. As the first step, bidder shall have to click the "Register" link and fill in the requisite information in the "Bidder Registration Form". Kindly remember your email id (which will also act as the login ID) and the password entered therein. Once you complete this process correctly, you shall get a system generated mail. Thereafter, login into the portal using your credentials. When you log in for the first time, system will ask you to add your Digital Signature. Once you have added the Digital Signature, please inform the vendor administrator @ Email Ids given below for approval. Once approved, bidders can login into the system as and when required.

3. As a pre-requisite for participation in the tender, vendors are required to obtain a valid Digital Certificate of Class III and above (having both signing and encryption certificates) as per Indian IT Act from the licensed Certifying Authorities operating under the Root Certifying Authority of India (RCIA), Controller of Certifying Authorities (CCA). The cost of obtaining the digital certificate shall be borne by the vendor.

4. Corrigendum/amendment, if any, shall be notified on the site https://bpcltenders.eproc.in. In case any corrigendum/amendment is issued after the submission of the bid, then such vendors who have submitted their bids, shall be intimated about the corrigendum/amendment by a system generated email. It shall be assumed that the information contained therein has been taken into account by the vendor. They have the choice of making changes in their bid before the due date and time.

5. In case of any corrigendum/addendum issued due to which change in price bid form exists, then in such cases the already submitted bid (before the corrigendum) shall be automatically withdrawn and bidder shall be informed about such change through system generated notification. It is the responsibility of the bidder to resubmit his bid in such cases and no further claims shall be entertained on this account.

6. Vendors are required to complete the entire process online by clicking on FINAL SUBMISSION & RECEIVING CONFIRMATION OF FINAL SUBMISSION ON SCREEN on or before the due date/time of closing of the tender

7. Directions for submitting online offers, electronically, against e-procurement tenders directly through internet:

i) Vendors are advised to log on to the website (https://bpcltenders.eproc.in) and arrange to register themselves at the earliest.

ii) The system time (IST) that will be displayed on e-Procurement web page shall be the time considered for determining the expiry of due date and time of the tender and no other time shall be taken into cognizance.

iii) Vendors Bidders are advised in their own interest to ensure that their bids are submitted in e-Procurement system well before the closing date and time of bid.

iv) If the Vendors Bidders intends to change/revise the bid already submitted, they shall have to withdraw their bid already submitted, change / revise the bid and submit once again.

However, if the Vendors Bidders is not able to complete the submission of the changed/revised bid within due date & time, the system would consider it as no bid has been received from the Vendors Bidders against the tender and consequently the vendor will be out of contention. The process of change / revise may do so any number of times till the due date and time of submission deadline. However, no bid can be modified after the deadline for submission of bids.

v) Once the entire process of submission of online bid is complete, they will get an auto mail from the system stating you have successfully submitted your bid in the following tender with tender details.

vi) Bids / Offers shall not be permitted in e-procurement system after the due date / time of tender. Hence, no bid can be submitted after the due date and time of submission has elapsed.

vii) No manual bids/offers along with electronic bids/offers shall be permitted.

8. For tenders whose estimated procurement value is more than Rs. 10 lakhs, vendors can see the rates quoted by all the participating bidders once the price bids are opened. For this purpose, Vendors Bidders shall have to log in to the portal under their user ID and password, click on the “dash board” link against that tender and choose the “Results” tab.

9. No responsibility will be taken by OWNER and/or the e-procurement service provider for any delay due to connectivity and availability of website. They shall not have any liability to vendors for any interruption or delay in access to the site irrespective of the cause. It is advisable that Vendors Bidders who are not well conversant with e-tendering procedures, start filling up the tenders much before the due date /time so that there is sufficient time available with him/her to acquaint with all the steps and seek help if they so require. Even for those who are conversant with this type of e-tendering, it is suggested to complete all the activities ahead of time. It should be noted that the individual bid becomes viewable only after the opening of the bid on/after the due date and time. Please be reassured that your bid will be viewable only to you and nobody else till the due date/ time of the tender opening. The non-availability of viewing before due date and time is true for e-tendering service provider as well as OWNER officials.

10. OWNER and/or the e-procurement service provider shall not be responsible for any direct or indirect loss or damages and or consequential damages, arising out of the bidding process including but not limited to systems problems, inability to use the system, loss of electronic information etc.

    In case of any clarification pertaining to e-procurement process, the vendor may contact the following agencies / personnel:

    1. For system related issues:

    M/s. C1 India Help-Desk contact details:

Contact Nos. and email IDs for helpdesk officers		
Name	**Email**	**Phone Numbers**
Sachin Toraskar	**sachin.toraskar@c1india.com**	**+ 91 124 430 2000 Ext : 200**
Saranraj Naicker	**saranraj.naicker@c1india.com**	**+91-124-4302000 Ext : 110**
Rahul Naik	**rahul.naik@c1india.com**	**9834101181**
Ujwala Shimpi	**Ujwala.shimpi@c1india.com**	**+91-124-4302000 Ext: 114**
Fairlin Jivin	**fairlin.jivin@c1india.com**	**+91-124-4302000 Ext : 112**
Diksha Naik	**diksha.naik@c1india.com**	**9011797905**

SECTION–III

INSTRUCTIONS TO BIDDERS

CONTENTS

SECTION–III
INSTRUCTIONS TO BIDDERS (ITB)

3.1 GENERAL

1. Competitive offers are invited in two-part bid- Bid Qualification Cum Techno Commercial Bid and Price Bid from eligible bidders. Bidders are requested to carefully study all the documents/ annexures and understand the conditions, specifications, drawings etc. before submitting the tender and quoting the rates. In case of doubt, written queries should be raised within 14 days in case of open tenders from the date of publication of the tender. However, this shall not be a justification for request for extension of due date for submission of bids. The number and date of Collective Request for Quotation (CRFQ) & E- Tender must appear on all correspondence before finalization of Rate Contract / Purchase Order. After finalization of Contract / Purchase Order, the number and date of Contract/Purchase Order must appear on all correspondence, drawings, invoices, dispatch advices, (including shipping documents if applicable) packing list and on anydocuments or papers connected with this order. The Bid and all supporting documentation and all correspondence exchanged by bidder and Corporation, shall be written in English language only. All documents attached with the Bid Qualification Cum Techno Commercial Bid, price bid and all corrigenda issued shall form the part of the tender. Bid Qualification criteria documents, techno-Commercial bid and the price bid will be submitted online.

The bidder will declare the annual CUF of their site(s) at the time of Bid submission. The declared annual CUF shall in no case be less than 34% (Thirty Four Percent) P-90 for Maharashtra and 32% (Thirty Two Percent) P-90 for Madhya Pradesh.

The decision of OWNER regarding consideration of AEP / CUF figures, corresponding evaluated bid value (EBV) worked out for evaluation of the Bids and viability of the offer will be final and OWNER will be under no obligation to give any reply, justification to any of the Bidder in any form. No communication in this regard should be entertained post submission of the Bid. OWNER reserves the right to decide the final number of sites and MW capacity to be ordered. OWNER is under no compulsion to issue order irrespective of the EBV worked as per parameters outlined for each Bid and mere issue of this Tender do not assure placement of Order.

AEP (CUF%) figures as certified / finalized (P-90) by owner's consultant and accepted by OWNER or worked out independently by OWNER on through in-house analysis and based on verification of data submitted by Bidder for individual Bidder or AEP figures P-90 & P75 as quoted by the bidder, whichever is lower, will be considered for Bid evaluation purpose.

The rates quoted in the tender shall be fixed & firm. The Bidder can quote their prices in Price Schedules “Bid Response Sheet No. P-I to P-VII”.

3.2 BREAKUP OF PURCHASE ORDERS

3.2.1 The OWNER at the request of the bidder request place four orders, on the bidder for implementation of the project as mentioned below:

3.2.1.1 Order for detailed engineering, manufacturing, in-house testing, supply and delivery of equipment at site(s).

3.2.1.2 Order for micro-siting, arranging all approvals, all civil & electrical construction works at site(s), laying internal & external evacuation system, erection & commissioning WEGs and interconnection with State grid of Windfarm project complete in all respect.

3.2.1.3 Order for arranging required land and land development for the project (either on outright purchase basis or long-term sub lease or lease transfer basis, as applicable).

3.2.1.4 Order for Comprehensive O&M Contract shall be placed after the completion of 1 year warranty period post stabilization of the project extendable thereafter on discretion of the Owner. (First year O&M charge to be included in the quoted price)

3.2.2 The aforesaid placement of Purchase Orders/ Contract agreement shall be merely to facilitate the overall project requirement and shall not relieve the bidder in any manner from the overall responsibility of execution of work.

3.3 EARNEST MONEY DEPOSIT:

Indian Bidders shall submit an interest free Earnest Money Deposit (EMD) in the form of Electronic Funds Transfer to BPCL Bank Account / Bank Guarantee executed by any Scheduled Bank approved by Reserve Bank of India for Net amount of ₹ 100 Lakh only for each lot (in favour of M/s Bharat Petroleum Corporation Limited payable at Mumbai. Any banking charges, etc have to be borne by bidder.

Foreign Bidders shall submit the EMD amount of USD 120,000.

Any bank charges, etc. have to be borne by bidder. Wire transfer shall be allowed only for foreign bidders

Account details for submitting EMD through NEFT/RTGS mode for Indian Bidders are as given below:

Standard Chartered Bank Fort Branch
A/c No. 22205020131
IFSC CODE: SCBL0036001

By Foreign bidders as follows:
Beneficiary's Name : Bharat Petroleum Corporation Limited
Beneficiary's Bank Name: State Bank of India
Beneficiary's Branch Name: CAG Branch, Mumbai
Beneficiary's Account Number: 36010165409

Beneficiary Bank's Swift Code: SBININBB162
Type of Account: EEFC Account
Branch Code: 09995

Corresponding Bank Details
Name & address-State Bank of India New York
Routing Number 026009140
Swift Code- SBINUS33

Foreign Vendor to mention "Tender Reference No." in Remarks field of swift message while doing wire transfer. Intimation of wire transfer details have to be sent to Email ID (amitkumarjha@bharatpetroleum.in; shajuaj@bharatpetroleum.in) well in advance before the due date and time mentioned in the tender:

Bidder shall upload a letter on their letter head stating the Item Nos. for which he has quoted. Also mention in the letter about the details of BG/NEFT/RTGS payment details/valid MSE documents, meeting the tender EMD clause. Bidder's Offer may not be opened without this confirmation letter along with the BG/NEFT/RTGS payment details/valid MSE documents. BG shall be submitted only in the tender EMD format.

Exemption of EMD would be in line with policy of Govt. of India for MSE vendors.

3.4 DOCUMENTS TO BE SUBMITTED BY BIDDER:

Bidder shall furnish the necessary documents as per tender conditions along with the bid. In the absence of such documents, BPCL reserve the right to reject the Bid without making any reference to the bidder or assigning any reason what so-ever.

Bidder shall submit the following documents as per Bid Qualification Criteria (BQC), Technical and Techno-commercial requirement of tender:

a) Documents required for Technical Criteria of BQC: Bidder shall submit the required documents as per technical criteria of BQC.

b) In **case bidder is a sub – contractor**, the following documents are additionally required:

- Written consent of the owner to sub-contract for execution of works
- Agreement executed /documents issued by contractor.
- Completion certificate issued by the contractor to the sub – contractor.
- Completion certificate issued by the owner to the contractor/sub-contractor.

c) Documents **required for Financial Criteria of BQC**: Bidder shall submit the following financial documents.

i. Bidder shall furnish Annual Report/ audited balance sheets including Profit and Loss Accounts for previous three financial years along with the Bid to establish Bidder's conformance to financial criteria and prove existence since three years.

ii. In case a bidder (a Parent Company) is having wholly owned subsidiaries but only a single consolidated annual report is prepared and audited which includes the financial details of their wholly owned subsidiaries, consolidated audited annual report shall be considered for establishing the financial criteria subject to statutory auditor of the bidder certifying that separate annual report of bidder (without the financial data of subsidiaries) is not prepared and audited.

iii. Further, in case a bidder is a subsidiary company and separate annual report of the bidder is not prepared & audited, but only a consolidated annual report of the Parent Company is available, consolidated audited annual report shall be considered for establishing the financial criteria subject to statutory auditor of the parent company certifying that separate annual report of bidder is not prepared and audited.

iv. In case the financial year closing date is within 6 months of original bid due date and Audited annual report of immediate preceding financial year is not available, Bidder has the option to submit the financial details of the three previous years immediately prior to the last financial year.

In case the financial year closing date is within 6 – 9 months of original bid due date and Audited annual report of immediate preceding financial year is not available, Bidder has the option to submit the financial details of the three previous years immediately prior to the last financial year provided Bidder submits a letter from CA / Cost Auditor/ Statutory Auditor stating the reasons of non-preparation/furnishing of the latest year's Audited Financial Statements.

In case the financial year closing date is beyond 9 months of original bid due date, it is compulsory to submit the financial details of the immediate three preceding financial years. Example,

In case, audited annual report of immediate preceding financial year (year ending 31st March) is not available and where bid closing date is up to 31st December, the financial details of the three previous years immediately prior to the last financial year may be submitted. However, in case the bid closing date is after 31st December, it is compulsory to submit the financial details of the immediate three preceding financial years only.

v. If Audited Financial Report is in currency other than INR, the respective/ desired figure for calculation of above details shall be converted into equivalent INR considering the conversion factor indicated in Bidder's Audited Financial Report. In case the same is not indicated, the conversion rate of INR as on last date of Bidder's financial year shall be considered, based on TT selling exchange rate published by State Bank of India (SBI). In case reference rate

for that non INR currency is not available on SBI TT exchange rate then Financial Benchmarks India Pvt. Ltd. (FBIL) reference rates shall be used. If the conversion rate of the non INR currency is not available on both of these platform then exchange rate website OANDA Selling rates shall be used.

d) **<u>Document Verification</u>**: During BQC/EMD stage all vendors will have to submit *TPIA verified documents (*TPIAs which are accredited under "NABCB accredited bodies as per requirement of ISO/IEC 17020 as type "A" in QCI's NABCB website (**https:/nabcb.qci.org.in/accreditation/reg_bod_inspection_bodies.php**)).

The bidders who are already registered with BPCL shall also submit all the documents as mentioned above.

I. Documents to be submitted by MSE (Micro/Small enterprise) Bidder:

1. Bidders quoting as Micro and Small Enterprise shall submit scanned copy of MSE document i.e. valid **"Udyam Registration Certificate"** along with scanned copy of CA certificate (as per the format attached as Annexure-A),duly verified by *TPIA to avail the benefits of Public Procurement Policy as per MSMED Act 2006/Public Procurement Policy Order 2012 (as amended from time to time).

2. In case CA certificate is not submitted, bidder shall not considered as MSE and such bidder shall not be eligible to avail the benefits of Public Procurement Policy as per MSMED Act 2006/Public Procurement Policy Order 2012 (as amended from time to time).

   i. TPIA Certification not required if the CA certificate in original is submitted.

   ii. The CA certificate should be dated after the date of floating of tender and shall be specific to the tender for which bid is being submitted.

II. Bidder shall ensure that any certificate/ reports issued/ attested by a practicing-chartered accountant in India and submitted in the bid shall mandatorily include the UDIN number. Certificate / reports issued/ attested without UDIN number of practicing chartered accountant in India shall not be considered for evaluation.

III. Charges of TPIA Verification & CA Certificate: All charges of the third party verification and CA certificate shall be borne by the Bidders.

IV. Submission of authentic documents is the prime responsibility of the bidder. Wherever BPCL has concern or apprehensions regarding the authenticity/correctness of any document or information, BPCL reserve the right to get the documents cross-verified from the document issuing authority.

BPCL reserves the right to inspect the facilities at party's work to confirm their capabilities. BPCL also reserves the right to independently assess the capability and capacity of the bidder for execution of the project.

V. Failure to submit the above documents as per Qualification Criteria will render the Bid liable to be rejected. Therefore, the bidder shall in his own interest furnish complete documentary evidence in the first instance itself, in support of their fulfilling the Qualification Criteria as given in the tender. BPCL reserves the right to complete the evaluation based on the details furnished without seeking any additional information.

3.5 BID QUALIFICATION CRITERIA (BQC)

3.5.1 BIDS MAY BE SUBMITTED BY: Please refer BQC attached Separately.

A. Single Entity (called single bidder)

A Bidder shall mean and include be a Company within the meaning of Companies Act, 2013 including erstwhile Act or duly incorporated under the relevant laws of its country of origin, or a registered partnership firm under Indian Partnership Act, 1932, or a limited liability partnership under Limited Liability Partnership Act, 2008, or a partnership firm registered under the relevant laws of its country of origin, a Joint Venture, Consortium, HUF, an individual, Registered Co-operative Society or an Association or a group of persons duly formed.

B. Bidding by Joint venture (JV) / Consortium

Bidding by JV / Consortium is allowed. Bids submitted by Consortium/Joint Venture shall comply with the following:

a) Not more than three members will be permitted in the JV/Consortium bid. In case of Consortium, members could be Indian or Foreign Company. If Consortium is having Indian Member who shall also be a Lead Member, In case of JV, JV Company will represent as lead member.
b) Each member of Consortium / JV should be a Company within the meaning of Companies Act, 2013 including erstwhile Act or duly incorporated under the relevant laws of its country of origin with a minimum stake of 26%. JV Company should be an incorporated Company as above. In case JV Company is proposed to be incorporated, then bids may be submitted in form of Consortium.
c) However, no Bidder applying individually or as a member of a Joint Venture/Consortium as the case may be, can be a member of another Joint Venture/Consortium.
d) It shall not be necessary that all the members of the Consortium/JV satisfy the Minimum PQ criteria set out hereof above, and it will be sufficient if one member of the Consortium/JV (by itself or through members) singly on its own or all the members should themselves on their own collectively satisfy the criteria as stipulated in the Tender.

e) The JV Company/ Leader of the Consortium on behalf of Consortium can submit bid. Joint Bidding Agreement (as per format enclosed in tender) between the members of Consortium / JV duly signed as per the delegated authority, must accompany the techno-commercial bid.

f) The nominated Consortium lead member / JV Company shall be in-charge to represent the Consortium / JV members in all dealings with the Consortium / Joint Venture and for providing any information or clarification sought from the Consortium / Joint Venture and this authorization shall be evident by submitting a Board Resolution / Power of Attorney signed by legally authorized signatory for the member so as to enable such representative of member to be in-charge and to act on behalf of and to bind the other member/entity.

g) The bid shall contain a statement of the members and composition of the Joint Venture / Consortium and shall provide all information necessary to satisfy OWNER that at least one member of the Joint Venture / Consortium singly and / or other / all the members collectively fulfill(s) the experience criteria as set out above.

h) The lead member–in-charge / JV Company shall be authorized to incur liabilities and receive instructions for and on behalf of members of the Consortium / Joint Venture and the entire execution of the contract, including payment etc shall be done exclusively with the member -in-charge.

i) The leader of the Consortium / JV Company should confirm unconditional acceptance of primary responsibility of executing the 'Scope of work' of this tender. This confirmation should be submitted along with the techno-commercial bid.

j) All the members of the Consortium / Joint Venture (including JV Company) shall be liable jointly and severally for the Performance of the Work/Contract in accordance with Contract terms and a relevant statement to this effect shall be deemed to be included in the authorization by legally authorized signatory for the member.

k) Members of the Joint Venture (including JV Company) / Consortium shall be required to enter into a Joint Bidding Agreement specific to the Tender. The Consortium / Joint Venture bidder should submit a copy of the said agreement entered into by the member(s) governing the Performance of the work, division of scope among members corresponding to expertise, responsibilities of each member/JV, without limiting in any manner the obligation and / or joint and several liabilities of the member(s) to the OWNER. It should be expressly understood that the Consortium / Joint Venture after submission of the bid shall not be permitted to be altered without prior written consent of the OWNER. Such agreement shall be subject to OWNER's satisfaction to ensure that the work will be carried out to the required standard.

l) Only that consortium member who has undertaken a particular activity in execution of a contract shall be considered as having technical experience of that particular activity and for roles & responsibilities for performance of work.

Lead consortium member/ JV company shall ensure performance as indicated in the tender. In the event one or more JV/Consortium member/s fail to perform it's / their respective obligation, the same shall be deemed to be a default by all the JV/ Consortium members.

m) Should the Consortium / Joint Venture bidder fail to satisfy any of the above conditions, the bid shall be liable to be rejected as non-compliant.

C. Bids from Foreign Companies through Indian arm subsidiary / group company

Offers of those bidders who themselves do not meet the technical and financial experience criteria stipulated in the tender can also be considered based on the experience criteria of their Parent / direct subsidiary / indirect subsidiary company / Group Company.

Bids may be submitted by a Foreign company/ Foreign Manufacturer / Foreign System Integrator through an Indian arm Subsidiary or a Group company.

a) If the bidder is a Subsidiary or a Group company of a Foreign Company / Foreign

Manufacturer or a Foreign System Integrator:
The bidder can use the own credentials of the Parent / direct subsidiary/ indirect subsidiary within Parent / Group Company for the Technical Criteria and Financial Criteria. In such a case, back to back guarantee shall be provided by the Parent / direct subsidiary/ indirect subsidiary within Parent / Group Company which should have completed 3 financial years existence after date of commencement of business clearly stating that they shall fulfil the contractual obligations for Supply, Service and Warranty of the tendered item in case of failure of the bidder and financially support the bidder during the contract period with a commitment to maintain the stake in the bidder without any dilution.

b) In case an Indian Subsidiary or Group Company is submitting the bid:

i) Documentary proof should be submitted to establish that the Indian Bidder is a subsidiary or Group company of the Foreign Principal.(Foreign Company / Foreign Manufacturer or a Foreign System Integrator)
ii) Only one subsidiary /group Company can participate in the tender. In such as case, the Parent / Group Company cannot participate in the tender.
iii) Credential of Parent/Group companies shall be considered to establish the Pre-qualification criteria.
iv) Group companies can either be Parent company, direct subsidiaries & indirect subsidiaries

Group companies can either be –

a) Parent company (includes ultimate parent)
b) Direct subsidiaries - If the parent company directly holds 51% or more of the equity share capital in their subsidiary companies, then such subsidiary companies are called direct subsidiaries and shall be considered as part of group companies.
c) Indirect subsidiaries - If Direct subsidiary of the Parent Company holds 100% of the equity share capital in their subsidiary companies (including 100% subsidiary

companies of 100% subsidiary companies), then such subsidiary companies are called indirect subsidiaries and shall be considered as part of group companies.

D. Bids from Foreign Companies participating directly-

Foreign companies can participate directly and quote in foreign currency and the quote shall be inclusive of all taxes and duties ,other costs etc. Vendor is expected to quote with complete understanding of the Indian tax structure keeping in mind the entire scope of work.

3.5.2 BID-QUALIFICATION CRITERIA:

BPCL would like to qualify vendors for undertaking the above work as indicated in the brief scope. Detailed bid qualification criteria for short listing vendors shall be as follows:

The job in each state is split up into two lots of 25 (+/-5%) MW each. Bidders can participate in single lot or in multiple lots as per BQC criteria below. Lot wise award shall be done. Bidder can offer maximum 2 sites for each lot with minimum capacity of 10 MW at any one site.

3.5.2.1 Technical Criteria Part 1:

The bidder shall have experience of having successfully commissioned (in case of ongoing contract, job commissioned to the extent will be considered based on submission of document credential including necessary commission certificate) *similar works in India during last 10 years ending on last day of the month previous to the one in which tender is invited. The works completed (proof of completion to be submitted) should be as follows:

Sl. No.	Requirement for Bidder's offer in lot (s)	One Similar work of capacity not less than	Two Similar works each of capacity not less than	Three Similar works each of capacity not less than
1	For single lot of 25 (±5%) MW capacity Windfarm during last 10 years	20 MW	12.5 MW	10 MW
2	For two lots of 25 (±5%) MW capacity Windfarm during last 10 years	40 MW	25 MW	20 MW
3	For three lots of 25 (±5%) MW capacity Windfarm during last 10 years	60 MW	37.5 MW	30 MW
4	For four lots of 25 (±5%) MW capacity Windfarm during last 10 years	80 MW	50 MW	40 MW

Definition of *Similar Work/s:

A. Similar works shall be considered as –

a. Supplied/procured, erected/ supervised erection, commissioned/ supervised commissioning of grid connected Wind Power Project(s).
   Or
b. Developed and commissioned grid connected wind farm power project including civil, electrical and allied works.

B. Additional Requirement

The bidder should have the experience of successful operation and maintenance of at least one Windfarm of 10 (±5%) MW capacity having WEGs of 1000 kW rating or above, for a period at least of one year ending last date of the month prior to which tender is invited.
The following documents should be submitted in support of the Technical Criteria requirement as mentioned above: -

i. Signed Agreement/PO copy/Work order/LOI or any other document which shows value of awarded works along with BOQ.

ii. Commissioning Certificate/Final Bill certified by the client or any other document which conclusively proves completion and commissioning of the awarded work. This document shall clearly mention Name of the client, Name of the job, Work Order / Purchase order / LOA No. and date, awarded value, Commissioned values, and Date of commissioning.

iii. In case of combined works, clear calculations showing the bifurcated cost towards the similar work as defined above, duly certified by TPIA should be submitted.

iv. The work order for similar work(s) shall be in the name of the bidder.

v. In case the bidder is a windfarm developer or IPP or EPC contractor or Other entity he should submit documents showing proof of setting up , Commissioning and running of grid connected wind farm power project. Bidders to submit Letter of Award (LOA) from the State/ Central Government Company/ PSUs or any bidding agency; or executed the Power Purchase Agreement (PPA) and Commissioning certificate issued by State/ Central Government Company/ PSUs or any authorized agency in last 10 (Ten) years as on last day of previous month on which the proposal is invited.

3.5.2.2 Technical Criteria Part 2

i. The offered model of Wind Electric Generator (WEG) must be included in the latest list of “Manufacturers of Wind Electric Generators / Wind Turbine equipment” – RLMM list published by National Institute of Wind Energy

[Formerly known as Centre for Wind Energy Technology (C-WET), Ministry of New & renewable Energy (MNRE) and Government of India.

ii. The offered model of WEG shall be of 2000 kW rating or above.

iii. The quoted model of WEG (of offered rotor diameter and Hub height by Bidder) should have been installed and commissioned by the bidder and/ or the offered WEGs model shall be under satisfactory operation for at least for one year elsewhere. Bidder to furnish Supporting data.

iv. All equipment shall be new and shall comply with all regulatory requirement for establishing wind/renewable energy project in India (Maharashtra and Madhya Pradesh)

v. The quoted model of WEG should have Type Certification from an accredited test house such as RISO Denmark, DEWI - Germany, Germanischer LLOYD - Germany, NIWE or any other agency approved by Ministry of New and Renewable Energy (MNRE), Government of India. Such Type Certificate should be valid as on the date of opening of the bid. Copy of Type Certificate along with copy certified power and thrust curve shall be submitted with the bid. Certified power curve and thrust curve should be in graphics as well as tabular form.

vi. The WEGs design should ensure smooth interconnection with the grid and shall comply with prevailing norms and standards for grid connectivity specified by SLDC /CEA/ Regulatory authorities.

vii. The company shall be capable of providing post commissioning trouble shooting, operation and maintenance services to achieve high standards of performance as prescribed in Request for Proposal (RfP)/Tender document.

viii. In case bidder is not OEM of offered WEG, the bidder must have valid memorandum of understating (MoU)/Agreement/License with respective OEM for sharing information, technology, proprietary items/IP spares and supply of software, equipment and service support etc as on bid closing date.

3.5.2.3 Technical Criteria Part 3

Land Availability:

The availability of land to the bidder is a pre-requisite. Identification and suitable arrangements for transfer by outright purchase or lease/ Sub-lease of 100% (hundred per cent) land in favour of OWNER is required at the time of bid submission. The bidder should have any of the following arrangements for land for WEP:

a) The Bidder should give all relevant documents to satisfy OWNER regarding availability of land.

b) If the land offered is a private land, the Bidder shall furnish the following documents along with the bid:

i. Copy of the Registered Sale Deed/Registered Lease deed in favour of the Bidder w.r.t. the land offered. In the event of the bidder being the lessee of the land offered, then such lease in favour of the bidder shall be for a minimum period of 30 years from the date of commissioning of the project and the said lease must not have any condition restricting sub lease in favour of the Owner.

-Or-

ii. An Agreement to Sell/Agreement to Lease/MoU executed by the bidder with a third party (an individual or company) who is/are the landowner(s) and is in possession of such private land offered. In such cases, bidder must also submit an undertaking on non-judicial stamp paper from the Landowner stating that the landowner has no objection to get the land conveyed or leased for minimum 30 years from the date of commissioning of the entire project, as the case may be, to the Owner on the same lease/rental charges quoted by the bidder in financial bid, in the event of award of the contract to the Bidder.

c) If the land offered is a revenue land, the Bidder shall furnish the following documents along with the bid:

i. Copy lease deed, if signed.
ii. If Allotment Letter of competent authority is not available, the recommendation of allotment of offered land from the Nodal Agency will also be considered. In such case, the Bidder will have to submit an undertaking on non-judicial stamp paper that the land offered will be sub leased to the Owner within a period of maximum 9 (nine) months from the date of LOI/LOA after taking all necessary approvals/permissions as may be required for the purpose of such sub lease.
iii. Copy of allotment letter in favor of bidder.

d) If the land offered is a forest land, the Bidder shall furnish the following documents along with the bid:

i. Copy of Stage-1 clearance from MoEF in favor of bidder.
ii. Bidder will have to produce a certificate from a Local Advocate stating that there are no restrictions under the local laws/ rules for taking the plot on lease by the Owner for the purpose of commissioning Windfarm project.

e) Above information be furnished separately for each site (s) of each lot.

3.5.2.4 Financial Criteria:

In case of single bidder:

a. Average Annual Turnover: The average annual turnover of the Bidder for the last three audited accounting years should be equal to or more than Rs. 40.08 Cr (USD 4.81 Million) for each lot.

   If a bidder wants to qualify for 2 lots the average annual turnover of the Bidder for the last three audited accounting years should be equal to or more than Rs. 80.16 Cr (and USD equivalent) and likewise for additional lots.

   In case of JV/Consortium Bid:

   In case of JV/Consortium bid, the JV company/Lead Member or any/other/all consortium JV members put together, shall satisfy the financial criteria for Bid Qualification.

b. Net Worth: The bidders should have positive net worth as per the latest audited financial statement.

Bidder shall furnish self-certified copies of Annual Report/ audited balance sheets including Profit and Loss Accounts of last three years along with the Bid to establish Bidder's conformance to Qualification Criteria.

Documents Required for Financial Criteria

1. Bidder shall furnish Annual Report/ audited balance sheets including Profit and Loss Accounts for previous three financial years along with the Bid to establish Bidder's conformance to financial criteria and prove existence since three years.

2. In case a bidder (a Parent Company) is having wholly owned subsidiaries but only a single consolidated annual report is prepared and audited which includes the financial details of their wholly owned subsidiaries, consolidated audited annual report shall be considered for establishing the financial criteria subject to statutory auditor of the bidder certifying that separate annual report of bidder (without the financial data of subsidiaries) is not prepared and audited.

3. Further, in case a bidder is a subsidiary company and separate annual report of the bidder is not prepared & audited, but only a consolidated annual report of the Parent Company is available, consolidated audited annual report shall be considered for establishing the financial criteria subject to statutory auditor of the parent company certifying that separate annual report of bidder is not prepared and audited.

4. In case the financial year closing date is within 9 months of original bid due date and audited annual report of immediate preceding financial year is not available, Bidder has the option to submit the financial details of the three previous years immediately prior to the last financial year. Otherwise, it is compulsory to submit the financial details of the immediate three preceding financial years.

Example, In case, audited annual report of immediate preceding financial year (year ending 31st March) is not available and where bid closing date is up to 31st December,

the financial details of the three previous years immediately prior to the last financial year may be submitted. However, in case the bid closing date is after 31st December, it is compulsory to submit the financial details of the immediate three preceding financial years only.

5. In case of foreign Bidders, if Audited Financial Report is in currency other than US Dollars, the respective/ desired figure for calculation of above details shall be converted into equivalent US Dollars considering the conversion factor indicated in Bidder's Audited Financial Report. In case the same is not indicated, the conversion rate of USD as on last date of Bidder's Financial Year shall be considered based on Financial Benchmarks India Pvt. Ltd. reference rates.

In case any of the supporting documents (either technical or financial) are not in English language, then the English translation copy of the same shall also be furnished duly certified, stamped and signed by Local Chamber of Commerce of bidder's country or Indian embassy in bidder's country or their embassy in India.

6. If the bids are invited from a Foreign company (through an Indian arm) (i.e. Authorized Indian agent/ Dealer/Distributor/ Subsidiary or a Group company of a Foreign Manufacturer or a Foreign System Integrator), then the foreign company should have completed 3 financial years after date of commencement of business.

   (a) If the bidder is an Authorized Indian agent/Dealer/Distributor/ Subsidiary or a Group company of a Foreign Manufacturer or a Foreign System Integrator:

   The bidder can use the credentials of the Foreign Principal (Foreign Manufacturer or Foreign System Integrator) only for the Technical Criteria (i.e. Manufacturing Capability and / or Supplying Capability stipulated in Technical Criteria). The bidder on their own shall meet the other Criteria. (viz. Service Support in India, Financial Criteria etc.) subject to 3.5.1 C) of bids through Indian Arm subsidiary / group company.

   (b) If the bidder is an Authorized Domestic agent/ dealer or Distributor:

      i. They should submit an Authority letter issued by Foreign Principal specific to the tender. In addition, back to back guarantee (Annexure -XVII) shall be provided by the foreign company, clearly stating that they shall fulfill the contractual obligations for Supply, Service and Warranty of the tendered item in case of failure of the bidder.

      ii. An Indian agent/dealer/distributor can participate on behalf of only one Foreign Principal. He shall not be allowed to quote on behalf of another Principal in the same tender.

      iii. Foreign company can authorize only one Indian agent /dealer /distributor to submit their bid in the tender. In such as case, the foreign company cannot participate directly in the same tender.

iv. A letter from the foreign company stating that the bidder is their authorized agent /dealer/distributor to participate in the tender.

(c) In case an Indian Subsidiary or Group Company is submitting the bid: Ref 3.5.1 C)

7. Domestic Bidder being a Company can use the own credentials of the Indian Parent / direct subsidiary/ indirect subsidiary within Parent / Group Company for the Technical Criteria and Financial Criteria. In such a case, back to back guarantee shall be provided by the Indian Parent / direct subsidiary/ indirect subsidiary within Indian Parent / Group Company which should have completed 3 financial years existence after date of commencement of business clearly stating that they shall fulfil the contractual obligations for Supply, Service and Warranty of the tendered item in case of failure of the bidder and financially support the bidder during the contract period with a commitment to maintain the stake in the bidder without any dilution.

Document Verification:

2. The certificate confirming both the Technical and Financial criteria above and all the documents submitted thereof, should be duly verified and certified by TPIA which are accredited under “NABCB accredited bodies as per requirement of ISO/IEC 17020 as type “A” in QCI’s NABCB website (nabcb.qci.org.in/accreditation/reg_bod_inspection_bodies.php) as on due date of bid submission”, at no extra cost to BPCL. The verification and certification should necessarily include comment "Verified from originals", with name and contact details (contact number and e-mail ID) of the certifying officer, TPIA name with the address of TPIA branch undertaking the certification.

Hard copy of the original TPIA verified documents (with original stamp) should be submitted to BPCL by the successful bidder for future reference. BPCL reserves the right to request for original documents of Bidder at any time during tendering process.

3. For foreign bidders, all the bidding documents related to Technical qualification Criteria as well as Financial qualification criteria should be duly certified, signed, dated and stamped by an official authorized for this purpose in Indian embassy/ High commission in Bidder’s country. An apostilled document shall also be treated as legalized document in India by all concerned, in accordance with the international obligation under the Hague Apostille Convention. OR

a) Local chamber of commerce in bidder’s country. OR
b) TPIA which is registered under “NABCB accredited bodies as per requirement of ISO/IEC17020 as Type A” in QCI NABCB website://nabcb.qci.org.in/accreditation/reg_bod_inspection_bodies.php as on date of verification of documents, OR
c) The above referred TPIA’s group company available in the bidder’s country.

4. In case vendor submits BPCL Work Order/P.O. in technical criteria, certification by TPIA is not mandatory against Technical Qualification Criteria. Completed value in such case will be cross checked from BPCL's SAP system and completion certificate/other documents to satisfy completed value will not be mandatory. However, certification by TPIA is mandatory against Financial Qualification Criteria

Other Information:

A. Financial Capacity / Turnover

Revenue from operations shall be considered as per Audited Balance Sheet including P&L Statement of the Bidder. Other income shall not be considered for arriving at annual turnover.

If the Bidder is a JV/Consortium, then Turnover, as required may be demonstrated cumulatively, i.e., the JV/Consortium members as a whole can meet the requirement. In case the Bidder is a Joint Venture/Consortium, the Proposal must be accompanied with the details of each Member of the Joint Venture (including JV Company) /Consortium whose Financial Capacity is considered for evaluation.

For the purpose of Financial requirements, Standalone annual accounts shall be referred.

The Bidder shall enclose with its Proposal, certificate(s) from its statutory auditors/ a firm of chartered accountants stating its Financial Capacity meeting the requirement.

B. Net worth

If the Bidder is a JV / Consortium, then the Net Worth, as required shall be demonstrated individually i.e every member of JV / Consortium including JV Company should fulfil the requirement.

Net worth shall be submitted by all bidders in terms of definition under section 2 (57) of the Companies Act 2013 duly computed and certified by the respective Company's Statutory Auditors and Firm of Chartered Accountants in case bidder is not required to have Statutory Auditors.

3.5.2.5 General Conditions:

Holiday Listing Provisions

The Bidder (and in case of a JV / Consortium, all Members including JV) is not affected by and has not been affected by any of the following events, conditions or circumstances:

i.) the Bidder being subject to proceedings for declaration of or being declared bankrupt, being wound up, or having its affairs administered or conducted by any court, administrator, receiver; or

ii.) currently not serving any Holiday Listing orders issued by BPCL or MOPNG convicted of an offence –

a) under the Prevention of Corruption Act, 1988: or
b) the Indian Penal Code or any other law for the time being in force, for causing any loss of life or property or causing a threat to public health as part of execution of a public procurement contract.

Conflict of interest

No Bidder or its member shall submit more than one Bid for the Project. A Bidder applying individually or as a member shall not be entitled to submit another application either individually or as a member of any Joint Venture/Consortium, as the case may be.
Bidder shall not have a conflict of interest that may affect the Selection Process or the Project. Any Bidder found to have a Conflict of Interest shall be disqualified. In the event of disqualification, the Bid inviting authority reserves the right to forfeit and appropriate the Bid Security for, inter alia, the time, cost and effort of the Bid Inviting Authority. Without prejudice, any other right or remedy that may be available to the Bid Inviting Authority shall also be exercised.

Right to seek clarifications

To facilitate evaluation of Bids, BPCL may, at its sole discretion, seek clarifications in writing from any Bidder regarding its Bid. Bidder shall ensure that all the information, facts & figures, data provided in the bid are accurate and correct. BPCL reserves the right to confirm / verify any data or information through their own sources. BPCL also may contact directly the references given for the project executed and may also visit the site, manufacturing facilities & sub-vendors works etc., physically to as certain capabilities of the applicant, if so desire at their own cost. Bidder may have to facilitate BPCL for any such visit.

3.6 CONFIDENTIALITY

Information relating to the examination, clarification, evaluation and recommendation for the Bidders shall not be disclosed to any person who is not officially concerned with the process or is not a retained professional advisor advising the Company in relation to or matters arising out of or concerning the bidding process. The Company will treat all information, submitted as part of the Bid, in confidence and will require all those who have access to such material to treat the same in confidence. The Company may not divulge any such information unless it is directed to do so by any statutory entity that has the power under law to require its disclosure or is to enforce or assert any right or privilege of the statutory entity and / or the Company.

3.7 CORRESPONDENCE WITH THE BIDDER

The Company shall not entertain any correspondence with any Bidder in relation to acceptance or rejection of any Bid.

3.8 BID OPENING AND EVALUATION

3.8.1 The Company shall open, examine and evaluate the Bids in accordance with the provisions set out in this RFP document.

3.8.2 To facilitate evaluation of Bids, the Company may, at its sole discretion, seek clarifications in writing from any Bidder regarding its Bid.

3.8.3 After the receipt of Bid the Company may at its discretion send a team of engineers if necessary to inspect the engineering facilities, to ensure suitability and satisfactory working conditions at the Bidder's works / yards(s) and equipment listed to be used by the Bidder for the work. The Bidder shall ensure that the aforesaid team shall at all the times have access to visit and inspect works, equipment etc.

Based on the information and documents submitted, only parties meeting the Bid Qualification Criteria will qualify for the techno commercial evaluation. Price bid of onlythose bidders shall be opened who qualify in the Techno-commercial bid. The schedule foropening the price bid shall be advised separately.

3.9 TESTS OF RESPONSIVENESS

3.9.1 Prior to evaluation of Bids, the Owner or their consultant shall determine whether each Bid is responsive to the requirements of the RFP/ NIT. A Bid shall be considered responsive only if:

(i) it is received in the manner prescribed in this RFP/ NIT/ Tender documents
(ii) it is accompanied by the requisite Tender Fee and EMD
(iii) it is received with all the Enclosures of the Bid as prescribed
(iv) its Enclosures are received as per the formats specified in BRS as well as the Tender;
(v) it contains all the information (complete in all respects) as requested in this Tender (in the same formats as specified);
(vi) it complies will all the terms, conditions and provisions specified in this Tender; and
(vii) it does not contain any conditions or deviations

3.9.2 The Owner reserves the right to reject any Bid which is non-responsive and no request for alteration, modification, substitution or withdrawal shall be entertained by the Company in respect of such Bid.

3.10 MODIFICATION AND WITHDRAWAL OF BIDS

3.10.1 In case any clarifications are sought by the Company after opening of Bids then the replies of the Bidder should be restricted to the clarifications sought. Any Bidder who

modifies its Bid (including a modification which has the effect of altering the value of its Financial Proposal) after opening of Bid without specific reference by the Company, shall render the Bid liable to be rejected without notice and without further reference to the Bidder and its EMD shall be forfeited.

3.10.2 No Bid may be withdrawn in the interval between the bid due date and the expiration of the validity period of the Bid. Withdrawal or unsolicited modification of a Bid during this interval shall result in the Bidder's forfeiture of its Bid Security.

3.11 EMPLOYMENT OF OFFICIALS / EX-OFFICIAL OF THE COMPANY

Bidders are advised not to employ serving the Company. It is also advised not to employ ex-personnel of the Company within the initial two years period after their retirement / resignation / severance from the service without specific permission of the Company. The Company may decide not to deal with such firm(s) who fails to comply with the above advice.

3.12 DECLARATION ON BIDDER'S RELATION TO DIRECTORS

The Bidders are required to certify in prescribed format BRS 8: Declaration of Compliance, whether he / they is / are related to any of the Directors / Senior Personnel of the Company in any of the ways mentioned in the Certificate. It is clarified that any such affirmative certificate shall not, by itself, prejudice consideration of the Bid. This certificate must accompany the Bid.

3.13 LETTER OF INTENT (“LOI”) / LETTER OF ACCEPTANCE (“LOA”) AND NOTIFICATION TO PROCEED

3.13.1 After selection of the Successful Bidder, a Letter of Intent (the “LOI”) Or LOA (Letter of Acceptance) shall be issued, in duplicate, to the Successful Bidder. The Successful Bidder shall not be entitled to seek any deviation from the Contract, as may have been amended by OWNER prior to the bid submission date.

3.13.2 On issue of the LoI by the Owner, Authorized representative of the Successful Bidder shall sign the Contract Agreement within 21 (Twenty-One) days and submit the Bank Guarantee within the stipulated time as per the proforma of the bid.

3.14 FRAUDULENT PRACTICES

3.14.1 The Bidders may please note that the Company shall not entertain any correspondence or queries on the status of the Bids received against this RFP. Bidders are advised not to depute any of their personnel or agents to visit the Company’s office for making such inquiries.

3.14.2 Any effort by a Bidder to influence the Company on the Bid evaluation, bid comparison or Contract award decision may result in the rejection of the Bidder's Bid.

3.15 IMMUNITY TO GOVERNMENT OF INDIA / MAHARASHTRA/ MADHYA PRADESH:

It is expressly understood and agreed to by and between the bidder and OWNER that OWNER is entering into this contract solely on its own behalf and not on behalf of any

other person or entity. In particular, it is expressly understood and agreed that the Government of India / Maharashtra/ Madhya Pradesh is not a party to this contract and has no liabilities, obligations or rights hereunder. It is expressly understood and agreed that OWNER is an independent legal entity with power and authority to enter into contracts solely in its own behalf under the applicable laws of India and general principles of contract law. The bidder expressly agrees, acknowledges and understands that OWNER is not an agent, representative or delegate of the Govt. of India / Maharashtra/ Madhya Pradesh. It is further understood and agreed that the Govt. of India / Maharashtra/ Madhya Pradesh is not and shall not be liable for any acts, omissions and commissions, breaches or other wrong arising out of the contract. Accordingly, the bidder hereby expressly waives, release and forgoes any and all actions or claims including cross, impleader claims or counter claims against the Govt. of India / Maharashtra/ Madhya Pradesh arising out of this contract and covenants not to sue the Govt. of India / Maharashtra/ Madhya Pradesh as to any manner, claim cause of action or thing what so ever arising of or under this Agreement.

3.16 BID EVALUATION METHODOLOGY AND SELECTION OF BIDDER:

Evaluation of techno-commercial bids and priced bids shall be done separately.

Bidder has the option to provide BPCL with ownership or long-term lease (minimum 30 years from the date of commissioning of the project) over the Land(s).

3.16.1 OWNER will examine the Bid to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the Bid is generally in order.

3.16.2 Prior to the detailed evaluation, OWNER will determine the substantial responsiveness of each Bid. A substantially responsive Bid is one which conforms to all the terms and conditions of the Tender Documents without material deviations. Deviations from or objections or reservations to critical provisions such as those concerning Eligibility, EMD, Applicable Law and Taxes and Duties, essential GCC Conditions like Performance Security Guarantee will be deemed to be a material deviation. OWNER's determination of a Bid's responsiveness is to be based on the contents of the Bid itself without recourse to extrinsic evidence.

3.16.3 Non responsive bid will be rejected by OWNER and may not accept subsequently made responsive by the Bidder by correction of the nonconformity.

3.16.4 Based on the above inputs, Owner / Consultant shall get the estimated deliverable generation worked out. If required, Owner / Consultant may ask for additional information. Further, Owner/ Consultant's representative reserve the right to visit the offered site(s) and collect site(s) specific information. In event of any ambiguity preliminary observed on micro siting data, submitted with the Technical bid, Owner/ Consultant may reserve the right to ask the bidder to revise the same prior to the Price bid Opening. A joint observation sheet may be signed by the bidder, consultant/ owner's representative and same sheet shall be considered for the onward evaluation of the bid. In case of dispute in AEP, owner reserves the right to appoint subject expert

to decide on the matter. Owner/ Consultant reserves the right to accept or reject the information provided by the bidder on their discretion and/ or after such visit of site(s). The decision of the Owner/Consultant shall be final and abiding and no claim whatsoever of the bidder shall be entertained. Bidder should arrange such joint visits during technical evaluation within reasonable period .

3.16.5 OWNER will evaluate and compare Bids which have been determined to be substantially responsive.

3.16.6 Price bids of only qualified and techno-commercially acceptable bidders shall be opened.

3.16.7 Evaluated Bid Value (EBV) Per KWh will be worked out by OWNER considering the following:

(i) Total EPC as per Sl. No. 4 of BRS No. P-I price (X-1) quoted by bidder in Bid Response Sheet P-I

(ii) NPV of the Operation and Maintenance charges (X-2) quoted by the bidders for 10 years in BRS P-V

(iii) NPV of Land lease/Sub lease rental (X-4) for 30 years from the commissioning of project, quoted by the bidder in BRS P-VI, if quoted.

(iv) NPV of S & F charges (X-3) as quoted in BRS P-VII

(v) Total Annual Energy Production (AEP) for 10 years as evaluated. AEP furnished by the bidders and accepted by OWNER as per Clause No.4.24

(vi) Discount Factor of 12.0% annually. For discounting purpose, all payments are assumed to be done at the beginning of the year.

(vii) The owner's Price evaluation of a bid will take into account, the bid prices indicated in Bid Response Sheet P-I to P-VII

(viii) Rebates (discounts) offered, in any form of bid proposal or on the forwarding letter shall not be taken cognizance under any circumstances. However, if OWNER requests, bidders can submit a price discount at an appropriate time and in the manner prescribed by the Owner.

(ix) GST shall be indicated separately in price bids. In case of land the quoted price shall be inclusive of GST. (Land BRS P-IV and BRS P-VI)

Any other duties as applicable shall be part of basic rates only. Evaluation shall be carried in equivalent INR based on exchange rate applicable on last extended tender due date.

If there is a discrepancy between the unit price and the total price, which is obtained by multiplying the unit price and quantity, or between sub totals and the total price, (even in case of carry forward of prices) the unit or subtotal price shall prevail and the

total price shall be corrected accordingly. If there is a discrepancy between words and figures, the amount in words will prevail. If the Bidder does not accept such correction of errors, its bid will be rejected and the bid security will be forfeited.

Cost per kWh will be calculated based on CAPEX and OPEX as quoted by bidder for the Guaranteed Baseline Annual Saleable Energy at metering point specified by the bidder The following methodology will be used for calculating the Cost per kWh.

The Evaluated Bid Value (EBV) shall be calculated using the following parameters, for each lot i.e. 25 MW (±5%) site separately.

Sl. No.	Symbol	Details of parameters
1	X-1	Quoted EPC Price by Bidder inclusive of all taxes / duties etc. in Rs. Lakh as per Sl. No. 4 of BRS No. P-I price
2	X-2	NPV of Quoted Comprehensive O&M charges for 9 years considering discount factor as given above .
3	X-3	NPV of Quoted S&F charges for 10 years
4	X-4	NPV of Quoted Land lease charges for 30 years
6	Y	Annual Energy Production (AEP) of Windfarm as per clause 4.24.for each year during the O&M period as per stipulated evaluation criteria of tender
7	Y1	Total Energy Generation for 10 years in kWh
	EBV (Cost per kWh)	(X1+X2+X3+X4) / Y1

1. Refer Bid Response Sheet No. P-I to P-VII for Price bid BOQ. Soft copy of the Sample Excel sheet for calculating EBV per kWh is enclosed as Annexure- XI.

2. All the bids shall be arranged in ascending order for the value of Rs. Per kWh. Order shall be placed on the bidder whose EBV per kWh is found to be the lowest for each project/lot wise of offered MW capacity. EBV Per KWh found to be lowest up to three decimal points by OWNER / its consultant, whose decision will be final in this regard.

3. OWNER will be in no compulsion to award any/all lot irrespective of EBV.

4. OWNER reserves the right to cancel a site without describing any reason based on its own assessment and can accordingly modify the capacity of the project to be awarded.

5. In case of a tie, work contract would be awarded to the bidder whose EBV per kWh is found to be the lowest up to four decimal points and so on.

6. Quoted O&M for total of 9 years shall be minimum 10 % of the Total EPC Contract Value (X1). If the bidder quotes lesser value as O&M charges, Bid evaluation will be done considering O&M charge at the quoted rate only. However, order will be placed as below:

For EPC contract shall be placed after reducing Quoted EPC price by the difference of (Minimum 9 year O&M cost ie.(10 % of the Total EPC Contract Value) and the O&M price quoted by the bidder. The added O&M will be paid in proportion to O&M quotes over 9 years period.

Illustration -Bidder's Quoted EPC= 100 , O&M 6 , Total=106. Revised EPC =(106/110)*100= 96.36 ,Revised O&M= 9.64 The difference of 9.64 – 6 = 3.64 will be paid in proportion to O&M rates over 9 years period.

7. Year to year annual escalation of O&M charges should be between 0 % to max 5% Bidder should ensure the same while quoting.

8. Year to year escalation of land lease charges shall be 0 % to max 5 %

9. Quoted prices in Indian Rupees for Indigenous Supply and in Foreign Currency (USD or Euro) for Imported supply shall be accepted in price bid. For evaluation purposes, all quoted values would be converted to Indian Rupees as on last deadline for submission of Techno-commercial bids.TT selling exchange rate published by State Bank of India (SBI) shall be used.

The order will be placed on the lowest successful bidder as per EBV calculated in each Lot of (25 MW +/- 5%) considering Public Procurement (Preference to Make In India) (PPP-MII) policy for the job. The subject job is Non-Divisible for a lot.

BPCL reserves the right to seek technical queries as well as BQC queries simultaneously during evaluation of bids so that time can be saved in total procurement cycle.

3.17 RIGHTS OF OWNER

3.17.1 Bidders are informed that Owner is neither under any obligation to select any bidder nor to assign any reason for either qualifying or disqualifying any bidder. Owner is also not under any obligation to proceed with the project or any part thereof.

3.17.2 At any time prior to opening of price proposals, either on its own initiative or in response to clarifications requested by any prospective bidder, Owner may modify the document by issuing an amendment by courier / fax / e-mail, etc. to all bidders.

3.17.3 Owner reserves the right to reject any or all proposals without assigning any reason thereto.

3.17.4 BPCL reserves the right to extend the original lease period for another 25 years or suitable period or surrender after completion of initial lease period, at its own discretion.

3.18 NO DISPUTE / CLAIMS

Although details presented in this RFP/ NIT have been compiled with all reasonable care, it is Bidder's responsibility to satisfy itself that the information / documents are adequate and that there is no conflict between various documents / stipulations. No dispute or claims will be entertained on this account. Bid proposal preparation is the

responsibility of the bidder and no relief or consideration can be given for errors and omissions.

3.19 PROJECT LOCATION

Project location shall be anywhere in Maharashtra and Madhya Pradesh meeting the requirement of the Project. One Project is defined as maximum two sites of cumulative capacity of 25 (+/-5%) MW in each state with minimum capacity of 10 (+/-5%) MW at single site.

3.20 SITE CONDITIONS

3.20.1 Bidder shall satisfy himself of the site conditions and shall apprise himself of the procedure for engagement of agencies / labour and shall collect other relevant information that may be required before submitting the bid. Claims and objections due to ignorance of site condition will not be considered after submission of the bid.

3.20.2 Bidder shall fully acquaint himself as to all conditions and matters, which may in any way affect the work or the cost thereof. The bidder shall be deemed to have himself independently obtained all necessary information for the purpose of preparing the bid and his bid as accepted shall be deemed to have taken into account all contingencies as may arise due to such information or lack of the same.

3.20.3 Bidder shall be deemed to have visited and carefully examined the site and surroundings to have satisfied himself about the nature of all existing facilities, infrastructure available for transport and communications and access to the site for developing the wind power project.

3.20.4 Bidder is deemed to have acquainted himself of Government taxes, laws structure, regulations, levies and other charges relating to the tendered work at site.

3.20.5 Bidder shall obtain all the necessary clearances / permission / NOCs etc. for development of the site for wind power project.

3.20.6 Any neglect or omission or failure on the part of the bidder in obtaining necessary clearances and reliable information upon the forgoing or any other matter affecting the bid shall not relieve him from any risks or liabilities or the entire responsibility for completion of the work in accordance with the bid.

3.21 LOCAL CONDITIONS

3.21.1 It will be imperative on the part of each bidder to acquaint himself with all local laws, conditions and factors which may have any effect or bearing on the execution of works and supplies under the scope of this tender. In their own interest, the bidders are required to familiarize themselves with (but not limited to) the Indian Income Tax Act, Indian Companies Act, Indian Customs Act, Factories and Boiler Act, Contract Labour (regulation and abolition) Act, Building and other construction workers welfare cess act 1996, Arbitration Act, PF Act and other related Acts and Laws and Regulations of India with their latest amendments as applicable. The Owner shall not entertain any clarification from the Bidder(s) regarding such local condition.

3.21.2 It shall be understood & agreed that above factors have been properly investigated and considered while submitting the offer. No claim for financial or any other adjustments to contract price or completion time on account of lack of clarity of such factors shall be entertained.

3.22 PUBLIC PROCUREMENT (PREFERENCE TO MAKE IN INDIA)-

Applicable for all the tenders of estimated value of above Rs. 1.0 Crore.

Public Procurement (Preference to Make in India) order, 2017 issued by DPIIT and as amended time to time will be applicable, bidder to provide necessary declarations accordingly.

Bidders are requested to go through the Order No. F.No. 283 /22/2019 -GRID SOLAR dtd. 09th Feb'2021 issued by Ministry of New & Renewable Energy, GoI, for granting purchase preference to local suppliers.

Bidders to note "Local Value addition through services such as transportation, insurance, installation, commissioning, training and after sales services support like AMC/CMC etc. shall continue to be considered in local content calculation."

BPCL reserves the right to seek any other documents (like break up of value and percentage of thelocal content etc.) from bidder to establish/verify his claim of local content during the Tender Evaluation process.

3.23 NEW STATUTORY LEVIES:

The taxes, duties, rates, and Cess quoted shall be final. New tax, if any, introduced later shall be on BPCL account from the date of bid submission (or extended date, if any) up to contract period.During contractual period, any variation in existing taxes, duties, rates and cess shall be borne by BPCL. Any upward statutory variation in taxes, duties rates and cess (including any new tax) beyond contractual completion date shall be borne by the bidder. However, in case of downward variation, the same shall be passed on to BPCL.

3.24 GST DETAILS:

Type of GST namely IGST/CGST-SGST will be determined based upon the billing address provided by the bidder in the tender & the state in which works are being executed. Bidders are requested to enter SAC codes (Service Accounting Codes) / HSN codes as Applicable in the relevant column of the price bid.

GST, as quoted by the bidder, shall be deemed as final and binding for the purpose of bid evaluation (applicable for tenders where bidder quotes the GST rates). In case a bidder enters "zero" GST or an erroneous GST, the bid evaluation for finalizing the L1 bidder will be done considering the quoted GST rate. No request for change in GST will be entertained after submission of bids.

In cases where the bidder quotes a wrong GST rate, for releasing the final order, the following methodology will be followed:

- In case the actual GST rate applicable is lower than the quoted GST rate, the actual GST rate will be added to the quoted basic rates. The final cash outflow will reduce to the extent of the revised GST.
- In case the actual GST rate applicable for the state is more than the quoted GST rate, the basic rates quoted will be reduced proportionately, keeping the final cash outflow the same as the overall quoted amount.

3.25 DECLARATIONS/ UNDERTAKINGS BY BIDDERS:

Bidders have to mandatorily submit the following declarations/undertakings as per the format provided in Annexure A to H:

(I) DECLARATIONS ON HOLIDAY LISTING & LIQUIDATION: **Bidder shall submit the declarations that :**

a. Bidder is not under liquidation, court receivership or similar proceeding.
b. Bidder is currently not serving any Holiday Listing orders issued by BPCL or MOPNG debarring us from carrying on business dealing with BPCL/ MOPNG or convicted of an offence –
   i. Under the Prevention of Corruption Act, 1988: or
   ii. The Indian Penal Code or any other law for the time being in force, for causing any loss of life or property or causing a threat to public health as part of execution of a public procurement contract.

(II) COMPLIANCE OF RESTRICTIONS FOR COUNTRIES WHICH SHARE LAND BORDER WITH INDIA:

Bidders have to submit an undertaking with respect to Compliance of Restrictions for Countries which share land border with India { Restrictions under Rule 144(xi) of the GeneralFinancial Rules, 2017–Reference OM no. 6/18/2019 – PPD dtd. 23.07.2020 (read along withany subsequent clarifications/amendments thereof) issued by Ministry of Finance, Public Procurement Division (https://doe.gov.in/procurement-policy-divisions)}. The declaration tobe submitted online in the portal.

(III) DECLARATION ON ACCEPTANCE OF TERMS & CONDITIONS SOCIAL MEDIA POLICY OF BPCL:

Terms & Conditions under Social Media Policy of BPCL for business partners are to provide clear guidance on acceptable standards of conduct and practices to be followed by the

Business Partners of Bharat Petroleum Corporation Limited, in the usage of social media toolsduring and post their association with the Corporation. These terms and conditions are intended to protect and safeguard *inter alia* the interests and reputation of the Corporation, inthe access, use of or participation on Social Media platforms by such constituents. **Successful bidder/bidders shall have to essentially submit following documents for further evaluation in the tender:**

i. "Social Media T&Cs" document along with the bid documents, duly signed & stamped/ digitally signed by the same signatory who is authorized to sign the bid documents. All the pages of the "Social Media T&Cs" shall be duly signed. Bidder'sfailure to return the "Social Media T&Cs" duly signed along with the bid documents shall result in the bid not being considered for further evaluation.

(IV) Public Procurement (Preference to Make in India) to provide Purchase Preference (linked with local content):

Public Procurement (Preference to Make in India) to provide Purchase Preference (linked with local content) is applicable in this tender.

Bidders are requested to go through the Order No. F.No. 283 /22/2019 -GRID SOLAR dtd. 09th Feb'2021 issued by Ministry of New & Renewable Energy, GoI, for granting purchase preference to local suppliers.

Eligibility for Price Bid Evaluation shall be determined as specified hereunder:

The following list of goods/ services are to be supplied/ sourced as/ from Class-I Local Suppliers only:

Sl. No.	List of Goods/ Services to be supplied/ sourced as/ from Class-I Local Supplier
1	Gear Box
2	Blades
3	Rotor
4	Generator
5	Tower
6	Hub
7	Parts of Controller
8	Bearings
9	Yaw Mechanism Components
10	Nacelle
11	**Common items for Transmission, Distribution and Generation Sector** at Annexure-IA to Ministry of Power OM No. A-1/2021-FSC-Part(5) dated 16.11.2021 (enclosed at Annexure-A). The Minimum Local Content (%) as mentioned under the afore mentioned OM shall be complied. The contractor should comply with the requirement of Minimum Local Content for individual items as listed in Annexure-I and should purchase these items only from Class-I Local Supplier.

i) The bidder shall declare in Annexure -C / D of their techno-commercial bid regarding supply/ sourcing of above listed goods/ services, as/ from Class-I Local Supplier.

ii) In case the bidder declares supply/ sourcing of all the Goods/ Services as per the above list as/ from Class-I Local Supplier, their bid shall be considered for further evaluation.

iii) For those bidders who do not declare, or declare for only some of the listed items, the supply/ sourcing of Goods/ Services as/ from Class-I Local Supplier, their bid shall not be considered for further evaluation and shall be technically rejected.

iv) In cases of procurement for the value in excess of INR 10 crore, the contractor/ supplier shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content of item(s) as per the defined list during execution prior to submission of last bill for payment.

v) In case aforesaid Certificate furnished by Contractor/Vendor is not in line with the declaration in respect of Local content in their bid, same shall be treated as false declarations.

3.26 SUBMISSION OF HARD COPY OF DOCUMENTS

i. Hard copies of the TPIA certified Bid Qualification Criteria (BQC) documents and its supporting documents with Original Stamp of TPIA certified with comment 'Verified *from Originals'*

ii. EMD/ MSE Certificate & TPIA verified CA Certificate(whichever is applicable)

3.27 STARTUPS MEDIUM ENTERPRISES:

In case a Startup is interested in supplying the tendered item, but does not meet the Pre- Qualification Criteria (PQC)/ Proven Track Record (PTR) of Prior Turnover norm as indicated in the tender document, i.e., in this case the Bid Qualification Criteria (BQC) mentioned above, the Startup is requested to write a detailed proposal separately and not against the present tender requirement, to the tender issuing authority about its product. Such proposals should be accompanied by relevant documents in support of Start-ups as under:

i. Certificate of Recognition issued by Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry, GOI.

ii. Certificate of Incorporation/Registration.

iii. Audited P&L statement of all the Financial Years since incorporation. In case where balance sheet has not been prepared, bidder shall submit a certificate in original from its CEO/CFO stating the turnover of the bidding entity separately for each Financial Year since incorporation along with a declaration stating the reason for not furnishing the audited P&L Statement. The certificate shall be endorsed by a Chartered Accountant/Statutory Auditor.

iv. Such proposal will be examined by the tender issuing authority who may consider inviting a detailed offer from the Startup with the intent to place a trial order or test order provided the Startup meets the Quality and Technical Specifications.

v. In case the Startup is successful in the trial order, it will be considered for PQC exemption/ relaxation (as the case may be) for the next tender for such item till the timethe entity remains a Startup.

Startups are exempted from submission of EMD.

3.28 PLANNING AND DESIGNING IN PURVIEW OF VULNERABILITY ATLAS OF INDIA

Vulnerability Atlas of India (VAI) is a comprehensive document which provides existing hazard scenario for the entire country and presents the digitized State/UT - **wise** hazard, maps with respect to earthquakes, winds and floods for district-wise identification of vulnerable areas. It also includes additional digitized maps for thunderstorms cyclones and landslides. The main purpose of this Atlas is its use for disaster preparedness and mitigation at policy planning and project formulation stage.

This Atlas is one of its kind single point source for the various stakeholders including policy makers, administrators, municipal commissioners, urban managers, engineers, architects, planners, public etc. to ascertain proneness of any city/location/site to multi-hazard which includes earthquakes, winds, floods thunderstorms, cyclones and landslides. While project formulation, approvals and implementation of various urban housing, buildings and infrastructures schemes, this Atlas provides necessary information for risk analysis and hazard assessment.

The Vulnerability Atlas of India has been prepared by Building Materials and Technology Promotion Council under Ministry of Housing and Urban Affairs, Government of India and available at their website www.bmtpc.org.

It is mandatory for the bidders to refer Vulnerability Atlas of India for multi-hazard risk assessment and include the relevant hazard proneness specific to project location while planning and designing the project in terms of:

.i) Seismic zone (II to V) for earthquakes,
ii) Wind velocity(Basic Wind Velocity: 55, 50, 47, 44, 39 & 33 m/s)
iii) Area liable to floods and Probable max. surge height
iv) Thunderstorms history
v) Number of cyclonic storms/ severe cyclonic storms and max sustained wind specific to coastal region
vi) Landslides incidences with Annual rainfall normal
vii) Districtwise Probable Max. Precipitation

SECTION–IV

SPECIAL CONDITIONS OF CONTRACT
FOR
SUPPLY, ERECTION & COMMISSIONING

CONTENT

SECTION–IV

SPECIAL CONDITIONS OF CONTRACT FOR SUPPLY, ERECTION & COMMISSIONING

4.0 DEFINITIONS & INTERPRETATION

Acts / Codes shall mean, but not limited to the following, including the latest amendments, and / or replacements, if any: -

1. Electricity Act, 2003 with amendments thereto, if any.
2. CEA (Measures relating to Safety & Electric Supply) Regulations 2023
3. A.I.E.E Test Codes
4. American Society of Testing of Materials (ASTM Codes).
5. Relevant standards of the Bureau of Indian Standards (IS Codes)
6. Arbitration and Conciliation Act, 1996, and Rules made there under.
7. Environment (Protection) Act, 1986 and Rules made there under.
8. Other approved standards and / or Rules and Regulations touching the subject matter of the Contract.

Applicable Laws means any statute, law, regulation, ordinance, rule, judgment, order, decree, restriction, directive, governmental authorizations, requirements of Applicable Permits and any agreements, decisions, acts, instructions, requirements, directions and notifications of the competent authority of the state having jurisdiction over the matter in question, whether in effect as on bid closing date.

ABT Meter means meter for measurement power and energy as per IEGC/MSETCL or MPPTCL as applicable

AEP: Shall mean Annual Energy Production of the WEG or Wind farm as applicable net at metering point

Bid and Bid Document shall mean the proposal submitted by the Bidder in response to this ITB in accordance with the terms and conditions hereof.

Bidder shall mean the Bidding Entity or the Bidding Consortium which has submitted a proposal, in response to this ITB to Owner.

Bidding Entity shall mean a single entity, whether a firm or a Company.

BIS shall mean Bureau of Indian Standards.

CDM shall mean Clean Development Mechanism

CEA shall mean Central Electricity Authority

CEIG means Chief Electrical Inspector of State of Maharashtra / Madhya Pradesh

CERC means Central Electrical Regulatory Commission

Completion Period shall mean the period by / during which the work shall be completed as agreed herein between the Owner and the Contractor

Commercial Operation Date (COD) of WEG shall means the date on which the Power Producer / Developer synchronize the last Wind Energy Generator with the Grid system and certificate of Commissioning of WEG for the date is issued by Nodal Agency / MSETCL/MPPTCL

Contractor means the person or the persons, firm or Company or corporation whose tender has been accepted by the Employer and includes the Contractor's legal Representatives, his successors and permitted assigns. “Bidder” and “Vendor” shall have same meaning as of Contractor unless and otherwise specified exclusively.

Company shall mean a body incorporated in India under the Companies Act, 1956

Completion Certificate shall mean as defined in 4.23 of Section IV

Commissioning of Project shall mean the commissioning of entire Wind Power Project of ordered capacity, certified by MEDA/MPPMCL/competent authority, its interfacing with Grid and commencement of export of electrical energy to the grid.

Common Facilities As defined at clause number 4.32

CUF Shall mean Capacity Utilization Factor of WEG or wind farm similar to PLF

Date of Commissioning of wind energy generator shall mean the date of commissioning mentioned in the certificate issued by MEDA/ MPPMCL/competent authority, as the case may be, on successful commissioning of WEG

Delivered Energy means the kilowatt hours of electricity actually fed and measured by the energy meters at the Delivery Point and as certified by Maharashtra/ Madhya Pradesh SLDC as per clause 4.23.3.

DISCOM means ‘Four Distribution Utility of the State of Maharashtra/ Madhya Pradesh.

Date of completion means the date of issue of completion certificate as per clause no. 5.23.

Defect Liability Period” means the period of validity of the warranties given by the Contractor, during which the Contractor is responsible for defects with respect to the Facilities (or the relevant part thereof) as provided in Clause No. 4.27 (Defect Liability) hereof

Effective Date / Zero Date shall mean the date of issue of Fax / Letter of Intent/ Letter of Acceptance.

Engineering, Procurement and Construction Contractor (EPC) shall mean the firm / company or party on whom the Letter of Intent / Work Order for faithful execution of the work mentioned herein is placed and shall include his / her / their heirs, legal representatives and successors and permitted assigns.

EBV: Evaluated Bid Value

Final Acceptance shall mean completion of project activities in all respect including 96 Hrs test run & Power curve performance test or any other test required as per contract Facility means land, wind turbine, generator, step up sub-station, Shared power evacuation system.

GA means grid availability**,** means the period for which the external power evacuation remains available in healthy condition.

GF means failure of power evacuation system beyond metering point i.e. MSETCL/MPPTCL system

GST means Goods & Service Tax

Inter-connection Point shall mean the point of connection of Power evacuation system to the nearest MSETCL/MPPTCL sub-station. During Project execution up to commissioning, point of interconnection shall mean up to MSETCL / MPPTCL Sub-Station or termination point. After commissioning it will be termination point at pooling sub-station.

KW / MW means Kilo Watt / Mega Watt.

KWh means Kilowatt Hours

LCS means local control system.

LOI means Letter of Intent issued by OWNER.

LSTK means Lumpsum Turnkey Contract

Machine Availability/MA means the period for which the WEG is in the state of power generation and remains available in healthy condition irrespective of wind condition. Formula of Machine Availability is defined at Clause 5.6

MBD means Machine Break Down for insurance purpose.

MEDA means Maharashtra Energy Development Agency.

MERC means Maharashtra Electricity Regulatory Commission.

Metering Point / Delivery point / interconnection point means the point at which energy supplied to MSETCL/MPPTCL shall be measured and shall be the bus bar of

the MSTECL / MPPTCL/ CTU substation at which the wind power is injected.

Micro-siting means identification of points on the offered land contours based upon wind resource assessment, where individual WEG is to be located in the wind farm. These locations (points) for the WEGs shall be optimized to have maximum possible electricity generation.

MNRE means 'Ministry of New & Renewable Energy Sources, Government of India'.

MPERC means Madhya Pradesh Electricity Regulatory Commission

MPPGCL means Madhya Pradesh Power Generation Company Limited

MPPMCL means Madhya Pradesh Power Management Company Limited

MPPTCL means Madhya Pradesh Power Transmission Company Limited

MPUVNL means Madhya Pradesh Urja Vikas Nigam Limited

MSEB means Maharashtra State Electricity Board

MSEDCL means Maharashtra State Electricity Distribution Company Limited

MSETCL means Maharashtra State Electricity Transmission Company Limited

MSPGCL means Maharashtra State Power Generation Company Limited

Nacelle Assembly means set of generating equipment consisting of Gear Box and generator.

NIWE' means National Institute of wind Energy (Erstwhile known as Centre for Wind Energy.

O&M shall mean Operation & Maintenance of wind power project which inter alia, includes provisions of manpower, spares, special tools, cranes or such materials / equipment that may be required for maintaining the WEGs in operation.

OWNER: BPCL (Bharat Petroleum Corporation Limited.)

Operator shall mean the person or the persons, firm or Company or corporation whose tender has been accepted for operation & maintenance by the Owner and includes the Contractor's legal Representatives, his successors and permitted assigns.

Project shall mean the Development, Design, Engineering, Supply, Procurement and Construction, Commissioning, Operation and Maintenance of the ordered capacity wind energy generation facilities complete in all respects and all activities incidental thereto.

Project Consultant is agency engaged by the OWNER for overall and successful completion of the Project and shall assist OWNER. “PMC” & “Consultant” elsewhere used shall have same meaning.

Project Life means the operational life of WEGs and all associated equipment and the same shall not be less than 20 years.

Prudent Utility Practice means accepted international / Indian practice(s), standard(s), engineering and operation considerations, taking into account the conditions prevalent at Site including manufacturer's recommendations generally followed in the operation and maintenance of facilities similar to the power plant.

Power Curve is a curve drawn with wind velocity in meter per second as axis and the corresponding energy generated by WEG as ordinate at standard density of air. (1.225kg / m^3)

P-90, P-75, P-50: Estimation of AEP of a wind farm / WEG at different level of probability by experts / Consultant based on Wind Resource Data for the site.

QAP mean Quality Assurance Plan.

Reactive Power shall mean the Reactive Power drawn from the grid and charged by the power utility from the Owner and measured in KVARh.

RfP shall mean request for proposal equivalent to tender document.

SCADA means Supervisory Control and Data Acquisition.

SLDC Mean State Load Dispatch Center

Stabilization Period means time required for fine tuning of the WEG and is considered as 60 Days from the date of commissioning as per clause no. 4.10.

STU State Transmission Utility i.e. MPPTCL & MSETCL

SUB-CONTRACT shall mean order placed by the Bidder / contractor for any portion of the contracted work, after necessary consent and approval of OWNER.

Time Schedule shall mean the period by which the work shall be completed as agreed herein between the Owner and the Contractor as per clause no. 4.9.

VAR means reactive power.

VCB means Vacuum Circuit Breaker.

WAsP means Wind Atlas Analysis and Application Program.

WEG shall mean Wind Electric Generator

4.1 GENERAL

4.1.1 Special Conditions of Contract shall be read in conjunction with the General Conditions of Contract, Scope of work, technical specifications, drawings and any other document forming part of this contract, wherever the context so requires.

4.1.2 Where any portion of the Special Conditions of Contract (SCC) is repugnant to or at variance with any provisions of the General Conditions of Contract (GCC), then unless a different intention appears, the provision of the Special Conditions of Contract shall be deemed to over-ride the provisions of the General Conditions of Contract only to the extent such inconsistencies of variations in the SCC as are not possible of being reconciled with the provisions of GCC.

The materials, design and workmanship shall satisfy the applicable standards, specifications contained herein and codes referred to. Where the Technical Specifications stipulate requirements in addition to those contained in the standard codes and specifications, those additional requirements shall be satisfied.

In case of any contradiction in any of the terms & conditions to the extent that the two provisions cannot co-exist, the following shall prevail in order of precedence.

i) Contract Agreement
ii) Work Order
iii) Letter of Intent / Fax of Intent/ Letter of Acceptance
iv) Corrigendum, if any
v) Statement of Agreed Variations
vi) Instructions to Bidder
vii) Special Conditions of Contract
viii) Scope of Work
ix) Technical Specifications.
x) General Conditions of Contract and its latest revisions, if any.
xi) HSSE Management and Assurance Policy.
xii) Any other document

4.1.3 **Environmental Laws**

All applicable codes, laws, rules and regulations relating to actual or potential effect of the activities on and at the project contemplated by executing this project on the environment, the disposal of material, the discharge of chemicals, gases or other substances or materials into the environment, or the presence of such materials, chemicals, gases or other substances in or on the project.

4.2 POWER PLANT

The complete, fully functional and operational 25 MW (±5%) wind power generating station in maximum 2 Sites having minimum capacity of 10 (+/-5%) MW at single site including related facilities, substation and controls necessary to enable the plant to

deliver electric power to 33 kV or at higher voltage outgoing feeders up to inter connection at MSETCL/ MPPTCL at 66 kV and above.

4.3 DOCUMENT

In this document unless otherwise stated:

i) The headings and paragraph numbering are for convenience only and shall be ignored in construing the agreement;

ii) The singular includes the plural and vice versa;

iii) References to natural persons include body corporate and partnerships;

iv) References to any enactment, ordinance or regulation include any amendment thereto or any replacement in whole or in part;

v) References to Articles, Clauses and Schedules, unless the context otherwise requires, refers to Articles of, Clauses of and Schedules to this document.

4.4 SCOPE OF WORK

The broad scope of work covered in this tender shall be as specified under Section-VI A, VI B & VI C of "Scope of Work", Technical Specification as per Section VII and as mentioned elsewhere in this tender document. It is, however, understood and confirmed by the Contractor that the scope as described in the bid document is not limiting in so far as the responsibilities of the Contractor shall include inter-alia, carrying out any and all works and providing any and all facilities those are required in accomplishing an operating system, complying fully with all requirements as are envisaged of it, complete in all respect and satisfying all Performance and guarantee requirements stated or implied from the contents of the tender document. The Contractor shall make all required liaisoning with the all agencies along with concerned power utilities for interconnection of the Windfarm with the State Grid, so as to commence exporting the power generated from Windfarm soon after its commissioning. The Contractor shall get tested all required equipment (like CTs, PTs, ABT meter, etc) from the power utility (if applicable) well before commissioning of the Windfarm so as to avoid any delay in commissioning of WEGs and export of power.

It will be responsibility of the bidder to arrange for the capacity allocation from MSETCL/ MPPTCL & developers' permission as applicable in the State by the Renewable Nodal Agency of the State for the development of Windfarm at the offered site. All costs towards the successful execution and completion of work including out of pocket expenses shall be borne by the Contractor.

The site(s) should have clear legal title and should be free from any encumbrance.

4.5 PLACEMENT OF ORDERS FOR AWARD OF CONTRACT

4.5.1 The OWNER at the request of the bidder request place four orders, on the bidder for implementation of the project as mentioned below:

4.5.1.1 Order for detailed engineering, manufacturing, in-house testing, supply and delivery of equipment at site(s).

4.5.1.2 Order for micro-siting, arranging all approvals, all civil & electrical construction works at site(s), laying internal & external evacuation system, erection & commissioning WEGs and interconnection with State grid of Windfarm project complete in all respect.

4.5.1.3 Order for arranging required land and land development for the project (either on outright purchase basis or long-term sub lease or lease transfer basis, as applicable).

4.5.1.4 Order for Comprehensive O&M Contract for 9/10 years from the date of stabilization of the complete wind project as per financial bid. Initial contract for 5 years and extendable thereafter on discretion of the Owner.

4.5.2 The aforesaid placement of Purchase Orders/ Contract agreement shall be merely to facilitate the overall project requirement and shall not relieve the bidder in any manner from the overall responsibility of execution of work.

4.5.2 A breach in the performance of any of the orders as indicated above, shall be considered as a breach in performance of the other order, which shall confer a right on the Owner to terminate the other order also at the risk and cost of the Contractor / operator without any prejudice to any other rights the Owner may have as per terms & conditions of respective order.

4.5.3 Total responsibility in regard to design, engineering, manufacturing, delivery at site(s), timely execution, including completion, guarantee liabilities and all other contractual obligations will remain with Bidder irrespective of the modality of ordering and the bidder shall coordinate all activities for smooth and timely completion of the project. In such a manner, as if there has been no split in the scope of work.

4.6 RESPONSIBILITIES OF THE CONTRACTOR

4.6.1 All expenses towards mobilization at site and demobilization including bringing in equipment, work force, materials, dismantling the equipment, clearing the site(s) after completion of work and liaisoning for interconnection of Windfarm with the State Grid with concerned departments as per statutory norms etc. including out of pocket expenses shall be deemed to be included in the prices quoted and no separate payments on account of such expenses shall be entertained.

4.6.2 Contractor may have to work in energized or partly energized conditions. In such cases, it shall be the responsibility of the Contractor to arrange for necessary permits or shuts downs and provide skilled and responsible persons for the execution of works. Contractor shall organize his works during the shutdown periods properly and complete the programmed works within the time given. Safety and permit systems at the site shall be in the scope of vendor. Owner shall not be responsible for any safety incidence at site during construction and O&M. Contractor shall not be paid any extra payments for working under the above said circumstances.

4.6.3 Contractor shall assist and facilitate OWNER for signing of wheeling and banking agreement to avail available benefits of open access mechanism.

4.6.4 It shall be entirely the Contractor's responsibility to provide, operate and maintain all necessary construction equipment, scaffoldings and safety gadgets, cranes and other

lifting tackles, tools and appliances to perform the work in a workman like and efficient manner and complete all the jobs as per time schedules.

4.6.5 Procurement and supply, in sequence and at the appropriate time, of all materials and consumables shall be entirely the Contractor's responsibility and his rates for execution of work will be inclusive of supply of all these items.

4.7 FORCE MAJEURE

Clause No 20 of GCC shall be applicable.

4.8 SECURITY DEPOSIT CUM PERFORMANCE BANK GUARANTEE

The Successful bidder shall submit security Deposit Cum Performance bank guarantee for an amount equivalent to 10 % of EPC contract value (X1) within 15 days of issue of LOA with validity till 12 months from the date of stabilization.

O&M Performance Guarantee -The Bidder shall submit a Bank Guarantee one month prior to commencement of paid O & M period for an amount equivalent to 10% (ten percent) annual O&M charges for the year. Every year a fresh bank guarantee shall be submitted by the Bidder, having validity of 13 months, one month prior to expiry of the previous Bank Guarantee or the existing bank guarantee can be extended suitably every year till O&M contract remains with the Bidder

The Bank Guarantee shall be in the format prescribed in GCC.

Option for retention of in lieu of PBG is not applicable for this tender.

4.9 TIME SCHEDULE

4.9.1 The time and the date of completion of the Contract as specified in the contract by the Owner without or with` modifications, if any, and so incorporated in the Letter of Intent, shall be considered to be the heart of the Contract.

4.9.2 The bidder shall submit a detailed Program Schedule in MS Project within the time frame agreed covering all activities with various key phases of supply and service obligations under the contract such as supply schedule and field erection activities within fifteen (15) days of the date of Letter of Intent (LOI)/ Letter of Award (LOA).

4.9.3 The time period mentioned below shall be reckoned from the date of issue of Letter of Intent.

4.9.4 Commissioning schedule for the Windfarm shall be 21 (Twenty-One) months from the date of issue of LOI/LOA. The date of commissioning shall be the date as mentioned in the certificates of commissioning issued by the respective State Nodal Agency or the State utility for all WEGs.

4.9.5 Transfer of Land

i) Transfer / Lease / Sub lease of land in the name of OWNER shall be got done within 9 (Nine) months from signing of contract agreement.

ii) Process of lease transfer of forest land in favour of OWNER shall be commenced soon after finalization of WEG locations after award of Contract to the Contractor.

4.10 STABILIZATION OF WEGs

Soon after commissioning of WEGs in the Windfarm the Contractor shall start undertaking stabilization activities for the turbines and related BOP. All stabilization activities shall be completed within stipulated period of two months from date of commissioning of last WEG of the project.

Post commissioning checks on turbines viz. fine tuning of pitching & yawing mechanism, checks for oil leakages, braking system, voltage converters, providing of auto start facility on each WEG irrespective of Grid failure period, any other checks as prescribed in Contractor's Protocol, checking of all electrical installations & rectification of defects observed, if any, attending to all punch points, torqueing, checks of all bolts& lubrication of bearings after first 500 operational hours of WEGs.

Further Stabilization of all WEG's in the Windfarm shall be considered to have been achieved on successful accomplishment of the following activities:

4.10.1 Minimum monthly machine availability after stabilization should be 97% for Complete Windfarm for the next one month.

4.10.1 Project has been completed in all respect including power evacuation facility till utility grid.

4.10.2 SCADA has been commissioned and fully operational including connectivity at Owner's premises. There should not be any discontinuity for a minimum period of 15 days from the date of connectivity at owner's premises & it remains operational thereafter. In case of any interruption during test period of 15 Days test period will start afresh.

4.10.3 WEG's are free from occurrence of repetitive fault of the same nature.

In case stabilization work of all the WEGs and BOP is delayed beyond stipulated period of two months by the Contractor. No O&M charges for the period between commissioning and completion of stabilization will be paid by OWNER and treated as free of cost.

4.11 COMPENSATION FOR DELAY

4.11.1 As commissioning time is the essence of the Contract and the same shall be firm and binding. The Bidder shall complete all activities of the Project viz. design, engineering, manufacture, supply, storage, all civil works, and installation, erection, testing, commissioning, and interconnection with State grid of wind energy project within the scheduled date. In case the project is not commissioned within the scheduled date then the contractor has to pay the owner compensation for delay for the value of un-commissioned WEGs, at the rate of 0.5% (half percent) per week plus applicable GST of delay subject to a maximum of 5% (five percent) of the contract value **of un-commissioned WEGs** plus applicable GST (value of supply, erection and

commissioning i.e. excluding value of O&M). The decision of the Engineer-in Charge with regard to the amount to be recovered from the Contractor will be final and binding on the Contractor.

Compensation for non-conformance of Power Curve Testing shall be separate and will be in addition to the Compensation for delay and shall be governed as per Clause No. 4.30 of this Section and Annexure –X.

4.11.2 Commissioning will be considered for the project as a whole when last WEG of the wind energy project has been interconnected with the State Grid.

4.11.3 The Bidder shall indicate duration of all the activities in draft activity chart in conformity with the overall schedule of the commissioning of project. A sample for activity chart is attached for reference at Bid Response Sheet 20. Bidder shall submit the activity chart in form of Bar Chart which shall be discussed and finalized and shall be a part of Contract as Program schedule defined in Clause No. 4.9.2.

4.11.4 Compensation towards non-conformance of power curve performance test shall be additional as specified in Annexure X

4.12 EXTENSION OF TIME

4.12.1 Failure or any delay by the Owner due to any cause whatsoever, shall in no way effect or vitiate the contract or alter the character thereof or entitle the Contractor to damages or compensation thereof provided that the Owner may extend the time for completion of the work by such period as it may consider necessary or proper.

4.12.2 If the Contractor shall desire an extension of the time for completion of the project on the grounds of his having been unavoidably hindered in its execution or the work has been materially increased by Owner or other such grounds, he shall apply in writing to the engineer in-charge within ten days of the date of occurrence of event on account of which he desires, such extension as aforesaid, and the Engineer - In- charge shall, if in his opinion (which shall be final) reasonable grounds have been shown thereof, authorizes such extension of time as may be, in his opinion be necessary or proper. Whenever such extension is granted by the engineer in-charge, such extension shall be construed as Provisional Extension of Time and would be without prejudice to the Owner’s right under this contract.

4.12.3 During execution of work on mutual consent of the Contractor, Consultant, and the Engineer- In charge or Site Engineer, for smooth execution of work and review of progress status. communications may be done through WhatsApp or text messages or Mobile phone calls or Telephone calls but the same shall be merely for review and update on extant progress of work and shall neither be considered as formal communications nor can be considered or produced for any litigation or dispute purpose or for raising any claims. Any instruction or communication as per the terms of the contract shall only be done through emails and letters.

4.13 NO COMPENSATION FOR ALTERATION IN OR RESTRICTION OF WORK

If at any time from the commencement of the work the Owner shall for any reason whatsoever not require the whole work or part thereof as specified in the bid to be

carried out or, alteration in the work are required, the Engineer-In charge shall give notice in writing of the fact to the Contractor, who shall have no claim to any payment or compensation whatsoever on account of any profit or advantage which he might have derived from the execution of the work in full or prior to alteration.

4.14 CONTRACTOR'S OFFICE AT SITE(S)

During the execution of the contract, the Bidder shall ensure responsible person with authority to take decisions to be available at site(s). Such person deputed by the Contractor shall report to the Consultant's/ Owner's Site in-charge, for smooth execution and timely commissioning of the work. The Contractor shall also provide and maintain a site office, at the site, for the use by the owner / its consultant / representative. Such office shall be open at all reasonable hours to receive instructions, notices or other communications. The Contractor shall be responsible for any misconduct / indiscipline by his employees or sub-Contractor / agent employee's. The Contractor shall abide by the instructions of the engineer in charge, if given in this regard. Operator shall provide sitting space in office to the representative/s of Owner or their authorized agency during their visit to the site.

EPC Bidder shall submit the Manpower Chart with hierarchy that would be deployed at site.

4.15 SUB-CONTRACTING OF WORK

Contractor shall not subcontract or assign, in whole or in part, its obligations to perform under this contract, except with Company's prior written consent. In the eventuality of sub-contracting of work, Owner / Company will be informed in advance. However, the Contractor's liability or obligations will not get altered / delegated to sub-Contractor. If any sub-Contractor engaged upon the work at the site executes any work which in the opinion of the engineer in-charge is not in accordance with the contract documents, the Owner / Company may give written notice to the Contractor advising him to terminate such sub-contracts and the Contractor on the receipt of such notice shall terminate such contracts.

4.16 POWER OF ENTRY

4.16.1 In case the Contractor does not commence work in the manner described in the contract documents or if he shall at any time in the opinion of the Engineer in charge:

i) Fail to carry on the works in conformity with contract document / schedule or

ii) Substantially suspend work or the works for a continuous period of 14 days without permission from the engineer in charge, or

iii) Fail to carry on and execute the works to the satisfaction of the Engineer-in-Charge, or

iv) Commit or permit any other breach of any of the provisions of the contract on his part to be performed. or

v) If the Contractor abandons the works, or

vi) If the Contractor during the continuance of the contract becomes bankrupt.

In any of such events, the Owner shall have the power to enter upon the works and take possession of the materials, temporary works, equipment, tools and stocks thereon, and to revoke the Contractor's order to complete the works by his agents, other Contractors or workmen.

4.17 USE OF COMPLETED PORTIONS

4.17.1 Whenever in the opinion of the Owner the work or any part thereof is in a condition suitable for use and in the best interest of the Owner requires use, the Owner may take possession of the same. The Contractor shall, however, be not relieved of his pending obligations.

4.17.2 Prior to the date of final acceptance of the work by the Owner, all necessary repairs or renewals in the work or part thereof so used on account of defective materials or workmanship or due to the operations failure shall be at the expenses of the Contractor. Such use shall neither relieve the Contractor or any of his responsibilities under the contract, nor act as waiver by the Owner of the conditions thereof. However, if in the opinion of the Owner the use of the work or the part thereof delays the commissioning of the remainder of the work, the Owner may grant such extensions of time as it may consider reasonable. The decision of the Owner in the matter shall be final. The Contractor shall not be entitled to claim any compensation on account of such use by the Owner.

4.18 POWER OF THE ENGINEER-IN-CHARGE TO ORDER SUSPENSION OF WORK

The Engineer-in-charge may, from time to time by direction in writing and without invalidating the contract, order the Contractor to suspend the work or any part thereof at such time or times and for such reasons as he may consider necessary. After such directions to suspend the work or any part thereof has been given, then proceed with the work or part thereof, directed to be suspended until he receives a written order from the Engineer-in-charge to so proceed. In the event of suspension, the Owner may under the provisions of the contract, extend the time for commissioning of the work or part thereof by such period as it may find reasonable. The decision of the Owner in the matter shall be final and binding on the Contractor. Owner shall not be responsible for any stoppage of work at site (s) due to any local or other issues. Bidder shall resolve the issues. If any in a timely manner to ensure the completion of Work as per the scope on time.

4.19 PAYMENT TERMS

Payments shall be released in the following manner after furnishing of Security cum Performance Bank Guarantee by the bidder and signing of Agreement as per provisions of bidding document:

Considering separate orders, the following payment terms will be applicable for the respective scope: -

Stage wise payments shall be released on prorata basis (i.e WEGs wise basis) against each SOR including all applicable taxes and duties after furnishing of Contract Performance Bank Guarantee.

A) For Land:

i.	90% on transfer of land in the name of owner, peaceful possession & execution of land deed by way of outright purchase or lease or Sub-lease or mixture of two or more and as per the detailed scope of Work
ii.	10% against complete commissioning of entire system

Land means land & all land related development in the Windfarm.

B1) For supply of plant and equipment as quoted in Schedule of Prices BRS P – II

i.	5% payment against approval of micro siting.
ii.	65% payment against receipt of material at site on prorate basis.
iii.	15% against erection, testing and pre-commissioning of WEGs on prorate basis.
iv.	5 % against commissioning of WEGs on prorate basis.
v.	5% on submission of completion certificate as per clause no. 4.23 of the Wind Energy Project
vi.	3% payment against successful completion of Power Curve Verification test.
vii.	1% after six months to be reckoned from completion of stabilization period 1% after twelve months to be reckoned from completion of stabilization period or completion of defect liability period whichever is later.

B2) For Erection and commissioning works

i.	5% on start of foundation works (after approval of Reinforcement steel, design mix, etc.)
ii.	55% on completion of Foundation on prorate basis.
iii.	15% on completion of Erection of WEG and all equipment on prorate basis
iv.	10% on erection of evacuation system.
v.	10% against commissioning of WEG on prorate basis
vi.	5% on submission of completion certificate as per clause no.5.23 of the Wind Energy Project.

ADVANCE PAYMENT:

On specific request of the bidder, Owner may release interest bearing advance up to 30 percent of the contract value for Sl. No. 4 of BRS No. P-I subject to the following conditions:

Advance amount will be made available for procurement Wind Turbine and accessories as per Sl. No. 1 of BRS No. P-I.

The advance thus allowed will be interest bearing to be charged at 9.55 % compounded quarterly.

Advance will be paid in two equal instalments of 15% each after signing the contract agreement considering order placement/acceptance for the equipment and delivery schedule confirmation provided after obtaining from the OEM and /or self-declaration in case bidder is OEM, with necessary details.

Bidder shall provide unconditional bank guarantee for 115 % of the advance amount towards security of the advance on a separate BG in approved proforma enclosed with the bidding document.

The BGs can be submitted in two stages of 15% each and shall be valid till the completion of respective scope of work or 18 Months ,(Whichever is later) with a claim period of 6 months thereafter.

The Contractor may claim first instalment of advance up to 15 % of the EPC contract value as per Sl. No. 4 of BRS No. P-I after the placement of LOA by owner and submission of BG by bidder as mentioned above subject to copy of acceptance of order of WEG(s) and accessories by OEM and confirmation of delivery schedule by the OEM.

The second instalment of 15 % of the EPC contract value as per Sl. No. 4 of BRS No. P-I may be paid on certification by the contractor of having achieved a financial progress of 30 (thirty) per cent of the EPC contract price, as also provision of a BG and submission of utilization certificate by the contractor for this part of the advance and verification of the same by BPCL.

Recovery of advance from the RA bills shall be done at the rate corresponding to the repayment schedule as per the major milestones of the project . Such recovery from RA bills shall be continued till 100% amount of advance payment along with interest accrued till date is recovered.

BG’s shall be furnished by bidder for requested amount along with interest in six equal parts with validity of 18 Months (Against stipulated project completion period of 21 months) and additional 6 months of claim period. Bidder shall also submit a separate bank guarantee equivalent to 10% of 115 % of the advance amount so requested to meet the condition that advance proposed to avail shall not include the margin money and bank commission charges.

Confirmation of BG documents towards advance payment will be done in SFMS mode.

The recovery of advance by encashing the BG will be done in case the contractor's money on account of work done is not available due to non completion of work as per schedule approved by owner.

BGs shall remain effective until the advance payment has been fully repaid but the amount thereof shall be progressively reduced by the amount paid by the Contractor.

BG shall be provided as per the attached Proforma in the tender document.

Necessary insurance on the Product and hypothecation needs to be done in favour of the Owner.

The bidder will be required to execute an agreement for availing the advance. All the advance amount shall be used by the Contactor exclusively for intended purpose. Necessary proof viz: the copy of Chartered Accountant's certificate and Fund Utilization statement shall be furnished by the bidder quarterly to the PMC/ Owner. In case of non-receipt of such certificate or fund utilization statement, Owner reserves right to encash the BG without serving any further notice. Should the contractor misappropriate any portion of the advance, it shall become due and payable immediately and no further advance will be made. The contractor shall also be liable for appropriate penal action under the contract.

No loading shall be done in the price bid on account of availing the advance as the same is interest bearing.

C) PAYMENT PROCEDURE

The Contractor shall raise bills against the completed supply / works .
75% payment of the Running Account bill (RA bill) shall be released within 15 calendar days of receipt of RA bill duly certified by Engineer-in-charge (EIC) and the balance payment shall be released within 30 days of receipt of RA bill by EIC after detailed scrutiny.RATES TO BE FIRM AND INCLUSIVE OF ALL TAXES

4.19.1 The rates quoted by the Contractor shall remain firm inclusive of all taxes, duties and binding till commissioning of the project in all respect. The rates shall not be subject to escalation. Rates shall be deemed to include and cover all costs, expenses, taxes, duties, levies, royalties, foreign exchange variation, etc. and liabilities of every description and all risks associated in execution, for completing and handing over the work to the Owner by the Contractor.

Any variation in taxes, duties on account of revision by the Statutory orders shall be reimbursed to the contractor or recovered from the Contractor as per the relevant Clauses of the GCC and Price break up submitted along with the bid.

4.19.2 GST as applicable will be paid to the Contractor and it should be included in the total quoted cost in the Bid Response sheet. The rates for supply of different equipment, Balance of Plant (BOP), erection, testing, commissioning etc should be indicated in the Bid Response Sheet.

4.20 DEFECTS PRIOR TO TAKING OVER

4.20.1 If at any time before the work is taken over, Engineer-in-Charge shall:

i. Decide that any work done or materials used by the Contractor or any sub-Contractor is defective or not in accordance with the contract, or that the works or any portion thereof, are defective, or do not fulfill the requirements of contract (all such matters being hereinafter, called 'Defects' in this Clause).

And

ii. As soon as reasonably practicable notice is given to the Contractor in writing of the said decision, specifying particulars of the defects alleged to exist or to have occurred, and then the Contractor, at his own expense and with all efforts shall make good the defects so specified.

4.20.2 In case the Contractor fails to do so, the Owner may take, at the cost and risk of the Contractor, such steps as may in all circumstances be reasonable to make good such defects. The expenditure so incurred by the Owner will be recovered from the amount due to the Contractor. The decision of the Engineer-in Charge with regard to the amount to be recovered from the Contractor will be final and binding on the Contractor. As soon as the works have been completed in accordance with the contract and have passed the tests on completion, the Engineer-in-Charge shall issue a certificate in which he shall certify the date on which the works have been so completed and have passed the said tests and the Owner shall be deemed to have taken over the works on the date so certified.

4.21 DEFECTS AFTER TAKING OVER

4.21.1 In order that the Contractor could obtain a completion certificate, he shall rectify any defect arising from the defective materials supplied by the Contractor or workmanship or any act or omission of the contract or that may have been noticed or developed after the works or group of the works has been taken over. Normally it is expected that work will be completed within 15 days. However, in case of unforeseen / genuine delay Engineer in charge may take a call on this aspect whose decision will be final. If any defect be not remedied within period stipulated above the Owner may proceed to do the work at Contractors risk and expense and deduct from the final bill such amount as may be decided by the Owner.

4.21.2 If by reason of any default on the part of the Contractor, a completion certificate has not been issued in respect of the works within one month after the date fixed by the Contractor for the completion of the work, the Owner shall be at liberty to use the works or any portion thereof in respect of which a completion certificate has not been issued, provided that the works or the portion thereof so used as aforesaid shall be offered reasonable opportunity for completion of these works for the issue of completion certificate.

4.21.3 All the aforesaid safeguards / rights provided for the Owner shall not prejudice its other rights / remedies elsewhere provided herein and / or under law.

4.22 COMPLETION CERTIFICATE

4.22.1 The contactor shall submit Completion Report of the project to the Owner. The Completion Report shall consist of the following documents:

(i) Copy of the Commissioning Certificate issued by the competent authority.

(ii) Technical documents as per scope of work & technical specifications according to which the work has been carried out.

Four sets of as built drawings showing therein modification and corrections, if any, made during the course of execution signed by the Contactor. A soft copy of as built drawings shall also be submitted. As built shall include - Soft copy format shall also include native files in formats like *".dwg/any other (for Auto CAD), .pdf"* & for Electrical system study conducted through ETAP, etc. native files like .OTI to be submitted by bidder. Native files for software (WASP, etc.) used shall also be shared by the Contractor.

Copy of complete layout of the Windfarm including Evacuation system

Copies of test Certificates for type / routine tests performed on major equipment and Works

O&M Manuals – 3 sets

Copies of Statutory clearances / permissions.

Certificate / undertaking for making payment of all statutory requirements, labour wages and others and for any such claims.

An undertaking confirming the payment of all statutory taxes & duties, or document (s) having evidence of paying statutory duties, taxes etc. as per requirement of concerned statutory authorities.

Certificate regarding completion of the facility in all respect including SCADA by the Engineer In-Charge / Consultants.

4.22.2 Owner shall issue Completion Certificate after verifying from the completion documents and satisfying itself that the work has been completed in accordance with details set out in the construction and erection drawings and the contract documents. No Completion Certificate shall be given nor shall the work be deemed to have been executed until the export of generated wind power commenced, statutory requirements are completed and all scaffolding, surplus materials and rubbish is cleaned off the site completely

4.22.3 **Delivered Energy**

Delivered energy is the kilowatt hours of electricity actually fed and measured by the energy meters at the Delivery Point and as certified by MSETCL/MSEDCL/ Maharashtra SLDC. In case, the project is installed in existing / new Pooling Station and connected to MSETCL / STU, the delivered energy shall be arrived at by deducting

the below mentioned normative transmission losses between Windfarm Pooling Station and MSETCL's receiving sub-station from the energy recorded at Pooling Station.

4.23 ESTIMATED ANNUAL ENERGY PRODUCTION

Bidder shall submit estimated Annual Energy Production (AEP) of the offered Windfarm by using Wind Resource Assessment tools. & will declare the annual CUF of Project in his bid submission. Offered annual CUF shall not be less than 34% (Thirty four percent).

The bidder shall submit the following details with the bid both in soft copy and hard copy: -

1. Details of reference wind mast i.e.

    a) NIWE mast or Bidder's own mast. The minimum height of the mast shall be 80 Meter. However, preferably bidder should provide wind data for wind mast of 2 / 3 height of WEG offered.

    b) Location of the mast with respect to offered site(s) giving co-ordinates and elevation. Wind mast location should not be more than 10 km from farthest WEG location offered.

    c) Height of the mast indicating sensor heights.

    d) Period of wind data of the mast considered for calculation which should not be older than 10 years of bid submission date.

    e) Annual Air Density of the site(s).

    f) Wind data of the mast from the date of installation till the date of removal or one month prior to the bid opening, if the mast is in existence in soft mode only.

2. Wind data time sheet for a minimum period of one year or joint frequency distribution of wind data for two levels in WAsP format.

3. De-rating, if any, due ambient conditions.

4. Digitized contour map at contour intervals of 2 meter for the proposed site(s) for complex terrain and 10 m for uniform terrain and 10 m / 20 m for surrounding area including roughness considered in the form of MAP file as input to WAsP. The digitized map should cover at least 2 km area in all directions beyond boundary line of offered site(s) and reference wind mast location.

5. Roughness map should be submitted separately as well as incorporated with digitized contour map

6. Certified Power curve of the offered WEG.

7. Thrust curve of the offered WEG.

8. Wind Resource Assessment report covering estimated annual energy generation of the entire Windfarm and its monthly yield in percentage of annual generation including Micro siting along with assumptions considered.

9. AEP of each WEG as per Wind Resource Assessment tool for the complete Windfarm for P50, P75 & P90 exceedance levels**.**

10. The bidder shall furnish details of nearest wind mast of NIWE.

11. Year to year for past 20 years period or more based on Satellite data from MERRA/ERA. Details of month wise Wind variation from

    - Electrical single line diagram of Windfarm from WEG up to the metering point of SEB / Discom indicating size, length and brief specification of cable, OH line conductor and transformer etc. along with calculation of transmission losses.

    - Actual energy generation of the WEGs already existing in offered area or nearby area from the date of installation of such WEGs.

    Following correction factors mentioning percentage thereof to be considered for AEP estimation shall be furnished clearly:

    a) Machine Availability: Shall be considered as 96% or as guaranteed by the bidder, whichever is higher.

    b) Grid Availability: Shall be considered as 96%

    c) Array Efficiency / Wake loss

    d) Air Density

    e) Internal / Transmission losses up to metering point and internal consumption (including Import of energy)

    f) Year to year wind variation

    g) Distance & Height of wind mast

    h) Turbine Performance & Climatic conditions

    i) Other uncertainties

    j) Any other correction factors

Based on the above inputs, Owner / Consultant shall get the estimated deliverable generation worked out. If required, Owner / Consultant may ask for additional information. Further, Owner and Consultant's representative may visit the offered site(s) and collect site(s) specific information for which bidder will provide all the necessary assistance.

Consultant, during site(s) visit, will collect actual energy generation of the WEGs installed in that area or nearby area from the date of installation of such WEGs and calculate the average annual energy generation so as to arrive at final Estimated Annual Energy Production of the offered site(s).

Wind data submitted by the bidder for own mast should have NIWE report on

verification procedure with data like Wind Power Density (WPD), annual mean wind speed etc. However, NIWE certificate could be submitted within one month of submission of bid.

Estimated deliverable annual energy production (AEP) will be worked out by the consultant by giving effect of array efficiency, machine availability, grid availability, wind variation, internal consumption, and evacuation losses and as accepted by Owner, shall be considered for financial evaluation of the Bids.

Necessary corrections shall be carried out by Owner or its Consultant in the AEP furnished by bidders. The lower of the two-estimated generation, after corrections, shall be considered for evaluation of bids.

No change in data once furnished by the bidder at the time of submission of the bid relating to estimation of generation like machine model, rotor diameter, hub height, location of site(s), micro-siting plan of the Windfarm etc; shall be permitted. However, during the execution of the project, in case it becomes necessary for the Bidder then changes in location may be accepted by Owner but this should not affect the annual energy estimation. In such an event Owner will get the estimation of generation of the Windfarm checked from the Consultant with the changed data and if the generation so worked out is found to be less than what was considered for financial evaluation, then the Bidder shall modify the financial parameters in such a way that the post-tax IRR is maintained.

4.24 INSURANCE

FOR EPC CONTRACT

a) The Contractor at his cost shall arrange, secure and maintain all insurance as may be pertinent to the work and obligatory in terms of law to protect his interest and interests of the Owner, against all perils detailed herein. However, the responsibility to maintain adequate insurance coverage till taking over by the Owner shall be as of Contractor alone. The Contractor's failure in this regard shall not relieve him of any of his contractual responsibilities and obligations. The insurance covers to be taken by the Contractor shall be in the joint names of the Owner and the Contractor. The Contractor shall, however, be authorized to deal directly with Insurance Company or Companies and shall be responsible for the maintenance of all insurance covers.

b) Any loss or damage to the equipment during handling, transportation, storage, erection, putting the equipment into satisfactory operation and all activities to be performed till the successful completion of scope of work and till handing over to the Owner shall be to the account of the Contractor. The Contractor shall be responsible for preferring of all claims and make good the damages or loss by way of repairs and / or replacement of the work, damaged or lost. The Transfer of Title shall not in any way relieve the Contractor of the above responsibility during the period of contract. The Contractor shall provide the Engineer with copies of all insurance policies and documents taken out by him in pursuance of the contract. The Contractor shall also inform the Engineer in writing at least thirty (30) days in advance regarding the expiry / cancellation and / or change in any of such

documents and ensure revalidation, renewal etc. as may be necessary well in time.

c) Contractor shall, however, be required to follow the procedure as may be laid down by the Owner to facilitate for arranging such insurance shall include, but not be limited to fire and allied risk, miscellaneous accidents (erection risks), workman compensation / employees liability risks, loss or damage in transit, theft, riot and strikes and malicious damages, civil commotion, weather conditions, accidents of all kinds etc. The scope of such insurance shall be adequate to cover the replacement / reinstatement cost of the equipment for the risks.

d) The insurance policies to be taken should be on replacement value basis. Notwithstanding the extent of insurance cover and the amount of claim available from the underwriters, the Contractor shall be liable to make good the full replacement / rectification of all equipment / material and to ensure their availability as per project requirements without entailing any additional financial liability to the Owner.

e) The Contractor shall ensure that, where applicable, its Subcontractor(s), if allowed shall take out and maintain in effect adequate insurance policies for their personnel and vehicles and for work executed by them under the Contract, unless such Subcontractors are covered by the policies taken out by the Contractor.

f) Third Party Insurance:

Before receipt of equipment at site but without limiting his obligations and responsibilities under this clause hereof, the Contractor shall insure against his liability for any equipment, material, property (including the Owner's property and any parts of the facilities that have been accepted by the Owner),or physical damage covering bodily injury or death suffered by third parties (including the Owner's personnel) by or arising out of the execution of the contract or in the carrying out of contract.

g) If the Contractor fails to take out and / or maintain in effect the insurances referred to Clause 4.25 herein above, no payment will be released until the copy of required insurance is furnished to the Owner.

h) Workmen's Compensation / Employee's Liability Insurance:

The contractor shall protect himself against all claims applicable under the Workmen's Compensation Act, 1923. This policy shall also cover the contractor against claims for injury, disability, disease or death of his or his sub-contractor's employees, which for any reason are not covered under the Workmen's Compensation Act, 1923. The liabilities under Workmen's Compensation / Employee's Liability Insurance shall be as per statutory provisions. Group Personal Accidental Insurance policy taken by bidder is also acceptable.

i) Owner shall not be liable for or in respect of any damage or compensation payable in law in respect or in consequence of any accident or injury to any workman or

other person in the employment of the contractor(s) or any sub-contractor(s), save and except an accident or injury resulting from any act or default of the owner.

j) All cost on account of insurance liabilities covered under the contract will be to the Contractor's account and will be included in contract price. The Contractor, while arranging the insurance, shall ensure to obtain all discounts on premium which may be available for higher volume.

k) The Contractor shall arrange insurance with IRDA approved Insurance Companies.

The contractor shall at his own expense take out and maintain insurance cover during the performance of the contact as below:

Sl. No.	Insurance	Amount insured	Conditions
A.	Marine all risk Insurance	1) 110% of total equipment cost as per BRS P-III. 2) Applicable Taxes / Duties.	1) Warehouse to warehouse basis 2) Open policy 3) All risk insurance, SRCC (Strikes, Riots, Civil Commotion), terrorism etc.
B.	Storage & Erection All Risk.	1) Total equipment cost as per BRS P-III (Including all Applicable Taxes / Duties). 2) Erection & Commissioning cost as per BRS P-IV (including all applicable taxes / duties).	Installation risk, RSMD (Riots, Strikes, Malicious Damages) Freight cover Maintenance cover Contractor's Machinery Owner to be named as co-insured

Third Party liability (Extension of EAR Policy)

Amount	Parties insured	From To
INR 10.00 Crore Single Event Limit for bodily injury and property damage. (Ratio of 1:4)	As per Insurance Clause No. 4.38	From commencement of work on site to End of Stabilization period.

Note:

1. The owner shall be named as co-insured or name of the owner should be endorsed under all insurance policies taken out by the contractor except for the Third-party liability & Owner's liability insurance.

2. In case the Contractor has taken / takes blanket insurance policies for "Marine policy" during transportation of material and "Erection All Risk policy" during storage and erection, such polices shall also be acceptable to Owner provided that;

(a) The name of the Owner and the Project is endorsed in the said policies.

3. Notwithstanding the insurance requirements mentioned above, it would be the Contractor's responsibility to take adequate insurance cover as may be pertinent to protect his interest and interest of the Owner.

4. The Contractor shall follow law of the land as may be prevalent from time to time for insurance.

4.25 TESTS / INSPECTION

4.25.1 All the standard tests in accordance with applicable standards shall be carried out at the manufacturer's works with 100 % inspection on all the major equipment and accessories viz nacelle assembly which includes Gearbox, Generator & control panel, rotor blades, towers, and power transformers covered by these specifications so as to ensure efficient operation and satisfactory performance of all the component/parts. The bidder shall furnish complete list and details of all such tests to be conducted on different equipment. The contractor shall furnish copies of all tests/ inspection reports of their works for reference/review to the owner/consultant.

4.26.2 All major equipment/critical items (towers, rotor blades, nacelle assembly including generator & control panels and transformers) shall be inspected and tested through NABCB approved third party inspection agencies having experience of inspection of wind turbine's major equipment

4.25.2 The bidder shall provide Quality Assurance Plan (QAP) for all the critical/major components/items within 30 days of issuance of LOI/ LOA to the Owner/ Consultant and the approved QAP should be adhered to during manufacturing process.

4.25.3 After award of contract, Contractor should submit Validation of all design documents, design basis report, STADD file and design drawing for the for WTG which includes the lattice/hybrid structure details along with foundations. Also confirm that structure will withstand from corrosion for minimum 25 years of lifetime. The validation should be done from a reputed technical institute such as IITs, NITs etc.

4.25.4 OWNER reserves the right to carry out inspection up to 10% of the critical items by their own representative or consultant at the factory premises in line with approved QAP, as per EPC schedule furnished by the bidder after Award of Contract, so that implementation schedule could be adhered.

4.25.5 Prior to raise inspection call to BPCL, bidder shall

a) Inform 15 days well before scheduled date of inspection to BPCL/PMC.
b) Furnish type test reports for all major equipment.
c) Submit QAP for review/approval to BPCL/PMC
d) QAP shall be prepared in line with all applicable IS/IEC, etc. standards
e) Shall include relevant special tests in QAP for bought out items like transformer, etc.

4.25.6 Copies of test certificates shall be furnished with dispatch documents.

4.25.7 OWNER reserves the right to inspect the detailed QAPs, equipment/ components, in house record of stage inspection as well as finished product in line with the QAPs and relevant standards at the manufacturer's works as well as at project site.

4.25.8 During inspection if any equipment/item is not found confirming to requirement of Standards/specification and rejected by OWNER/consultant/Third party, the bidder shall make good for such rejections by replacement. The replacements shall confirm to relevant standard. Such replacements will also include the replacements or re-execution of such of those works of other Contractors and/or agencies, which might have got damaged or affected by the replacements or re-work done to the Contractor's work.

4.25.9 All Civil, Structural & other building Works shall be carried out as per the relevant IS Codes and Contractor shall ensure setting up of the Field Laboratory for Field tests of Raw materials and Workmanship. Sample of Concrete cubes, Reinforcement Steel, River sand, Stone Aggregates and Water etc. shall be sent to Third Party NABL laboratory periodically as per the QAP. Consultant or Owner has right to inspect all such tests and inspect the records.

4.26 GUARANTEE / WARRANTEE

4.26.1 Any material, equipment and / or accessories which prove defective, or which fail to meet the design guarantee or Performance Guarantee during the defect liability period (which is 12 months from the date of successful stabilization the project) the Contractor shall replace / rectify at his own cost, such material, equipment and / or accessories.

4.26.2 The Contractor shall guarantee the Windfarm and installation work, for a period of 12 (twelve) months from the date of successful stabilization the project. Any damage or defect that may arise or lie undiscovered at the time of issue of completion certificate, connected in any way with the equipment or materials supplied by him or in the workmanship, shall be rectified or replaced by the Contractor at his own expenses, as deemed necessary by the Engineer-in-Charge or in default, the Engineer-in-Charge may cause the same to be made good by other workman and deduct expenses (for which the certificate of Engineer-in-charge shall be final) from any sums that may be then or at any time thereafter, become due to the Contractor or from his SPBG.

4.26.3 Post commissioning of the Windfarm, no O&M charges shall be paid to the contractor till successful completion of defect liability period of initial 12 months from the date of stabilization of the Project. However, statutory charges required after commissioning as indicated in the financial bid shall be paid to the authorities by the contractor well within the due date & time and same shall be reimbursed and paid by the Owner on production of bill along with the quarterly O&M charges.

4.27 STATUTORY APPROVALS FOR WORKS

4.27.1 All statutory approvals / permissions related to installation of the wind power project and carrying out its operation & maintenance (O&M) as may be required under applicable law, rules shall be obtained by the Bidder. All fees for such statutory approvals for erection, installation till commissioning.

4.27.2 Inspection and acceptance of the work as above shall not absolve the Contractor of any of his responsibility under this contract.

4.27.3 If any penalty / levy becomes payable to the State Electricity Utility on account of low power factor of the Windfarm, the same shall be borne by the Contractor only.

4.27.4 All fee / charges payable to any statutory authority on account of operation & maintenance of Windfarm shall be borne by the Contractor during the warrantee period of the contract.

4.27.5 The Contractor shall be responsible for interconnection of Windfarm with the State grid, so as to export power from Windfarm. The date of commissioning will not be considered prior to inter connection of all the WEGs of Windfarm with the State grid. Therefore, the Contractor should make all efforts for installation of metering equipment, etc, and carry out the inter connection prior to the final commissioning of the Windfarm.

4.27.6 So long as commissioning of the project is not delayed and operation and maintenance is not hampered due to delay in statutory approvals, no Price Reduction shall be affected.

4.28 FUNCTIONAL & OPERATIONAL TESTS

After stabilization of the complete project, the following tests should be carried out:

4.28.1 **Functional Tests**

Functional test of all the WEGs and monitoring system after stabilization of the project should be carried out as per Annexure – XII

4.28.2 **96 Hours Short Time Test Run**

This short time test shall be conducted on all the WEGs.

The test shall be carried out during conditions of high wind regime of offered site so that the machines are subjected to fluctuating wind thrusts and their mechanical endurance established.

The test shall be considered successful if values of observed parameters of WEGs are found within the set values.

For conducting this test, the WEGs shall be run continuously for 96 hours without any interruption. In case of interruption or stoppage of WEG during the test, the test shall not be considered to have been completed. In such an event the test shall be conducted afresh.

The test shall be considered successful if values of observed parameters of WEGs are found within the set values.

In case of non-conformance of the parameters of any component / item of WEG, replacement of the defective component shall be done and test repeated till such time it is successful.

The tripping of WEG on account of protective relays due to adverse atmospheric conditions will not be considered as outage.

4.29 POWER CURVE PERFORMANCE TEST

Power curve performance test on one WEG of each Windfarm i.e 25 MW (±5%) shall be conducted at each site(s) for ascertaining its performance with reference to certified power curve of the machine. The test shall be conducted during first year of operation of the wind energy project in accordance with methodology detailed at Annexure X of this document.

4.30 PROGRESS REPORT & PROJECT REVIEW MEETING

The EPC contractor shall ensure that his designated project in charge shall submits fortnightly and monthly progress report (soft and hard copies) along with catch up plans against slippages to consultant and simultaneously to Owner.

Owner shall hold project review meetings with Consultant and EPC Contractor at pre-defined periodicity.

4.31 COMMON FACILITIES

Bidder shall give complete details of Common Facilities such as assets and rights which will be shared by OWNER with other Power Producers in the Windfarm and comprise all facilities that are needed to evacuate power from the individual WEG's, for sale / wheeling of energy at the metering point. Common Facilities include electrical and other installations for use in such operations like the 33 kV transmission lines, the entire Pooling Station together with all its installations, the bays and the EHV Transmission Line. Common Facilities also include all civil construction for such electrical installations and other buildings in the Windfarm including but not limited to the Pooling Station building and / or any office building(s). Pathways and approach roads within the Windfarm for inter-connections are also part of Common Facilities. Common Facilities also include land or any right of use of land for all installations and / or buildings within the Common Facilities.

In case of freehold land housing any Common Facility, such freehold land shall form part of the Common Facility. In any other form of right of use of land like leasehold rights or tenancy rights or a license or any right of way (ROW), such rights shall form part of Common Facilities. Bidder is to undertake that for land which is not held under freehold ownership, necessary leasehold or other rights like tenancy or license or ROW or any valid written approval shall be obtained by it and shall be maintained by him for the Life of the Windfarm.

4.32 RIGHTS OF COMMON FACILITIES

1. Bidder to ensure that All Power Producers (including OWNER) in the Windfarm will have an undivided share, in proportion to the number of WEGs owned by each of them, of the rights in the Common Facilities and shall be the beneficiary of all its rights in terms of the Common Facilities for the Life of the Windfarm.

2. OWNER shall be free to assign or otherwise transfer its rights in the Common Facilities to a third party, in part or on full, who shall thereafter continue to enjoy the same rights for the remaining Life of the Windfarm, provided that OWNER shall be free to assign or otherwise transfer only after the commissioning of the Project.

3. The rights referred to above in respect of Common Facilities shall be equivalent to the rights (whether ownership or otherwise) as available to bidder in respect of such Common Facilities except that such rights shall be undivided shared by all Power Producers in the Windfarm

4.33 RIGHTS OF USE / ACCESS OF COMMON FACILITIES

OWNER will have the right to use and create charge the Common Facilities for the life of the Windfarm. Bidder to mention complete mechanism for right of use as per BRS-20 (b)

4.34 APPROVALS

Approvals are required to be in the name of bidder. In case these approvals are in some other name / sister concern specific mention is required to be made in the offer and shall be undertaken by the bidder to transfer such approvals in the name of Owner as deemed necessary as per the detailed scope of the work.

SECTION–V

SPECIAL CONDITIONS OF CONTRACT
FOR
OPERATION & MAINTENANCE (O&M)
OF
WIND POWER PROJECT

CONTENTS

SECTION–V

SPECIAL CONDITIONS OF CONTRACT FOR OPERATION & MAINTENANCE (O&M) OF WIND ENERGY PROJECT

5.1 TERM OF O&M CONTRACT

The Contractor here termed as “Operator” and term “Contractor”, “bidder” and “vendor” elsewhere mentioned shall have same meaning unless and otherwise exclusively mentioned shall be responsible for Comprehensive Operation and Maintenance of the wind power project for 10 years from the date of stabilization of the complete wind project. Initial contract for 5 years and extendable thereafter on discretion of the Owner.

5.2 BATTERY LIMIT

The battery limit for bidder during the period of O&M contract shall cover complete wind energy plant and power evacuation system up to the point of interconnection i.e. MSETCL Sub-Station or termination point.

The bidder shall be responsible for arranging at his own cost all spare parts required for replacement for keeping the WEGs operational, repairs / replacement of any defective equipment(s), schedule and preventive maintenance, major overhauling of the equipment, maintaining log sheets / record for operational detail, deployment of staff for continuous operations and qualified engineer for supervision of O&M work, deployment of security personnel so as to ensure smooth operation for the entire period of O&M. In case of any change introduction or increase in Taxes / Duties / Statutory levies shall be borne by OWNER after Bid closing date, OWNER shall reimburse the difference to O&M contractor. In case of any benefit, the same shall be passed on to OWNER. In case of invoice being raised on OWNER for the amount due from O & M Operator by authority as an OWNER, OWNER will pay and deduct the amount from O&M Bills of the Contractor.

Operation & maintenance of evacuation system up to the point of interconnection with the State grid shall be the responsibility of the O&M Operator. In case of any outage of external lines connected with the Windfarm, the Operator shall follow up with MSETCL / DISCOM for prompt restoration of the faulty line under intimation to Owner.

5.3 SCOPE OF WORK

The Scope of Work for O&M Contact shall include but not limited to the following: -

1. Supply / arrangement of spares & Consumables
2. All Statutory compliances as applicable at the time of bid closing date.
3. Arrangement of Tools, Tackles & Crane
4. Periodical Testing as per requirement of OEM
5. Liaison with all Government agencies
6. Maintaining records and submissions to all concerned authorities
7. Arrangement of Security & ensuring Safety of Humane resources, Plants & Assets.
8. Coordination with the required agencies for revenue realization

9. Scheduling & forecasting as per Regulations, if opted.

The detailed scope of work is given in section VI C.

Cost of all the above items shall be included the price quoted for O&M Contract.
Operator shall provide all day to day operation and maintenance services for the wind energy project as set forth herein. Operator shall perform the work and arrange / supply all required spare parts, cranes, special tools & tackles or any other items as may be required, in a prudent and efficient manner and in accordance with manufacturer's and systems designers' specifications, Annual Operating Plan for the Plant and O&M manuals.

All applicable laws of the land including environmental protection, pollution, sanitary, employment and safety laws, ("Government Rules") shall be complied.

5.4 PRUDENT UTILITY PRACTICE

Operator shall use all reasonable and practical efforts:

- To maximize plant capacity utilization
- To minimize plant downtime
- Optimize useful life of all the equipment of the wind energy project.

The Operator shall perform the following obligations prior to taking over of the O&M activity:

- Prepare O & M plan in consultation with the Owner
- Provide the services and personnel set forth in the O & M Plan
- Prepare in consultation with the Owner, the initial Annual Operating Plan
- Develop and implement plans and procedures including those for maintenance planning, procuring and inventory control of stores and spares, plan to meet emergencies, plant safety and security; and such other facilities and systems as may be necessary to commence Operator's ongoing responsibilities.

After taking over the activity of O&M for the power plant, the Operator shall be responsible for the operation and maintenance of the plant and shall perform all necessary services including applicable services listed below: -

i) Provide all operations and maintenance services necessary and advisable to efficiently operate and maintain the plant, including all associated mechanical and electrical equipment keeping in view the objectives set-forth herein above.

ii) Maintain at the Plant accurate and up-to-date operating logs, records and Monthly reports regarding the operation and maintenance of the Plant which shall include detail of power output, other operating data, repairs performed and status of equipment, all such records to be maintained for the lifetime of the Windfarm. Upon expiry of term, the operator shall hand over such records to the Owner. However, Owner shall have access to all such records at any time.

iii) Regularly update and implement equipment repair or replacement and preventive maintenance program that meet the specifications of the equipment manufacturers and the recommendations of the original equipment manufacturers.

iv) Perform periodic preventive maintenance and overhauls required for the Plant in accordance with the recommendations of equipment manufacturers. Attend any break down in the Plant / Facility promptly. Inform time taken in attending to such breakdown shortly after restoration of WEG.

v) Provide technical & engineering support for resolving operation and maintenance problems.

vi) Perform the services required to procure all spare parts, or equipment as required, overhaul of parts, tools and equipment, required to operate and maintain the Plant in accordance with the recommendations of original equipment manufacturer.

vii) Operate and maintain the Plant for fire protection and safety of equipment.

viii) Maintain with the assistance of the Owner, records regarding the facility in accordance with generally acceptable accounting principles under the Laws.

ix) Arrange spares, consumables, tools & tackles, crane and testing. Cost of these items shall be included in the price quoted for O&M.

5.5 PERSONNEL

The Operator shall employ adequately qualified and experienced personnel for operating and maintaining the wind energy project. The Operator shall ensure that such personnel remain on duty at the plant at all times, twenty-four (24) hours a day and seven (7) days a week soon after commissioning of the first WEG.

5.6 MACHINE AVAILABILITY

5.6.1 Operator shall maintain all the WEGs of the wind power project in a befitting manner so as to ensure minimum machine availability as defined in the clauses hereunder and elsewhere in the document.

5.6.2 The Operator shall keep average minimum machine availability for the Windfarm at not less than 70% during stabilization period of two months.

5.6.3 The operator shall keep Machine availability during 4 months of high wind season i.e. from May to August as minimum 97% and for balance 8 months it shall be kept minimum 96%. In case, the stabilisation period falls during high wind season the machine availability will be considered for the remaining high wind months for the first year

5.6.4 The Bidder shall keep the annual average minimum machine availability for the individual WEG at not less than 85%.

5.6.5 The operator shall guarantee for above minimum Machine Availability. The machine availability includes power evacuation system (up to interface with the State Grid).

5.6.6 In case the Machine Availability is found to be less than as stated above then the Operator shall pay to the Owner Pre-Determined Mutually Agreed Compensation as given at Clause No. 5.8 of this Section.

5.6.7 For working out of Annual Average Machine Availability (M.A) of the Windfarm following formula shall be considered:

Annual Average M.A of the Windfarm shall be calculated in the following manner:

i. Overall MA of Wind Fam for a year:

$$\text{MA of Windfarm} = \frac{\{\text{No. of WEGs} \times 8760\} - \{\text{SUM of total (FM + S + U+GF)}\} \times 100}{\{\text{No. of WEGs} \times 8760\} - \{\text{SUM of total (FM +GF)}\}}$$

ii. **Overall MA of Windfarm for a respective month**

$$\text{MA of Windfarm} = \frac{\{\text{No. of WEGs} \times 24*(28/29/30/31)\} - \{\text{SUM of total (FM + S + U+GF)}\} \times 100}{\{\text{No. of WEGs} \times 24*(28/29/30/31)\} - \{\text{SUM of total (FM +GF)}\}}$$

iii. Overall MA of Windfarm during High Wind (4 months)

In the wind industry basically High Wind Season months are for Four months (i.e., May, June, July & August). No. of days work out for these months are (31+30+31+31=123 days). Overall MA calculate for High wind season are as under:

$$\text{MA of Windfarm} = \frac{\{\text{No. of WEGs} \times 24*(123)\} - \{\text{SUM of total (FM + S + U+GF)}\} \times 100}{\{\text{No. of WEGs} \times 24*(123)\} - \{\text{SUM of total (FM +GF)}\}}$$

iv. Overall MA of Windfarm during Low Wind (8 Months)

In the wind industry, basically, Low Wind Season months are for eight months (i.e., January, February, March, April, September, October, November & December). No. of days' work out for these months are (31+28/29+31+30+30+31+30+31=242/243 days). Overall MA calculate for High wind season are as under:

$$\text{MA of Windfarm} = \frac{\{\text{No. of WEGs} \times 24*(242/243)\} - \{\text{SUM of total (FM + S + U+GF)}\} \times 100}{\{\text{No. of WEGs} \times 24*(242/243)\} - \{\text{SUM of total (FM +GF)}\}}$$

Where:

8760 = Number of total hours for a machine in a year (i.e. 24x365 Days)

GF = Grid Failure hours, FM = Force Majeure hours

S = Scheduled Maintenance Hours for a Machine

U = Unscheduled or Forced Maintenance Hours for a Machine

5.7 GUARANTEE FOR MAINTAINING POWER FACTOR AND DRAWAL OF REACTIVE POWER

5.7.1 Power Factor

It will be the responsibility of the Operator to maintain power factor of the Windfarm not less than the minimum requirement of MSETCL/MPPTCL/ Grid Code so as to minimize drawal of Reactive Power from State grid system.

5.7.2 Levy of Reactive Power (KVARh) Charges

In the event of levy of any charges by State grid on account of lower power factor than the minimum mandatory requirement, such charges at actual amount shall be deducted from the operator's bills / outstanding operator's credit amount.

5.7.3 Guarantee for Transmission Losses

Total Annual Average Losses in evacuation system of electricity from LCS to the point of interfacing shall be guaranteed by bidder with a caping of 5% & same will be considered during estimation of Annual Energy Production.

5.8 PRE-DETERMINED MUTUALLY AGREED COMPENSATION

The Operator shall pay to the Owner Pre-Determined Mutually Agreed Compensation for lower Machine Availability than stipulated in clause 5.6 of this Section and also for Transmission Losses exceeding the guaranteed limit than stipulated in clause 5.7.3 in the manner given hereunder. However, maximum liability for these factors i.e. on account of lower machine availability and higher transmission losses together shall not exceed 70% of O&M charges of the concerned year**.**

5.8.1 Machine Availability

(i) **For Machine Availability lower than 70% during Stabilization Period as per requirement of clause 5.6.2**

No compensation shall be levied on account of lower machine availability during stabilization period. However, O&M period shall be treated as commenced in event of demonstration of 70% machine availability.

(ii) **For each WTG annually Machine Availability is lower than 85% as per requirement of clause 5.6.4**

In case annual machine availability for any WEG is less than the minimum value of 85%, the Contractor shall pay compensation to owner in the following manner:

Compensation Amount = [(85- MAF) x C x E]/100

where,
MAF is Actual MA
C is prevailing purchase rate
E is the actual average generation of energy in kWh of the WEGs excluding the generations of WEGs whose generation is below 85% during the year.

(iii) **For Machine Availability of Complete Windfarm below 97% as per requirement of HW months & 96 % as per requirement of LW months:**

The Operator shall pay compensation @ 2% of annual O&M Charges for every 1% fall in machine availability for the respective period of availability. For arriving at the amount of compensation during free O&M period, the annual O&M charges for the second year as quoted by the bidder shall be considered.

5.8.2 **Transmission Loss**

Excess transmission losses than the guaranteed above will be payable by Operator to Owner at Rs. 6 (Six) per kWh. Such loss will be recovered on annual basis as actuals:

5.8.3 **Recovery of Compensation**

The above Compensation will be deducted from price of Comprehensive O&M Contract

The total combined Compensation on account of shortfall in machine availability and Reactive Power Charges on account of transmission loss shall be limited to 70% of annual O&M contract value for that year.

Any Compensation arising out of guarantees during O&M period shall be adjusted against the O&M charges to be made to the Operator on annual basis in the last quarter.

5.9 LIAISONING

It shall be the responsibility of the Operator to liaison with the State Government, concerned Renewable Agency, State Transmission & Distribution Companies, CEIG or any such agency / department which may be required during O & M period.

5.10 O&M PERFORMANCE GUARANTEE

The Bidder shall submit a Bank Guarantee one month prior to commencement of O & M period for an amount equivalent to 10% (ten percent) annual O&M charges for the year. Every year a fresh bank guarantee shall be submitted by the Bidder, having validity of 13 months, one month prior to expiry of the previous Bank Guarantee or the existing bank guarantee can be extended suitably every year till O&M contract remains with the Bidder.

Such Bank Guarantee shall be given in the Performa as per Annexure – III.

5.11 INSURANCE

INSURANCE BY OWNER

Insurance policy for Fire and allied perils including earthquake, flood, storms, cyclone, tempest, theft and burglary, and any other purpose, as deemed fit by OWNER, shall be taken by OWNER regularly during O&M contract period. In case of any loss / claim covered under the policy, O&M contractor shall immediately inform the same to OWNER & facilitate OWNER in filing the claim with Insurance Company. Thereafter, Contractor shall submit all required documents to OWNER for onward submission to Insurance Company for filing claim and take all necessary measures required to protect the interest of OWNER for settlement of such claim.

The Contractor shall replace the damages to equipment which occur on account of events covered under such Insurance Policies, without waiting for settlement of the insurance claim, on the basis of estimation duly approved by OWNER. OWNER shall issue LOA / PO, wherever applicable, to go ahead and carry out repairs / replacement. On settlement of such claims by the Insurance Company, OWNER will bear the additional cost of replacement / repair over and above the insurance claim settled. In the event of rejection of the above claim by Insurance Company, the entire replacement / repair cost will be borne by the Contractor and the amount, if any, given by OWNER for repair / replacement will be refunded back by the contractor.

In case of claim against fire (not attributable to Force Majeure), theft & burglary, OWNER shall only reimburse to the contractor to the extent claim received from the Insurance Company and the differential cost of replacement / repair over and above the insurance claim settled, if any, will be borne by the Contractor. In the event of rejection of the above claim by Insurance Company, entire replacement / repair cost will be borne by the Contractor.

By Operator

Operator shall provide or obtain and maintain in force throughout the period of O&M the following insurance coverage:

1. Insurance to cover third party liability along with an undertaking indemnifying OWNER from any such claim

2. Workmen compensation and / or group personal accidents Insurance policy covering all its employees and workers including sub-operator.

3. To have minimum machine down time irrespective of the fact that whether the Contractor takes the Machine Break Down (MBD) insurance policy or not it shall be the responsibility of the Operator to operate and maintain the Windfarm and all the associated equipment at his own cost for the quoted O&M period for which the Owner shall pay the agreed O&M charges only. Any replacement / repair / modification of any item / equipment shall be carried out by the Operator at his own cost for the quoted O&M period. The Owner shall not be responsible for any break down / failure of any equipment to any reason thereof except for Force Majeure /

Fire & Allied Perils Events or extraneous reasons.

4. The scope / type / form of insurance cover mentioned elsewhere in this bid, for the scope of the project for the quoted O&M period, would be superseded by this Clause.

5.12 MEASUREMENT OF ENERGY AND METERING

5.12.1 Metering Systems:

The Operator shall maintain the Metering System (which shall include ABT / TOD IEGC compliant meter, current and potential transformers and metering equipment). The Metering System will be designed and installed conforming to requirements of State utility so as to measure outgoing energy and power delivered by the WEG to the State grid at the delivery point, i.e. point of inter connection and also for the import of energy for any purpose. Metering equipment shall comply the requirements of State Utility Grid Code but shall not be inferior to 0.2 accuracy Class. Meter reading shall be done jointly with Power Utility Engineer on monthly basis or at mutually agreed time interval.

5.12.2 Testing of Meters

The Owner shall have the right to carry out inspections of the Metering Systems from time to time to check their accuracy.

All testing and metering equipment shall conform to the relevant IS / TRANSCO / DISCOM standards of respective states.

If either the Operator or the Owner finds any inaccuracy in the Metering System, the operator or the Owner, as the case may be, shall notify the other party in writing within 24 hours for a joint inspection and testing from TRANSCO / DISCOM / or other agreed agency of respective states.

5.12.3 Sealing and Maintenance of Meters

The Metering System shall be sealed in the presence of both parties or in the presence of MSETCL/ MEDA / MPPTCL Engineer.

When the Metering System and / or any component thereof is found to be outside the acceptable limits of accuracy or otherwise not functioning properly, it shall be repaired, re-calibrated or replaced by the Operator on priority.

Breaking of meter seals shall not be done except in case of any requirement by State power utility for testing / calibration. Even in such case the Operator shall immediately inform the Owner of such requirement to enable Owner for deputing its representative. All testings / calibration of metering system shall be done by State power utility officials only.

5.13 O&M CHARGES

The Operator shall be responsible for Comprehensive Operation and Maintenance of the wind power project for a period of ten (10) years from stabilization of the each Windfarm. However, successful bidder shall be entitled for operational charges

Payment will be made after all statutory deductions as applicable to such type of contracts. The rate quoted shall deem to be inclusive of all salaries and other cost, expenses of employees, cost of spares, cost of repair / replacement / modification of any equipment or system for the entire period of 10 years so as to give 96% machine availability for 10 years. The rates shall also be inclusive of liabilities of every description and all risk of every kind to be taken in operation, maintenance and handing over the plant to the Owner by the operator.

Owner shall not be responsible for any such liability on the operator in respect of this contract and exclusion of applicable taxes on the bid closing date at prescribed rates due to ignorance or otherwise shall not form a reason for claiming anything extra at a later date. If any amount is payable / levied to / by MSETCL /MPPTCL/ DISCOM, etc, on account of low power factor or any other account of Windfarm, the same shall be deducted from the operator's remuneration or from other due payments / Bank Guarantees.

Subsequent to the bid closing date, if there is a change in taxes, levies, which results in additional cost / reduction in cost to the Contractor on account of the operation under this contract, the Company / the Contractor shall reimburse / pay the Contractor / the Company for such additional / reduced cost actually incurred.

Bidder shall indicate cost of O&M of shared facilities in the price bid P-V and only that amount shall be paid in case of any future descoping to the O&M contract after completion of O&M contract period.

5.14 PAYMENT

Payment cycle shall be on quarterly basis at the end of each quarter. The operator shall submit bills in respect of the quarter ended in duplicate after the end of each quarter for the payment after submission of Performance Bank Guarantee (PBG) as per Clause no.5.10

5.15 SUBMISSION OF DAILY & MONTHLY GENERATION DATA STATEMENT

A daily report comprising energy generation, grid availability, breakdowns, generation hours, low wind hours, machine availability etc shall be sent through e-mail and / or made available through Customer Relation Manager (CRM) to Owner.

Monthly Generation data statement for net energy delivered to the Utility duly certified by their authorized official shall be furnished to Owner by the Operator not later than 10^{th} day of the following month / as per state utility practice.

5.16 OPERATOR'S OFFICE AT SITE

During the execution of the contract the Operator shall ensure that a Plant Manager with authority to take decisions to be available at site(s). Such person deputed by the Operator shall report to the Engineer in Charge for smooth operation of the plant. The Operator shall also maintain an office at the site and such office shall be open at all reasonable hours to receive instructions, notices or other communications the office shall have communication and internet facility. The Operator shall be responsible for any misconduct / indiscipline by his employees or sub operator / agent employees.

The Operator shall abide by the instructions of the Owner Representative, if given in this regard.

Operator shall provide office space to the representative(s) of Owner or their authorized agency during their visit to the site.

5.17 POWER OF ENTRY

In case the Operator does not execute the work in the manner described in the contract documents or if he shall at any time in the opinion of the Engineer-in-Charge:

i) Fail to operate & maintain the plant in conformity with contract document or

ii) Substantially suspend work or the works for a continuous period of 15 days without permission from the engineer in charge, or

iii) Fail to carry on and execute the works to the satisfaction of the engineer in charge, or

iv) Commit or suffer or permit any other breach of any of the provisions of the contract on his part to be performed, or

v) If the operator abandons the works, or

vi) If the Operator during the continuance of the contract becomes bankrupt.

In any of such events, the Owner shall have the power to enter upon the works and take possession of the plant, materials, spares, equipment, tools and stocks thereon, and to revoke the Operator's Contract to operate the plant by his agents, other Operators or workmen.

5.18 HANDING OVER THE PLANT AFTER EXPIRY OF TERM

In the beginning of last year of expiry of term & extension of term as the case may be, the operator shall hand over the plant to the Owner in operationally fit and running condition. While handing over the plant, the operator shall hand over all technical documents, literature, and instruction manuals, lists of spare part & tools & tackles. The Operator will also hand over all the relevant record / documents.

5.19 FINAL PAYMENT

Whenever, in the opinion of the Engineer-in-charge, the Operator has completely performed the contract on his part, the Engineer in-charge will so certify in writing to the Operator.

Final payment to the Operator shall be made after accounting for all the previous payments / advances / adjustments of dues, provided always that Operator furnishes a "NO Further Claim - No Dues Certificate". The release of final payments does not relieve the Operator from his any other obligations as provided for in the contract.

Owner shall deduct statutory taxes at source as per prevailing rates from bills of the Operators.

5.20 FAILURE OF THE OPERATOR TO COMPLY WITH THE PROVISIONS OF THE CONTRACT

5.20.1 If the contractor refuses or fails to execute the work or any separate part thereof with such diligence as will ensure its completion within the time specified in the contract or extension thereof or fails to perform any of his obligation under the Contract or in any manner commits a breach of any of the provisions of the contract it shall be open to the Owner at its option by written notice to the Contractor to: -

(a) Determine the Contract: In which event the Contract shall stand terminated and shall cease to be in force and effect on and from the date appointed by the Owner on that behalf, whereupon the contractor shall stop forth with any of the contractor's work then in progress, except such work as the Owner may, in writing, requires to be done to safeguard any property or work, or installations from damage, and the owner, for its part, may take over the work remaining unfinished by the Contractor and complete the same through fresh contractor or by other means, at the risk and cost of the Contractor, and any of his sureties if any, shall be liable to the owner for any excess cost occasioned by such work having to be so taken over and completed by the Owner over and above the cost at the rates specified in the schedule of quantities and rates.

(b) Without determining the Contract: To take over the work of the contractor or any part thereof and complete the same through a fresh contractor or by other means at the risk and cost of the Contractor. The contractor and any of his sureties are liable to the Owner for any excess cost over and above the cost at the rates specified in the schedule of quantities / rates, occasioned by such works having been taken over and completed by the Owner.

(c) In other cases, the decision of the Owner is binding on the contractor.

5.20.2 In such events of clause 5.20.1 (a) or (b) above

(a) The whole or part of the security deposit furnished by the Contractor is liable to be forfeited without prejudice to the right of the Owner to recover from the contractor the excess cost referred to in the sub-clause aforesaid, the Owner shall also have the right of taking possession and utilizing in completing the works or any part thereof, such of materials, equipment and plants available at work site belonging to the contractor as may be necessary and the Contractor shall not be entitled for any compensation for use or damage to such materials, equipment and plant.

(b) The amount that may have become due to the Contractor on account of work already executed by him shall not be payable to him until after the expiry of six (6) calendar months reckoned from the date of termination of contract or from the taking over of the work or part thereof by the Owner as the case may be, during which period the responsibility for faulty materials or workmanship in respect of such work shall under the contract, rest exclusively with the contractor. This amount shall be subject to deduction of any amounts due from the Contractor to the Owner under the terms of the contract authorised or required to be reserved or retained by the Owner.

5.20.3 Before determining the contract as per clause 5.20.1 (a) or (b) provided in the judgment of the Owner, the default or defaults committed by the Contractor is / are curable and can be cured by the Contract if an opportunity given to him, then the Owner may issue notice in writing calling the Contractor to cure the default within such time specified in the notice.

5.20.4 The Owner shall also have the right to proceed or take action as per 5.20.1 (a) or Clause 5.20.1(b) above, in the event that the contractor becomes bankrupt, insolvent, compounds with his creditors, assigns the contract in favour of his Creditors or any other person or persons or being a company or a corporation goes into liquidation, provided that in the said events it shall not be necessary for the Owner to give any prior notice to the contractor.

5.20.5 Termination of the Contract as provided for in sub-Clause 5.20.1 (a) above shall not prejudice or affect their rights of the Owner which may have accrued up to the date of such termination.

5.20.6 Maintenance of Common Facilities

Bidder or its associate company to operate and maintain the Common Facilities for the Life of the Windfarm in accordance with its Operating and Maintenance protocols.

5.21 DATA FOR QUALIFYING AS CDM PROJECT

The bidder (EPC Contractor) shall provide all the required information / data to Owner as may be asked for fulfilling the requirement for qualifying the Windfarm for Clean Development Mechanism (CDM) or similar benefit including stake holder meeting at site. The bidder shall also extend all help to Owner free of cost for processing case of CDM or any other cardon credit.

5.22 O&M DEFAULT

5.22.1 Following event shall be construed as

a) Any default on the part of the Bidder for a continuous period of ninety (90) days to (i) operate and / or (ii) maintain (in accordance with Prudent Utility Practices), the Project at all times

b) Bidder fails to make any payment required to be made to Owner under this Contract within three (3) months after the due date of a valid invoice / claim raised by the OWNER on the Bidder.

5.22.2 Upon the occurrence of an event of default as set out in sub-clause 5.22.1 above, OWNER may deliver a Default Notice to the Bidder in writing and calling upon the Bidder to remedy the same.

At the expiry of 30 (thirty) days from the delivery of this default notice and unless the Parties have agreed otherwise, or the Event of Default giving rise to the default notice has been remedied, OWNER may deliver a Termination Notice to the Bidder. OWNER may terminate the Contract by delivering such a Termination Notice to the Bidder Upon delivery of the Termination Notice the Contract shall stand

terminated and OWNER shall stand discharged of all its obligations.

5.23 SCHEDULING & FORECASTING (S&F)

Scheduling and forecasting process is now required to be implemented in the Wind Sector. As specified elsewhere in the Contract documents, to comply with statutory requirements, Regulations, Orders, Bidder would be responsible to provide connectivity to SLDC/QCA/Competent authorities required for scheduling & forecasting of the ordered capacity on behalf of OWNER. The bidder will be paid for these services as quoted by him in Bid Response Sheet No. P-VII.

The Bidder shall be responsible for all DSM charges arising out of the Renewable Regulatory Fund (RRF) mechanism.

OWNER reserves the right to appoint a third party QCA and in that case the bidder will provide all the required data and assistance to the QCA without charging any additional fee on account of S&F and O&M operator shall not have any financial liability on account of scheduling & forecasting.

Section VIA

SCOPE OF WORK (SUPPLY)

CONTENTS

SECTION– VIA
SCOPE OF WORK (SUPPLY)

The Scope of Supply covered under this specification shall be but not limited to the following:

6.1 DESIGN, MANUFACTURING & SUPPLY

Design, engineering, manufacture, in house testing and supply at site of suitable low voltage, 50 Hz, upwind / downwind, horizontal axis Wind Electric Generators (WEGs) in the range of 2000 kW and above rating complete with accessories as may be required for erection, commissioning and successful continuous operation of 25 MW (±5%) capacity in each project where 2 projects shall be in Maharashtra and 2 projects in Madhya Pradesh. Project capacity offered may be of maximum 2 Sites with single site of minimum capacity 10 MW (±5%) in each Project. The WEGs shall be equipped with current limiting devices and capacitors (in case of induction generators) so as to maintain power factor conforming to the requirement of State grid.

Bidder shall ensure compliance with the requirements of “Indian Electric Grid Code” 2010 notified by CERC including Technical Standards for Connectivity to the Grid by CEA also be ensured by the Contractor.

Design, engineering, manufacture and supply at site(s) of WEGs.

Design, engineering, manufacture and supply at site(s) of Windfarm internal electrical system, including transformers, HT lines, panels, kiosks, protection equipment etc. complete in all respects for successful execution & commissioning of the Project.

Design, engineering, manufacture and supply power evacuation system (EHT Line & Pooling substation etc.) for evacuation of power from the wind power plant to the nearest State grid sub-station.

Design, engineering, manufacture and supply of ABT type meter(s) for recording data regarding export and import of power to / from State grid and also recording KVAH & KVARH data on real time basis.

Design, engineering, manufacture and supply of VAR drawl compensation system, if required.

Design, engineering, manufacture and supply of all control system to give command to WEGs, receive data, processing and getting required report on energy generation, wind speed etc.

Design, engineering, manufacture and supply Centralized Monitoring and Control System (SCADA) on sharing basis for Owner.

Design, engineering, manufacture and supply of any item not specified but essential for the Windfarm.

6.2 WIND MONITORING MAST

The bid shall include providing, installation and maintenance of one wind monitoring mast (meteorological mast) at the offered site. The wind mast shall be maintained and kept operational till completion of Power curve test. Wind mast shall include all required data loggers, sensors etc. capable of recording data for a minimum of 10-minute intervals. Wind measuring system should be 16 quadrant types and of approved / accredited makes. The height of the wind mast shall be such that primary anemometer is mounted at the same height / level as that of centre of rotor of the WEG under test. Wind wane shall be mounted at a minimum of 1.5 m below the primary anemometer but within 10% of hub height based on its distance above ground level at the wind mast. It shall be mounted so that flow distortion effects are minimized. Temperature and pressure sensors should be located close to the hub height on the wind mast at a minimum of 1.5 m below the primary anemometer. If a control anemometer is used it should be located close to the primary anemometer in order to provide good correlation between the two instruments. Necessary instrumentation for measurement of instantaneous wind speed, direction of wind flow, atmospheric pressure& temperature and RH should be installed. Raw wind data for continuously till completion of Power Curve test shall be gathered by the wind mast. The raw wind data and wind frequency distribution for this period shall be given to OWNER on monthly basis and for the full year as well.

Installation & commissioning including stabilization of wind mast shall be done before completion of stabilization period of Windfarm and data collection by wind mast should start soon after commissioning. The wind mast can be dismantled thereafter and taken back by bidder.

6.3 DOCUMENTS & DRAWINGS

6.3.1 Following documents with technical offer wherever applicable in three copies each shall be submitted to Owner as well as Consultant for review and approval:

- Detail Technical Specifications.
- General Arrangement Drawing.
- Lightning protection arrangement/design/drawing
- Contour plan for the land area.
- Micro-siting plan & Windfarm layout.
- Layout diagram of the WEG protection system and control system
- Schematic diagram for entire evacuation system and transmission loss calculations.
- G. A. drawings for overhead lines along with all types of structures, 33kV switchyard & Interfacing.
- Technical document for earthing & lightening protection
- WEG foundation drawing
- Cross section drawing for road.
- Quality Assurance Plans of major equipment, Field Quality Assurance Plans, Copies of type test certificates along with test reports, routine and acceptance tests for major components and Field works viz: Civil, Structural, Road & building works etc.

6.3.2 Validation of all design documents, design basis report, STADD file and design drawing for the for WTG which includes the lattice/hybrid structure details along with foundations. Also confirm that structure will withstand from corrosion for 25 years of lifetime. The validation should be done from a reputed technical institute such as IITs, NITs etc

6.3.3 Submission of all the drawings on "as built" basis covering all changes / modifications, if any, due to site(s) conditions in three sets to Owner / Consultants after commissioning of the project for record purpose.

- One soft copy of as built drawings shall also be submitted.
- O & M Manuals in four sets.

6.3.4 The Contractor shall forward to Owner / Consultants Schedule of supply within Two-week time from the date of LOI.

SECTION–VIB

SCOPE OF WORK
(ERECTION, TESTING & COMMISSIONING)

SECTION-VIB
SCOPE OF WORK (ERECTION, TESTING & COMMISSIONING)

The Scope of arrangement of land, Installation, Testing & Commissioning covered under this specification shall be but not limited to the following.

6.4 LAND, LAND DEVEOPLMENT & LAND TRANSFER

6.4.1 Bidder to provide BPCL (hereinafter referred to as "the Owner") with ownership or long-term lease (minimum 30 years from the date of commissioning of the project) over the Land(s) for the purpose of:

i) Installation of 50 (±5%) MW Wind Energy Project for power generation in the each State of Maharashtra and Madhya Pradesh. Offers are invited in 4 lots where 2 lots are for each state (Maharashtra and Madhya Pradesh) and each lot shall be considered as one Project and shall have cumulative capacity of 25 (+/-5%) MW with maximum 2 sites of having minimum capacity of 10 MW (+/-5%) at any of the one site. Bidder(s) can quote for one lot, two lots, three lots or all four lots depending upon their capability as per the Bidder's Qualification Criteria.

ii) Construction of internal roads required for smooth & trouble-free Operation and Maintenance.

iii) Construction / development of proper approach roads to the project site .

iv) Approach roads shall be developed on such lands which belongs/leased to the bidder or over such lands on which the bidder has the Right of Way / Use. In cases of lease or Right of Way, the Bidder must have an unfettered right to develop and maintain such approach roads for a minimum period of 30 years from the date of commissioning of the Project. Necessary undertaking to that effect will have to be furnished by the Bidder in support thereof.

v) Setting up internal and external transmission lines, transformers and evacuating the power generated from wind turbines up to the nearest TRANSCO / DISCOM Grid of respective states.

6.4.2 Bidder shall arrange necessary statutory, administrative and/or other necessary approvals & permissions from the concerned departments / authorities required for the above purpose. Bidder shall also furnish copies of relevant Govt. Policy (ies) applicable / in force for such transfer of land for the purpose of wind energy project.

6.4.3 Any and all expenses required to be incurred for the above including statutory fees, stamp duty, logistic expenses, out of pocket expenses etc. shall be borne by the bidder / contractor.

6.4.4 Bidder shall ensure following technical Requirements of the offered Land

The land offered by the bidders should meet the following requirements:

(a) Only those sites shall be accepted where wind resource assessment (WRA) has been carried out by installing wind mast of preferably 2 / 3rd of Hub height or at 80 m height minimum and measurement of wind-data for at least continuous one year period as per established industry practices / MNRE / NIWE / State nodal agency guidelines. The sites should have authentic wind resource assessment data to ensure estimation of long-term energy output from the wind-farm and meeting the techno-commercial viability of the project.

(b) It is desirable that the bidder furnishes wind-data and energy output records of adjacent wind-masts or Windfarms during recent years to Owner during energy estimation validation to be submitted in the bid for correlation of data with the offered Windfarm.

(c) The Bidder is required to quote for 50 (±5%) MW Wind Energy Project for power generation in each State of Maharashtra and Madhya Pradesh. Quotes are invited in 4 lots where 2 lots are for each state and each lot shall have cumulative capacity of 25 (+/-5%) with maximum 2 land sites of having minimum capacity of 10 MW (+/-5%) at single site. Bidder(s) can quote for any one lot, two lots, three lots or all four lots depending upon their capability as per the Bidder's Qualification Criteria.

(d) A single site would be defined as the cluster of WTGs installed at the same location connected to a single pooling sub-station.

(e) The farthest wind turbine of Windfarm in the offered land shall not be more than 10 km from the reference wind mast to enable Owner carry out prediction of estimated energy yield of the offered Windfarm for long term basis with reasonable accuracy.

(f) In case of land purchased on footprint basis, developer shall leave minimum distance of ½D+5m as boundary distance from the center of the proposed WEG from the neighboring land.

(i) Boundary distance of 0.5D + 5m in all four directions from the WTG (where D is the WTG rotor diameter) if there is no building, school, residential place etc. nearby.

(ii) Boundary distance of Tower height + 0.5D + 5m should be available in all four directions from the WTG (where D is the WTG rotor diameter), if the location is nearer to the building, school, residential place, highways etc. The above shall be superseded by the applicable norms of MNRE or State Guidelines whichever is applicable for the project.

6.4.5 Legal Requirements of Land

There could be three types of land for development of Windfarm project i.e. (i) Private Land; (ii) Revenue (or Government) Land & (iii) Forest Land. Bidder can offer any of these three types of land for the project. The Bidders can facilitate for transfer of the offered lands either through lease or sub lease or outright sale to the Owner or a combination of any of these three modes. Depending on the type of land(s) offered by the bidder, the eligibility criteria and the requisite documents to be furnished are as below:

(I) Private Land

If the land offered is a private land, the Bidder shall furnish the following documents along with the bid:

i. Copy of the Registered Sale Deed/Registered Lease deed in favour of the Bidder w.r.t. the land offered. In the event of the bidder being the lessee of the land offered, then such lease in favour of the bidder shall be for a minimum period of 30 years from the date of commissioning of the project and the said lease must not have any condition restricting sub lease in favour of the Owner.

-Or-

An Agreement to Sell/Agreement to Lease/MoU executed by the bidder with a third party (an individual or company) who is/are the landowner(s) and is in possession of such private land offered. In such cases, bidder must also submit an undertaking on non-judicial stamp paper from the Landowner stating that the landowner has no objection to get the land conveyed or leased for minimum 30 years from the date of commissioning of the entire project, as the case may be, to the Owner on the same lease/rental charges quoted by the bidder in financial bid, in the event of award of the contract to the Bidder.

ii. In event of the land being offered on outright purchase basis bidder shall provide notarized copy of the latest available Circle/ Revenue rate of the proposed land.

6.4.5.1 The successful bidder shall produce the following documents within a period of 6 (six) months from the date of issuance of LOI/ LOA/ Award:

i. Original certified or Original Notarised Copy of registered title documents in favour of the bidder/landowner.

ii. All relevant land revenue records (7/12 extract/Khatooni- Khasra) showing details such as name of landowner(s), identification of the piece of land, type of land, area, etc. in respect of the offered land for the last 31 years. All supporting mutation entries are also to be produced.

iii. Search Certificate from the local advocate after carrying out search for last 31 years from the concerned sub- Registrar office. Advocate will also have to produce supporting search receipt.

iv. Title Clearance Certificate from a local advocate providing details of the chain of title/past transactions for last 31 years. The Advocate must also certify that that there are no encumbrances with respect to the offered land.

v. Certificate from the local advocate confirming that he has checked the records in relevant court and found no suit/ Execution proceedings are pending in respect of the proposed plot.

vi. Conversion order/ Permission for change of land use from Agriculture to Non agriculture/Commercial purpose for allied activities from appropriate authority. {PMC to check internally if change of land use to 'commercial' or 'industrial'

purpose would be required for setting up Windfarm project}.

vii. Original Advocate certificate stating that there are no restrictions on taking the plot on lease/ sale by the Owner for the purpose of commissioning Windfarm project under the local laws/ rules.

viii. Revenue sketch map of Plot having Khasra/ survey numbers and its boundaries and /or extract of Village Naksha/ Settlement map/ mouza map

6.4.5.2 The successful bidder shall be required to ensure the following while transferring land in favour of Owner:

i. The seller from whom the Bidder is buying the land has a clear title to the said land.

ii. The Bidder shall ensure that the Agreement to Sell/Agreement to Lease on the basis of which the Bidder is placing his Bid is kept valid till Sale Deed/ Lease Deed is executed with the Owner.

iii. The land use in the records / policy of the Government does not prohibit the purpose for which the land is being procured i.e. setting up of a wind energy project and allows change of land use for allowing setting up of a wind energy project.

iv. All taxes, legal dues, charges, incidental / logistics expenses etc. for the said land applicable up to the period of execution of Sale / Lease Deed in favour of Owner shall be duly paid to the concerned Authority by the Bidder.

v. Obtain and ensure that the land offered has the permission of competent authority for Non-Agriculture (NA) use of setting up Windfarm project.

vi. The Bidder shall ensure that Registered Sale deed/ Lease deed/ Sub-lease deed is executed in favour of the Owner within a period of maximum 9 (nine) months' time from the date of issuance of LOA.

6.4.5.3 For land on outright purchase basis and/or ROU, if actual amount payable by Owner to the concerned land seller entity turns out to be higher than that quoted by the successful bidder, then in such cases the difference amount shall be recovered from the successful bidder from supply/works part of the LSTK contract (Sl. No. 4 of BRS No. P-I). This recovery/deduction will be over & above the other clauses of the contract.

(II) Revenue Land (Govt.) Land:

If the land offered is a revenue land, the Bidder shall furnish the following documents along with the bid:

(i) Copy of allotment letter in favor of bidder.

(ii) Copy lease deed, if singed.

(iii) If Allotment Letter of competent authority is not available, the recommendation of allotment of offered land from the Nodal Agency will also

be considered. In such case, the Bidder will have to submit an undertaking on non-judicial stamp paper that the land offered will be sub leased to the Owner within a period of maximum 9 (nine) months from the date of LOI/LOA after taking all necessary approvals/permissions as may be required for the purpose of such sub lease.

(iv) In event of the Revenue or Forest land being offered on Lease or Sub-lease bidder shall provide notarized copy of the Government Lease rate of the proposed land with the conditions of any increase or decrease in lease rentals over a period of entire lease or sub-lease duration.

In case the offered land is Revenue Land (also Government land) for which requisite amount has been deposited to Revenue department / Nodal Agency by the Bidder & suitable agreement to that effect is signed between the District Collector & the Bidder or official Letter of Allotment from State or its agency is issued to the Bidder, then such land may be subleased to the Owner for a minimum of 30 years from the date of commissioning. Necessary approvals/permissions from the concerned Government Authority, if any required, will have to be procured by the Bidder for such sublease in favour of the Owner. In event where in accordance with the policy of the state/ Govt. Authority, where maximum period of lease or sub-lease of the Revenue land restricts for an initial period of lease or sub-lease lesser than 30 years, bidders shall ensure the land allotment/ land allocation letter by the Government department in favour of Owner comprised the Clause of onward extension of lease or sub-lease period on mutual consent nearer the time of expiry of lease or sub-lease period.

If the land has been allotted to a third party with whom the Bidder has signed an Agreement to Transfer such land to the Owner, then the land should be subleased to the Owner for a minimum of 30 years from the date of commissioning of the Project. The bidder is responsible for completing the formalities and ensuring the sublease in name of Owner. Necessary approvals/permissions from the concerned Government Authority, if any required, will have to be procured by the Bidder for such sublease in favour of the Owner. In such cases of where land is allotted to third party, clear lease, or sub-lease period of minimum 30 years from date of the commissioning shall be required and in no circumstances lesser period of lease or sub-lease shall be considered and accepted by the Owner and bidders to take a note of the same while submitting their bid.

If Allotment Letter of competent authority is not available, the recommendation of allotment of offered land from the Nodal Agency will also be considered. In such case, the Bidder will have to submit an undertaking on non-judicial stamp paper that the land offered will be sub leased to the Owner within a period of maximum 9 (nine) months from the date of LOI/LOA after taking all necessary approvals/permissions as may be required for the purpose of such sub lease.

The successful Bidder will have to produce the following documents, wherever applicable, within a period of maximum 6 (six) months from the date of issuance of LOA:

i. Original certified or Original Notarised Copy of registered title documents in favour of the bidder/landowner.

ii. All relevant land revenue records (7/12 extract/Khatooni- Khasra) showing details such as name of landowner(s), identification of the piece of land, type of land, area, etc. in respect of the offered land for the last 31 years. All supporting mutation entries are also to be produced.

iii. Search Certificate from the local advocate after carrying out search for last 31 years from the concerned sub- Registrar office. Advocate will also have to produce supporting search receipt.

iv. Title Clearance Certificate from local advocate providing details of the chain of title/past transactions for last 31 years. The Advocate must also certify that that there are no encumbrances with respect to the offered land.

v. Certificate from the local advocate confirming that he has checked the records in relevant court and found no suit/ Execution proceedings are pending in respect of the proposed plot.

vi. Conversion order/ Permission from appropriate authority required for the purpose of commissioning a Windfarm project.

vii. Certificate from the Advocate stating that there are no restrictions under the local laws/ rules for taking the plot on lease/ sale by the Owner for the purpose of commissioning Windfarm project.

viii. Revenue sketch map of Plot having Khasra/ survey numbers and its boundaries and /or extract of Village Naksha/ Settlement map/ mouza map

(III) Forest Land:

If the land offered is a forest land, the Bidder shall furnish the following documents along with the bid:

(i) Copy of Stage-1 clearance from MoEF in favor of bidder.

(ii) Bidder will have to produce a certificate from a Local Advocate stating that there are no restrictions under the local laws/ rules for taking the plot on lease by the Owner for the purpose of commissioning Windfarm project.

The bidder must have at least Stage-1 clearance of the offered forest land from Ministry of Environment and Forests as on the bid submission date. The Bidder shall be required to fulfil / comply all the requirements mentioned by MoEF in Stage-1 clearance and obtain Stage-2 clearance within a period of 6 (six) months from the date of issuance of LOI/ LOA/ Award.

Lease of the forest land in favour of the Owner will have to be executed for a minimum period of 30 years from the date of commissioning of the Project after complying with all the conditions laid down by MoEF while granting clearance to the land offered. All necessary permissions/NOCs from the concerned authority for the purpose of setting

up windfarm project on the land offered will be obtained by the Bidder.

In case of Forest land, the lease shall be executed for the remaining period as well as may be available with the bidder at the time of execution of such lease which may be more than 30 (Thirty) Years.

Bidder will have to produce a certificate from a Local Advocate stating that there are no restrictions under the local laws/ rules for taking the plot on lease by the Owner for the purpose of commissioning Windfarm project.

i. Owner/Consultant reserves the right to seek for additional documents as may be required for satisfying itself regarding the title of the land offered. It shall be the duty of the Bidder to produce the documents sought as and when required. In the event that the Bidder is unable to produce the additional documents sought by the owner/Consultant, the Owner reserves the right to reject the bid placed by the Bidder.

ii. Owner/ Consultant reserves the right to get the proposed land by the bidder verified by any third party agency/ authority and in event of any ambiguity related to Title, nature, encumbrance, encroachment, position, status, type or area etc at any stage during or after execution of Sale or Lease or Sub-lease deed, Owner/ consultant may reject the proposed land of the bidder and any loss, costs, damages, etc. incurred by the Owner/ consultant shall be solely attributable to the bidder and same shall be recovered from the Bidders.

iii. Bidder shall submit the proforma of any Lease/ sublease/ License/ Sale deed along with the supporting documents to the Owner/ Consultant for review well in advance prior to the execution of the deed for their review, comments, if any, and approval.

6.4.6 Time Period for Transfer of the land:

Bidder shall ensure transfer of land in the name of the Owner well within 9 (Nine) months from the date of the issuance of LOA. The aforesaid timeline is for all kind of lands whether it is Private or Revenue or Forest. In the event that the Bidder is not able to execute the lease/sub-lease/sale deed in favour of the owner within the said period of 6 months. The milestone payment towards supply, shall be released for the WEGs for which land transfer has been completed. Bidders to note that any work or supply in non-transferred land in the name of the Owner shall be entirely at the risk of the bidder and payment whatsoever or advance payment made if any, towards any Site work or supply of equipment or other stage payment in non-transferred land in the name of the owner shall be recovered from the Bidder from next eligible bill on prorate basis of equipment delivered and/ or works executed in non-transferred land. The decision of Consultant and Engineer- In-charge on quantum of such recovery shall be final and abiding to the bidder and no claim whatsoever shall be entertained.

6.4.7 For land on Lease or Sub-lease basis, if it is observed that the lease charges quoted by the bidder are less than the Govt Land Policy rates, then in such cases Lease/ Sub-lease Rates / charges as per Government Land Policy will be considered for bid evaluation purpose. And, in such scenario the extra amount payable (actual payable –

quoted price) by Owner to the concerned Authority shall be recovered from the successful bidder from supply/works part of the LSTK contract. This recovery/deduction will be over & above the other clauses of the contract.

6.5 STATUTORY APPROVALS

Obtaining statutory approvals / clearances, wherever required, from Government departments but not limited to the following:

- Airports Authority of India
- Pollution Control Board
- State Renewable Energy Development Agency
- State Power Utilities Viz. Transmission Company / Distribution Company
- Electrical Inspectorate (CEIG) / Central Electricity Authority (CEA)
- Forest Department and
- Other applicable permissions / clearances relevant for the offered site(s).
- DM NOC, if required.
- Required applicable clearances from statutory bodies including clearance from army / air force, defence etc. shall be obtained by the Bidder / Contractor.

6.6 ERECTION, TESTING & COMMISSIONING

- Micro-siting of all the WEGs
- Construction of civil foundations for WEG towers.
- Transportation of all materials from the site(s) store to WEG locations.
- Erection of WEG towers on foundations.
- Installation of WEGs on erected towers.
- Installation, testing and commissioning of unit substation for WEGs and adequate internal evacuation system for 25 (±5 %) MW or quoted capacity of the Windfarm of Owner. The power evacuation system beyond unit substation of WEGs may be on shared basis**.**
- Testing and commissioning of WEGs.
- Installation, testing and commissioning of Grid interfacing equipment including transformers, HT lines, panels, kiosks, protection equipment, metering equipment for evacuation of power from the wind power plant to the nearest State grid sub-station as per statutory guidelines of the state.
- Installation, testing and commissioning of ABT meter(s) for recording data regarding export and import of power to / from State grid and also recording KVARh

& KVARh data on real time basis.

- Installation, testing and commissioning VAR drawl compensation system, if required.

- Installation, testing and commissioning of Centralized Monitoring and Control System (CMCS) for remote operation of the WEGs, receiving the data relating to WEGs, processing and getting required report on energy generation, wind speed etc. This facility for Owner Windfarm shall be on shared basis. The SCADA system of the Windfarm should transfer data to OWNER's central monitoring station at HQ (Mumbai). All the required hardware for the same is included in the scope of the Bidder and cost towards same to be included in the offered rates of the Bidder.

- Construction of office-cum-control room building having a separate control room for housing of CMCS.

- Fencing / wall with gate required around Transformer / DP yard, Pooling Substation as per statutory norms and around Control room / Office Building at Site.

6.7 POWER EVACUATION

The bidder should have any of the following arrangements for Power evacuation.

1. Approval from TRANSCO at voltage of 66 kV or above for power evacuation facility for the Windfarm in bidder's own name.

2. An Agreement with a third party, an individual or Company having approval from MSETCL/MPPTCL for providing power evacuation facility for the project, with no additional cost to OWNER. Bidder should clearly indicate the name of individual / company having approval of power evacuation.

3. The bidder shall furnish the Agreement along with the bid confirming reservation of adequate power evacuation capacity for the project. (BRS 19)

4. The WEGs should be integrated by installing Remote Terminal Unit (RTUs) by Windfarm Developers so that the injection can be monitored at the connectivity substation by the SLDC on real time basis, and in accordance with the MERC/MPERC orders from time to time.

5. Bidder shall procure & installed complete metering system including CT / PT / ABT as per guidelines, act of MSETCL / MPPTCL/ STU. Testing of these CT / PT / ABT shall be as per guidelines of MSETCL/MPPTCL / STU. Bidder shall bear all cost for successful installation, testing & commissioning of metering system as per guideline of MSETCL / MPPTCL/STU.

6. Any item not specifically mentioned but found essential for successful metering of Windfarm with full safety according to statutory requirements shall be included in scope of work of the bidder.

7. Designing of Fault level of Substation located at Windfarm as well as transmission facility shall be based on recommendation of MSETCL /MPPTCL/' STU.

8. The bidder shall set up Wind Power Project including the transmission network up to the Delivery Point, at its own cost (including but not limited to open access charges till the delivery point) and in accordance to the provisions of RFP. All approvals, permits and clearances required for setting up of the Project (including connectivity) and those required from State Government and local bodies shall be in the scope of the bidder with no additional statutory fee/charges to owner till commissioning of the project.

9. The project should be designed for delivering power of 66 kV or above at MSETCL/MPPTCL periphery.

10. The responsibility of getting the grid connectivity with MSETCL / MPPTCL shall entirely be of the bidder. The bidder shall submit documentary evidence for securing connectivity with grid from MSETCL /MPPTCL along with the bid.

11. The transmission of power up to the point of interconnection and energy accounting infrastructure shall be the responsibility of the bidder at his own cost. The maintenance of Transmission system up to the interconnection point shall be responsibility of the Bidder.

12. The arrangement of connectivity can be made by the bidder through a transmission line. The entire cost of transmission including cost of construction of line, maintenance, losses etc. from the project up to the interconnection point will be considered by the bidder.

13. Bidder shall comply with MERC / MPERC/ CERC regulations on Forecasting, Scheduling and Deviation Settlement, as applicable and are responsible for all liabilities related to Connectivity.

14. Obtaining of necessary clearances and permits as required for setting up the Wind Power Projects is in the Bidder's scope.

15. Bidder please note that in case, the project is installed in existing / new Pooling Station and connected to MSETCL/MPPTCL, the delivered energy shall be arrived at by deducting the normative transmission losses of line between Windfarm Pooling Station and MSETCL"s receiving sub-station from the energy recorded at Metering Point / Pooling Station.

16. Bidders are requested to take note of the same and consider normative Transmission losses accordingly.

6.8 INFRASTRUCTURE

Suitable arrangement of water is ensured to cater the day-to day requirement of drinking water and other needs of Windfarm during entire construction period.

Construction of suitable, all-weather roads i.e. approach roads and internal roads in Windfarm for transportation of heavy and long equipment to each WEG location in all weather conditions shall be provided for entire Windfarm for easy access to O&M team round the clock. Drainage and cross drainage shall be done using Hume pipes of suitable sizes to avoid water accumulation besides the road and any potential damage to the road.

For the construction and operation & maintenance of Windfarm the Office cum control room building of 100 sq.m (approx.) or suitable size should be constructed as per relevant Indian Building Standards for common use. One room shall be used as control room having CMCS. There should be adequate facilities for officers visiting on behalf of the company during their visit to the site which includes sitting arrangement, arrangement of water, electricity etc.

Any other specific Civil requirements for Project / Construction and O & M period shall have to be provided.

6.9 SHARED FACILITIES

The Facilities which shall be used either exclusively (if it is in the exclusive user of the Windfarm) or on sharing basis by investors in the Windfarm (if OWNER is not the exclusive user of the Windfarm) including (but not limited to) the following:

- All internal roads including approach roads to WEGs in the Windfarm.
- Internal evacuation system of Windfarm consisting of 33 kV (or applicable voltage) lines including spur lines from individual WEG and associated equipment for transfer of wind power generated from WEGs to pooling station of Windfarm.
- Pooling station consisting of EHV transformers (if required), associated equipment, control system, structures, metering system, control room building, stores etc. for stepping up of voltage from internal evacuation system to appropriate State grid voltage system.
- Control room, office building, stores and any other civil structure in the Windfarm. Central Monitoring& Control System (CMCS) including cables.
- Communication network.
- Water supply arrangement.
- Firefighting device.
- Safety & security system of Windfarm.
- Lighting system.
- Earthing system which shall be dedicated for WEGs
- Amenities for O&M staff and visiting officials.

6.10 MANPOWER & UTILITIES

The Contractor shall give details of competent & eligible manpower to be deployed at the site(s) for store management, installation, testing & commissioning of wind energy project.

Deploy at site(s) adequate qualified manpower, cranes, special tools & tackles, required consumables, measuring & testing equipment. Arranging construction power & water as required for installation and commissioning of the project.

6.11 GENERAL

To discharge obligations relating to retirement / Superannuating benefits to employees or any other benefit accruing to them in the nature of compensation, profit in lieu / in addition to salary, etc. for the period of service with the Contractor.

To hand over the entire system in good working condition.

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SCOPE OF WORK
(COMPREHENSIVE OPERATION & MAINTENANCE)

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SCOPE OF WORK (COMPREHENSIVE OPERATION & MAINTENANCE)

6.12 COMPREHENSIVE OPERATION AND MAINTENANCE

SCOPE

Owner intends to entrust the comprehensive operation and maintenance (O&M) of the 25 MW (±5%) Windfarms with maximum 2 sites of having minimum capacity of 10 (+/-5%) MW at any one site for 5 years with a provision of extension for a total period of 10 years from the date of project stabilization of the project.

The Contractor shall be responsible for all the required activities for maintenance and successful running of the WEGs for optimum energy generation as well as maintenance of associated facilities of the Windfarm.

Deployment of adequate and competent Engineering and other supporting personnel required for O&M of total Windfarm on 24 x 7, 365 days basis. Bidder to submit Organogram of O&M set up along with his Bid.

Deployment of adequate and competent security personnel and total security management including security gadgets, enabling equipment and facilities for complete watch and ward with expertise in handling all kind of situation with proper liaison and reporting system at Windfarm site

Keeping the WEGs in operational mode so as to get optimum energy generation from the wind energy project.

Monitoring controlling, troubleshooting maintaining of records, registers.

To maintain proper and adequate inventory of all spares, consumables and fixing / application of the same as per WEGs

Conducting periodical maintenance check, testing over hauling and taking preventive action for smooth running of Windfarm as required.

General up keep of all equipment, building, roads etc.

Submission of daily / periodical reports to Owner for energy generation & operating conditions of the Windfarm.

Continuous monitoring of performance of the Wind Electric Generators and regular maintenance of the whole system including WEGs, transformers, overhead lines, outdoor kiosks, switchgear, equipment etc. for extracting and maintaining the maximum energy output from the Windfarm.

Complying with all Grid connectivity norms including Day Ahead Declaration of Wind Generation as required by Grid Code / SLDC / Regulatory Norms notified from time to time.

6.13 GENERAL

To maintain all the facility accurate and up-to-date operating logs, records and monthly reports regarding Operation & Maintenance of the facility.

To perform or contract for and oversee the Performance of periodic overhauls or maintenance required for the facility in accordance with the recommendations of the original equipment manufacturer.

To maintain and up-keep control room, all internal roads, tool room, stores, equipment, etc. in workable conditions.

To discharge obligations relating to retirement / Superannuating benefits to employees (of the contractor) or any other benefit accruing to them in the nature of compensation, bonus / in addition to salary, etc. for the period of service with the Contractor.

Bidder shall ensure operation and maintenance of Power Evacuation facility of the offered Windfarm and WEGs up to Grid Interconnection point up to the term of WBA of Owner with DISCOM / TRANSCO.

Supply of all spares, consumables, lubricants, hardware with necessary skilled manpower support required till commercial operation and stabilization of the Windfarm and handing over to O&M contractor / OWNER, The Bidder shall provide the support / spares for all equipment, for complete plant life i.e minimum 25 years along with undertaking certificate for supply of spares and support.

Stocking of adequate spares at site for operation & maintenance of wind power project. List of such mandatory & critical spares to be provided

6.14 OPERATION AND PROFORMANCE MONITORING

Operation part consists of deploying necessary manpower required to operate the Windfarm at the optimum capacity.

Daily work of the operator in the Windfarm shall include logging the voltage, current, power factor, Active and Reactive Power output of the 25 (±5%) MW Windfarm, keeping batteries in healthy state at WTG and substation, individual WEG's output data once a day. The operator shall also record failures, interruption in supply and tripping of different relays, reason for such tripping, duration of interruption etc. and inform Owner of such interruptions with details very next day of occurrence. Necessary auto data recording instruments will be provided by the contractor.

The operator shall record the daily and monthly energy output of each WEG. Monthly Performance reports indicating turbine wise energy production, down time, capacity utilization factor, machine availability etc. shall be prepared for each WEG as well as for the Windfarm and furnished in soft mode to Owner in the first week of the following month.

Generation data shall be shared with Owner remotely through web based open protocol or any other suitable medium for real time monitoring monitor at Mumbai HQ

at a centralized location. In addition to that bidder shall share daily generation report covering followings:

A daily report comprising energy generation, grid availability, breakdowns, generation hours, low wind hours, machine availability etc shall be sent through e-mail and / or made available through CRM to Owner.

Monthly performance of each WEG based on the following parameters shall be prepared and submitted to Owner on 10th of succeeding month. Contractor shall provide following details to Owner:

a. Daily generation data
b. Details of preventive maintenance activities carried out during the month
c. Breakdown details along with remedial actions taken
d. Break up of down times – Technical & Non-Technical
e. Error trend
f. Component failure details
g. ROW – Reasons & remedial actions taken

Annual report of Windfarm will also be prepared on above points shall be submitted in the month of April every year.

OWNER at its discretion may get the performance checked from an independent technical consultant.

6.15 PREVENTIVE MAINTENANCE

The Contractor shall draw the preventive maintenance schedules for daily, monthly and yearly and attend to the breakdowns keeping in view that the machine availability is always as per clause 5.6. A copy of such Preventive Maintenance Schedule shall be submitted to the Owner.

The Contractor shall carry out the periodical / plant maintenance as given in the manufacturer's service manual and perform minimum two certified services per annum. Such programme for all the equipment shall be prepared as per operating manuals of manufacturer's and shall be implemented in letter and spirits.

Regular periodic checks of the WEGs shall be carried out as a part of routine preventive maintenance during low wind period. In order to meet the maintenance requirements stock of consumables is to be maintained as well as various spares as recommended by the manufacturer at least for 2 years are to be kept for usage.

Maintenance of other major equipment involved in wind energy farm are step up transformers, overhead line equipment, switchgear outdoor 66kV/ 33 kV / 22 kV / 11 kV VCB kiosk and metering panel. Particular care shall be taken for outdoor equipment to prevent corrosion. Cleaning of the insulators and applying Vaseline on insulators if required, shall also be carried out at every 3 to 4 months interval. Resistance of the earthling system as well as individual earth resistance is to be measured and recorded every three month. If the earth resistance is high suitable action shall be taken to bring down the same within the limits. The frequency of schedule maintenance shall be as per OEM schedule / instructions.

Maintenance record is to be maintained by the operator to record regular maintenance work carried out as well as any breakdown maintenance along with the date of maintenance, reasons for the breakdowns, steps taken for attending to the breakdown, duration of the breakdown etc.

Schedules will be drawn such that some of the jobs other than breakdown, which may require comparatively long stoppage of the WEG's, shall be carried out preferably during the non-windy season.

The Contractor shall deploy enough manpower at Windfarm site(s) to carryout work instructions and preventive maintenance schedules as specified. The Contractor shall keep at least one skilled and experienced supervisor at site(s) on permanent basis to supervise the jobs that are being carried out at site(s).

The Contractor will attend to breakdown jobs immediately for repair / replacement / adjustments and restore operations at the earliest during the currency of O&M Contract.

The Contractor shall immediately report the accidents, if any, to the Engineer In charge & to all the concerned authorities as per prevailing law of the State showing the circumstances under which it happened and the extent of damage and / or injury caused. O&M Contractor would be solely & fully responsible / liable to pay for any losses / damages / claims, etc. and Owner will be fully indemnified for such losses / claims.

The Contractor shall comply with the provision of all relevant Acts of Central or State Governments including payment of Wages Act, 1936; Minimum Wages Act, 1948;

Employer's Liability Act, 1938; Workmen's Compensation Act, 1923; Industrial Disputes Act, 1947; Employees State Insurance Act, 1948; Contract Labour (Regulations & Abolishment), Act 1970 or any other law relating whereto and rules made there under from time to time.

The Contractor shall at his own expense provide all amenities to his workmen as per applicable laws and rules.

The Contractor shall ensure that all safety measures are taken at the site(s) to avoid accidents to his or his Co-Contractor or Owner's Workmen.

If in the event of negligence or mal-operation by the Contractor's operator any failure of equipment takes place such equipment should be repaired / replaced by Contractor free of cost within a reasonable period of time.

6.16 STATUTORY CHARGES & LEASE RENTAL CHARGES

Statutory charges like CEIG / CEA annual charges, annual meter testing charges, joint certification charges etc., lease rental charges or any other charges as may be required to be paid to such statutory agencies shall be in the scope of the Owner & shall be paid by the Owner from time-to-time post commissioning of project. For such payments contractor has to inform one month in advance to the Owner. Contractor should inform

well in advance and submit a list of such recurring statutory charges to the Owner for records.

However, liaisoning & co-ordination shall be in the scope of the Contractor. Bidder to include all charges including out of pocket expenses in his O&M price.

6.17 QUALITY SPARES & CONSUMABLES

In order to ensure longevity safety of the core equipment and optimum Performance of the system the Contractor should use only genuine spares of high-quality standards as recommended by manufacturers (OEM).

6.18 TOOLS AND TACKLES

The Contractor shall arrange for all the necessary tools and tackles including crane for carrying out all the maintenance work covered under this contract.

6.19 SECURITY SERVICES

The Contractor shall arrange proper security system including deputation of security personnel at his own cost for the check vigil for the Windfarm. The security staff may be organized to work on suitable shift system; proper checking & recording of all incoming & outgoing materials vehicles shall be maintained. Any occurrence of unlawful activities shall be informed to OWNER immediately. Bidder to ensure due care for the same.

6.20 TRAINING

Providing a detailed training plan for all operation, maintenance procedures, which shall after approval by Owner, form the basis of the training program. Contractor shall impart training on site to 6 Owner engineers in O&M of Wind Energy Generators and associated equipment for two weeks. Boarding and lodging expenses of the trainees shall be borne by Owner.

6.21 SCHEDULING AND FORECASTING:

Scheduling and forecasting process is now required to be implemented in the Wind Sector. As specified elsewhere in the Contract documents, to comply with statutory requirements, Regulations, Orders, Bidder would be responsible for scheduling & forecasting for the ordered capacity on behalf of OWNER. The bidder will be paid for these services as quoted by him in Bid Response Sheet No. P-VII. The Bidder shall be responsible for financial implication exuding bank guarantees to SLDC i.e., DSM charges arising out of Renewable Regulatory Fund (RRF) mechanism.

The Bidder shall be responsible for all the financial implication including bank guarantees to SLDC and DSM charges arising out of Renewable Regulatory Fund (RRF) mechanism.

OWNER reserves the right to appoint a third party QCA and in that case the bidder will provide all the required data and assistance to the QCA without charging any

additional fee on account of S&F and O&M operator shall not have any financial liability on account of scheduling & forecasting.

6.22 ACCESS OF OWNER TO SITE DURING CONSTRUCTION:

Contractor shall facilitate Owner or consultant or authorized representative to access the Site, store, offices, laboratory, Grid substations and also the source of materials for any routine inspections and shall follow the instructions for corrective measures, if any. Contractor shall make sitting arrangements with minimum required facilities at site for carrying out day to day activities and or inspection.

SECTION–VII

TECHNICAL SPECIFICATIONS

CONTENTS

SECTION–VII

TECHNICAL SPECIFICATION FOR WIND ELECTRIC GENERATORS (WEGs) AND ELECTRICAL SYSTEM FOR INTERFACING WITH GRID

Specifications mentioned under this section are general in nature, just to elaborate our requirement. However, WEGs offered must be in line with the requirement of Maharashtra/Madhya Pradesh state utilities and other statutory authorities.

7.1 TYPE AND RATING OF WEGS

The WEGs shall be:

i. Of rating in the range of 2000 kW and above
ii. Upwind type
iii. Three blade types
iv. Horizontal axis with active yawing
v. Power Regulation (Pitch / Stall)
vi. Grid compatible type
vii. Single speed, dual speed or variable speed
viii. Of having survival wind speed capable to withstand cyclonic effect in the offered area.
ix. Generator having insulation class 'F' or better.

7.2 GRID CONDITIONS

Bidder shall ensure compliance with the requirements of “Indian Electric Grid Code” 2010 and amendments thereafter notified by CEA in general & following operating grid condition in particular.

Frequency	: 50 Hertz plus or minus 0.5 Hertz
Voltage	: +10% to (-) 12.5% variation
Maximum asymmetric voltage	: 2% (Phase to ground) for 60 sec.
Maximum asymmetric current	: ± 10% of nominal current
Short circuit rating	: As a part of the detailed design process, the bidder shall calculate the short circuit rating (minimum and maximum), and furnish the information in the bid

The WEGs shall have adequate protection and control to operate in parallel and synchronized manner with State grid. The tolerance limits indicated may, however, be exceeded in actual conditions and the WEGs shall be protected from damages against

such exceeding of limits. WEG should be compliant to fault ride through (FRT), Low Voltage Ride Through (LVRT) requirements.

7.3 DESIGN CRITERIA

The WEGs shall have a useful life of not less than 25 (twenty five) years for continuous operation. Bidder shall indicate the list of components whose life may be less than 25 (twenty five) years, indicating approximate actual life of such items. The WEGs should be suitably designed to perform satisfactorily at rated capacity in Indian climatic conditions with particular reference to offered site. The WEGs shall be designed to accept Indian make sub-components and consumables such as contactors, thyristors, fuses, lubricants etc. All material, components, sub-assemblies and equipment should be absolutely brand new. The blades should be designed based on standard specifications such as IEC 61400-1 which may be indicated by number, date of issue, authority of issue.

7.4 LOCAL CONTROL SYSTEM (LCS)

Each WEG shall have a Local Control System (LCS) and it shall be designed for automatic, unattended operation based on a microprocessor / PLC-controlled system with a power backup. The microprocessor and power control units shall be located properly and well ventilated. In case of tubular tower the LCS shall be capable of operating satisfactorily at such temperature that may exist inside the tower without exceeding the permissible temperature rise**.** The LCS shall be able to display basic operating functions of the WEG and also the provision for stopping and restarting the WEG. In case offered WEG model does not have the display in the local control system laptop should be made available during the visit of owner to view the display at LCS.

The LCS shall communicate with Central Monitoring & Control System at Master Control Room for operation, monitoring & control of all the WEGs, for display & record of important parameters, for providing annunciations (or error messages) and stop, display & restarting of WEGs again on acceptable conditions.

The LCS shall have following features:

A. Display and record the following parameters:

i. Power (kW)

ii. Voltage (V), of all the three phases in RMS values.

iii. Frequency (Hz)

iv. Current (A) of all the three phases in RMS values.

v. Power factor

vi. Rotor Revolution Speed (rpm)

vii. Brake activation

viii. Maximum power generated (kW) with time of generation

ix. Cumulative energy production

x. Cumulative active energy consumption from grid

xi. Cumulative reactive energy consumption drawn from grid

xii. Energy production for the grid (kWh)

xiii. Operation time of generator

xiv. Status of wind turbine

xv. Yaw angle and Pitch

xvi. Wind speed (M/s.) and direction of wind flow.

xvii. Actual reactive power consumption (kVAr)

xviii. Temperature of generator, gear box, nacelle and control panels

xix. Hydraulic oil pressure

B. Annunciations for the following conditions

i. Low oil level or pressure in gear box
ii. Yaw failure
iii. Cable twist
iv. Control system failure
v. Excessive vibration in nacelle
vi. Worn-out brake pads
vii. Abnormal temperature in generator, gear box, yaw motor, and control panel
viii. Grid failure i.e. frequency error, excess current asymmetry, voltage failure
ix. Over speed of rotor and generator
x. Activation of emergency stop brake
xi. Failure of capacitor units

C. Stop, display and restart again when conditions are acceptable:

i. Low wind speed

ii. Excessive wind speed

iii. Untwisting of cables

iv. Activation of stop push button (restart when start push button is activated)

D. Stopping the WEG automatically whenever the grid supply fails

E. Auto start of WEG on resumption of healthy grid supply irrespective duration of Grid failure

F. The LCS shall be connected with the Central Monitoring and Control System. (SCADA) It should be possible from central monitoring and control system at the master control room to control all the Wind Electric Generators, give commands, record their various data and take out the printed reports of energy generated from the wind power project as a whole and from each WEG, export / import of energy etc.

7.5 START-UP

The WEG must be equipped with a soft start arrangement for limiting the starting current and avoiding peak loads on the grid and excess voltage drop across the generators. The maximum inrush / starting current shall not exceed 1.5 times full load current of the generator.

7.6 GENERATOR

The generator shall be of three phase asynchronous / synchronous type and compatible for 50 Hz grid connection. The generator shall be designed for tropical environment and in accordance with relevant international standards, which should be stated in the offer in adequate detail. The rated output and voltage shall match the varying availability of wind on the one hand and all possible grid conditions on the other. The insulation class should be F or better as per IEC 60034-1

In case variable speed WEGs are offered, the power electronics shall be suitable for Indian grid conditions.

Suitable device to monitor and control the temperature for ensuring proper functioning of all the equipment shall be provided. Successful bidder shall supply a copy of type test report conducted in past 5 years and routine test reports for each Generator.
Generators shall be provided with temperature sensors and installed in the stator winding being part of the generator protection system. Generator windings etc. must be special corrosion protected to cope with condensation problem caused by the high RH –temperature gradient on the site. Generator should be protected against short circuit, earth fault and overload as per relevant IS or IEC code.

7.7 CAPACITORS (if required)

The WEG shall be provided with capacitors in case of induction generators, for maintaining a minimum power factor of 0.95 at full load and as close to unity as possible during the entire range available. The capacitors shall be cut in after the start-up procedure is terminated. Self-excitation of WEG due to capacitors is to be avoided. The bidder shall furnish the rating of the capacitors. Capacitors shall be housed in a separate panel so that proper ventilation is maintained and the heat dissipated from the capacitors shall not affect components in the switchboard. Capacitors should be designed for tropical environment and in accordance with relevant International and Indian Standards which should be stated in the quotation. All penalties / charges payable to SEB due to low power factor and reactive energy consumption beyond prescribed limits shall be borne by the Bidder only. Safety equipment must be provided for switching off the device for the capacitors so as to prevent excess voltage production WEG without being connected to the grid. The rated voltage of capacitors must be equal to the turbine nominal voltage +15%. Capacitors must meet standard IS 2993-1974IEC / EN / VDE. Switching contactors should have proper rating to handle making and breaking capacitor current.

7.8 BRAKING SYSTEM

The WEG shall have the provision for soft braking to avoid excessive loading on parts

and structure. Each WEG shall have two independent braking systems and out of the two brakes, one of them may be aerodynamic type and act at 10% (ten percent) over-speed of the rotor. If aerodynamic brake is not provided, the bidder should furnish full details as to how the WEG will be “failsafe”, even when grid power is not available. The bidder along with explanatory notes on their working principle shall indicate expected life of the braking system and the pads.

7.9 TOWER WITH LIFT

Tower may be either lattice type, or tubular (steel or pre-stressed concrete) type or hybrid type. Steel structure portion of tower shall be galvanized, tubular steel / concrete tower may be painted with anti-corrosion paint as per specifications & in accordance with Indian / International standards. Where tubular towers are provided for Stall regulated WEGs using tip spoilers, the tower should preferably have inspection door for tips spoilers checking and maintenance. Suitable numbers of sets of templates to fix the foundation bolts in the concrete should be supplied. The tower should have convenient climbing devices and suitable landing platforms or LIFT for maintenance purpose to improve the safety and reduce the downtime, Safety arrangements e.g. rope, belts etc. should be provided. Necessary foundation bolts / anchor plates / stubs should also be supplied. The exposed portion of the foundation bolts should be galvanized / painted with anti-corrosive paint as per relevant BIS / international codes.

7.10 SWITCH BOARD

For each WEG a switchboard shall be installed which must include all power distribution for the WEG protection systems, soft start, capacitor control etc. The general data for the switchboard are as follows:

Frequency	:	50 Hertz plus or minus 0.5 Hertz
Voltage	:	+10% to (-) 12.5% variation

Degree of protection:

1. In door air-conditioned areas	:	IP22
2. In door non, air-conditioned areas		
a. Ventilated enclosure	:	IP42
b. Non-Ventilated	:	IP54
3. Outdoor	:	IP55

Switch board shall be provided with adequately rated copper bus bar, incoming control, outgoing control etc. as a separate compartment inside the panel to meet the requirements of the CEA / CEIG. All live terminals and bus bars shall be shrouded. The outgoing terminals shall be suitable to receive suitable runs and size of cables required for the WEG / Transformer rating.

Switchboard shall be designed and manufactured in accordance with the relevant Indian standards / IEC / EN / VDE. Distribution boxes, junction boxes, cold junction

boxes, terminal boxes and all field mounted equipment to be furnished as per this specification shall have weatherproof protection conforming to IP 55. Shed or Canopy to be provided for outdoor switchboards as per Industry practice.

Separate control and power panels shall be provided with separate power circuit for isolated operation of control circuit.

7.11 EARTHING & LIGHTNING PROTECTION

Earthlings (or grounding) of WEGs, transformers and all electrical installations shall be under the scope of bidder. All electrical frames shall be effectively connected to earth at least at two points. Material required for earth electrode as well as earth current conductor shall be supplied by the bidder. Combined earth resistance at each WEG shall not be more than two Ohms. Earth electrode shall be designed to withstand the maximum possible short circuit current. Lengths of electrodes shall be such that the combined earth resistance shall less than two Ohms.

Bidder shall provide suitable independent earthling system for protection of blades, nacelle, and tower and step-up transformer against any lightning surge. Effective combined earth resistance shall not be more 2 Ohms. The work shall be executed, as per is IEC-62305 / IS-3043. Bidder should append a drawing showing the earthling arrangement for WEG and transformer. Care shall be taken to protect electric and electronic equipment within the control panel against any lightning / switching surges which are expected in electrical network. Surge protection device to be provided as per IS/IEC 62305 and other relevant standards. The bidder shall provide suitable lightning protection system at the highest possible point on the WEG.

7.12 SCHEDULING AND FORECASTING

Scheduling and forecasting process is now required to be implemented in the Wind Sector as the Central Electricity Regulatory Commission (CERC) have notified a Regulation named Indian Electricity Grid Code Regulations (IEGC), 2010 on April 28, 2010 for helping and maintaining the Grid discipline and also formulate rules related to the operating parameters of the Indian Grid across the country. CERC has also issued IEGC Regulations, 2010 under clause (h) of subsection (1) of Section 79 read with clause (g) of sub-section (2) of Section 178 of the Electricity Act, 2003. As per CERC Order dated 16th January, 2013. Scheduling and forecasting has been implemented with effect from 1st July, 2013. Though CERC on 7th January 2014 has stayed the implementation of RRF mechanism yet the forecasting and scheduling of wind generation shall continue as per the provisions of the Grid Code and RRF procedure approved vide our order dated 9.7.2013.

The Bidder shall be responsible for all the financial implication DSM charges arising out of Renewable Regulatory Fund (RRF) mechanism.

OWNER reserves the right to appoint a third party QCA and in that case the bidder will provide all the required data and assistance to the QCA without charging any

additional fee on account of S&F and O&M operator shall not have any financial liability on account of scheduling & forecasting.

7.13 WIND MONITORING MAST

Refer clause No.6.2.

7.14 ENVIRONMENTAL PROTECTION

Lattice towers shall be galvanized to relevant standards applicable to galvanization of fabricated steel structures. Minimum thickness of galvanizing shall be 120 microns, irrespective of whether it is hot dip galvanized or spray galvanized. These towers will be inspected at site and if damage to galvanization is noticed or the thickness of any section is found inadequate, such tower shall be replaced by the bidder to the satisfaction of the OWNER. Site galvanization or site repairs will not be permitted.

Tubular tower should be painted with anti-corrosion paint in accordance with EN-ISO 12944 (Part-4).

All materials, components and equipment shall function and work properly during the lifetime against deterioration that may be caused due to hostile climate conditions. The bidder shall submit descriptions of protection methods to be used for all components. All exposed iron components such as tower, nacelle and hub should be galvanized. Only hot dipped galvanized bolts and nuts should be used. Switchboards shall have two coats of epoxy painting of 120 microns thickness over two coats of primer. Alternatively, these can have powder coating having thickness more than 60 microns.

7.15 MICRO-SITING

The Contractor shall carry out Micro-siting, and to verify the same arrange instruments required for this purpose. Bidder shall furnish Micro-siting details and "Micro-siting Report" to OWNER for review.

7.16 NIWE APPROVAL / TYPE CERTIFICATION

The quoted model / type of WEG should have Type Certification from an accredited test house such as NIWE, RISO Denmark, DEWI- Germany, Germanischer LLOYD-Germany, or any other agency approved by Ministry of New and Renewable Energy (MNRE), Government of India. Such Type Certificate should be valid as on the date of opening of the bid. Copy of Type Certificate along with copy of certified power and thrust curve shall be submitted with the bid. Certified power curve and thrust curve should be in graphics as well as tabular form.

The bidder should have its name & the offered model included in the Revised List of Models and Manufactures (RLMM) published by Ministry of New and Renewable Energy (MNRE), Government of India. Copy of the latest published list shall be submitted with the bid.

The bidder should also submit the copies of Type test reports for Generator, Transformer and HT / EHT Circuit-Breakers within 15 days of award of contract for approval.

7.17 TECHNICAL DATA

The bidder shall furnish technical data and documents complete in all respect as per the requirement of bidding document. Bidder shall comply with all the latest statutory requirements including CEA grid connectivity standards, technical standards, plant and equipment safety standards, MNRE guidelines / OM / Advisory / Clarifications. The bidder shall fully comply with all latest amendments including and amendment thereof as mentioned below:

a) CERC (Grant of Connectivity, Long Term Access and Medium-term Access in Interstate Transmission and related matters) Regulation 2009
b) CEA (Technical Standards for Connectivity to Grid) Regulation,2007
c) CEA (Technical Standards for Connectivity to the Grid) (Amendment) Regulations, 2019
d) CEA (Technical Standards for construction of Electrical Plants and Electrical Lines) Regulation,2010
e) CEA (Grid Standard) Regulation,2010
f) CEA (safety requirements for construction, operation and maintenance of Electrical Plants and Electrical Lines) Regulations, 2011
g) CEA (Measures relating to Safety and Electrical Supply) Regulations,2023
h) Central Electricity Authority (Measures Relating to Safety and Electric Supply) Regulations, 2018
i) CEA (Installation and Operation of Meters) Regulations 2006
j) Indian Electricity Grid Code Regulation, 2010
k) CEA (Technical standards for communication system in Power system operations) Regulation 2020
l) CERC (Communication System for Inter State Transmission of Electricity) Regulations 2017
m) MNRE guidelines/OM/Advisory/Clarifications
n) And any other applicable standard/regulations etc. to make the wind power plant operational.

CODES AND STANDARD

All electrical installations shall be carried out in accordance with generally accepted installation expected for the Wind Power Plant and specifically shall comply with the relevant provisions of:

(a) The Electricity Act 2003
(b) CEIG requirement.
(c) EB requirement; and

A basic list of standards is given for the reference and all the equipment shall be designed, manufactured, tested and commissioned as per the relevant applicable

standards and statutory guidelines as stated elsewhere in the tender document. It is the responsibility of the bidder to follow relevant codes, standards and guidelines to supply, install & commission the equipment for successful completion of the Project as per terms & conditions of the tender.

A. WIND ENERGY GENERATION SYSTEM

Standard	Description
IEC 61400-1	Wind energy generation systems - Part 1: Design requirements
IEC 61400-4	Wind Turbines – Part 4: Design requirements for wind turbine gearboxes
IEC 61400-5	Wind Turbines – Part 5: Wind Turbine blades
IEC 61400-6	Wind energy generation systems – Part 6: Tower and foundation design requirements
IEC 61400-11	Wind Turbines – Part 11: Acoustic noise measurement techniques
IEC 61400-12	Wind energy generation systems – Part 12: Power performance measurements of electricity producing wind turbines - Overview
IEC 61400-12-1	Wind energy generation systems – Part 12-1: Power performance measurements of electricity producing wind turbines
IEC 61400-12-3	Wind energy generation systems – Part 12-3: Power performance – Measurement based site calibration
IEC TR 61400-12-4	Wind energy generation systems – Part 12-4: Power performance –Numerical site calibration for power performance testing of wind turbines
IEC 61400-12-5	Wind energy generation systems – Part 12 Power Performance - Section 5 Assessment of Obstacles and Terrain
IEC 61400-50	Wind energy generation systems – Part 50: Wind measurement – Overview
IEC 61400-12-2	Wind energy generation systems – Part 12-2: Power performance of electricity producing wind turbines based on nacelle anemometry
IEC 61400-12-6	Wind energy generation systems – Part 12-6: Measurement based nacelle transfer function of electricity producing wind turbines
IEC 61400-13	Wind Turbines – Part 13: Measurement of mechanical loads
IEC 61400-14	Wind Turbines – Part 14: Declaration of apparent sound power level and tonality values

IEC 61400-21-1	Wind energy generation systems – Part 21-1: Measurement and assessment of electrical characteristics – Wind Turbines
IEC 61400-21-2	Wind energy generation systems – Part 21-2: Measurement and assessment of electrical characteristics – Wind Power Plants
IEC TR 61400-21-3	Wind energy generation systems – Part 21-3: Measurement and assessment of electrical characteristics – Wind Turbine harmonic model and its application
IEC 61400-21-1	Wind energy generation systems – Part 21-1: Measurement and assessment of electrical characteristics – Wind Turbines
IEC 61400-22	Wind Turbines Part 22 Conformity Testing and Certification
IEC 61400-23	Wind Turbines Part 23 Full-Scale Structural Testing of Rotor Blades
IEC 61400-24	Wind Turbines Part 24 Lightning Protection
IEC 61400-25-1	Wind energy generation systems – Part 25-1: Communications for monitoring and control of wind power plants – Overall description of principles and models
IEC 61400-25-2	Wind energy generation systems – Part 25-2: Communications for monitoring and control of wind power plants – Information models
IEC 61400-25-3	Wind energy generation systems – Part 25-3: Communications for monitoring and control of wind power plants – Information exchange models
IEC 61400-25-4	Wind energy generation systems – Part 25-4: Communications for monitoring and control of wind power plants – Mapping to communication profile
IEC 61400-25-5	Wind energy generation systems – Part 25-5: Communications for monitoring and control of wind power plants – Compliance testing
IEC 61400-25-6	Wind energy generation systems – Part 25-6: Communications for monitoring and control of wind power plants – Logical node classes and data classes for condition monitoring
IEC 61400-25-71	Wind energy generation systems – Part 25-1: Communications for monitoring and control of wind power plants – Configuration description language
IEC 61400-26-1	Wind energy generation systems – Part 26-1: Availability for wind energy generation systems
IEC 61400-27-1	Wind energy generation systems – Part 27-1: Electric Simulation models – Generic models
IEC 61400-27-2	Wind energy generation systems – Part 27-2: Electric Simulation models – Model validation
IEC TS 61400-29	Wind energy generation systems – Part 29: Marking and lighting of wind turbines
IEC TS 61400-30	Wind energy generation systems – Part 31: Safety of wind turbine generators – General principles for design

IEC TS 61400-31	Wind energy generation systems – Part 31: Siting risk assessment
IEC 61400-50	Wind energy generation systems – Part 50: Wind measurement – Overview
IEC 61400-50-1	Wind energy generation systems – Part 50-1: Wind measurement – Application of meteorological mast, nacelle and spinner mounted instruments
IEC 61400-50-2	Wind energy generation systems – Part 50-2: Wind measurement – Application of ground-mounted remote sensing technology
IEC 61400-50-3	Wind energy generation systems – Part 50-3: Use of nacelle-mounted lidars for wind measurements

B. TRANSFORMERS

The system design and redundancy/capacity margin in EHV Power Transformer should be such that even during outage of one power Transformer, power equivalent to 50% of project capacity (minimum) can be evacuated at any time to Grid from Main pooling MV switchgear. In case bidder supply same power transformer as common mandatory spare which can be used as one to one replacement of transformers in service, then it shall also be accounted as redundancy. Bidder can adopt any of the following criteria or better for EHV power transformers:

1. 1x100%
2. 2x50%

- 3. 3 x 33.4 % (Min) or with higher number of transformer combinations.

- The Tie Transformer specification, rating, configuration, dimension, and foundation design shall be as per “Standard Technical Specifications of Transformer(s) for Pooling Station” issued by CEA. If the transformer rating calculated as per above criteria comes out to be non-standard size with respect to the “Standard Technical Specifications of Transformer(s) for Pooling Station”, then next higher standard size shall be adopted. However, if the Tie Transformer rating is less than 100 MW, then non-standard size in multiple of 5 MVA or any standard size shall be acceptable. Moreover, there is no mandatory requirement of 3-winding transformer upto 160 MVA.

- Additionally, if Projects corresponding to award capacity are setup at more than one location within same state, then common spare tie transformer which is interchangeable for all Projects can be considered. In such case, foundation and layout of power transformers for each Project shall be compatible to the offered spare transformer (largest size).

Standard	Description
IS 2026 / IEC 60076 (All Parts)	Specification of Power Transformers
IS 335 / IEC 60296	Insulating oil
IS 3639	Fittings and Accessories for Power Transformers
IS/IEC 60529:2001	Degrees of protection provided by enclosures (IP CODE)
IS – 8468 (Part 1)	Tap – Changers (Part 1) Performance Requirements and Test Methods (First Revision)
IS - 1866	Mineral Insulating Oils in Electrical Equipment Supervision and Maintenance Guidance
IS - 6792	Insulating Liquids - Determination of the Breakdown Voltage at Power Frequency - Test Method (Second Revision)
IS - 3347	Dimensions for Porcelain Transformer Bushings for Use in Lightly Polluted Atmospheres
IS - 1271	Electrical Insulation – thermal Evaluation and Designation
IS/IEC- 60137	Insulated Bushings for Alternating Voltages above 1000 V
IS – 2705 Part – 1	Current transformers specification
IS - 4201	Application Guide For Current Transformer
IEC-60214-1	Tap-changers - Part 1: Performance requirements
IEC/IEEE 60214-2	Tap-changers - Part 2: Application guidelines

C. CABLE

The cables shall be adequately insulated for the voltage required and shall be suitably colour coded for the required service. Sufficient margin should be taken into consideration while selecting the current carrying capacity of the cables with due consideration of ageing, derating due to various conditions of short circuit. The Bidder shall furnish the size and rating of cables including sizing calculations during detailed engineering. As a minimum requirement, the design, materials, and method of AC cables shall conform to the following standards shall be complied with:

Standard/Code	Description
IS:7098 (Part -I)	Cross linked polyethylene insulated PVC sheathed cables for working voltages upto and including 1100V.
IS:7098 (Part -II)	Cross linked polyethylene insulated PVC sheathed

Standard/Code	Description
	cable for (Part -II) working voltage from 3.3 kV upto & including 33 kV.
IS :1554 – I	PVC insulated (heavy duty) electric cables for working voltages upto and including 1100V.
IS : 3961	Recommended current ratings for cables
IS : 3975	Low carbon galvanised steel wires, formed wires and tapes for armouring of cables.
IS : 5831	PVC insulation and sheath of electrical cables.
IS : 8130	Conductors for insulated electrical cables and flexible cords.
IS : 10810	Methods of tests for cables.
ASTM-D -2843	Standard test method for density of smoke from the burning or decomposition of plastics.
ASTM-D-2863	Standard method for measuring the minimum oxygen concentration to support candle like combustion of plastics.
IEC-754 (Part-I)	Tests on gases evolved during combustion of electric cables.
IEC-332 Part-3:	Tests on electric cables under fire conditions. Tests on bunched wires or cables (Category-B).
IEEE-383	Standard for type test of Class IE Electric Cables
IS : 4905	Methods for random sampling.
IS : 10418	Specification for drums for electric cables.

D. LT SWITCHGEAR

Standard/Code	Description
IEC 61439-1	Low-voltage switchgear and control gear assemblies - Part 1: General rules
IEC 61439-2	Low-voltage switchgear and control gear assemblies - Part 2: Power switch gear and control gear assemblies
IEC 60947-1 / IS 13947	Low-voltage switch gear and control gear - Part 1 : General rules
IEC 60947-2 / IS 13947	Low-Voltage Switch gear and Control gear: Circuit Breakers
IEC 60947-3 / IS 13947	Low voltage switchgear and control gear: Part 3 Switches, disconnectors, switch-disconnectors and fuse combination units
IEC 60947-4-1/ IS13947	Low-voltages witch gear and control gear Part 4 - 1 : Contactors and motor - starters - Electro mechanical contactors and motor- starters
IEC 60947-5-1/	Low-voltage switchgear and control gear - Part 5-1:

IS13947	Control circuit devices and switching elements - Electro mechanical control circuit devices
IEC 62052-11	Electricity metering equipment (a.c.) -General requirements, tests and test conditions - Part 11 : Metering equipment
IEC 61869 / IS 2705	Instrument Transformers
IS 3043	Code of practice for earthing
IEC 60255	Measuring relays and protection equipment - Part1: Common requirements

E. HT SWITCHGEAR

Standard/Code	**Description**
IS / IEC 62271-1	High Voltage Switchgear and Control gear - Part 1: Common Specifications
IS/IEC 62271-100	High Voltage Switchgear and Control gear - Part 100: AC Circuit Breakers
IS/IEC 62271-102	High Voltage Switchgear and Control gear - Part 102: AC Disconnectors and Earthing Switches
IS/IEC 62271-200	High Voltage Switchgear and Control gear - Part 200: AC Metal Enclosed Switchgear and Control gear for Rated Voltages Above 1 kV and Upto and Including 52kV
IEC 61869	Instrument Transformers
IS 3231 / IEC 60255	Electrical relays for power systems protection
IEC 60255	Measuring relays and protection equipment
IEC 61850	Communication networks and systems for power utility automation
IEC 61131-3	Programmable controllers -Part3: Programming languages
IS 9385 / IEC 60282	High voltage fuses
IS 9431 / IEC 60660	Indoor post insulators of organic material for systems with nominal voltages greater than 1000 V up to and including 300 kV
IEC 60099 - 4	Surge arresters - Part 4: Metal-oxide surge arresters without gaps for A.C. systems
IS 3070-3 / IEC 62305	Lightning Arresters for Alternating Current Systems - Part 3: Metal Oxide Lightning Arresters Without Gaps
IEC 62052-11	Electricity metering equipment (A.C.) - General requirements, tests and test conditions - Part 11: Metering equipment
IEC 62053	Electricity metering equipment (A.C.) - Particular requirements

F. EARTHING SYSTEM

Standard/Code	Description
IS 3043, 2018	Code of Practice for Earthing
IEC 62561-2	Requirements for conductors and earth electrodes
IEC 62561-7	Requirements for earthing enhancing compounds
IEEE 80	IEEE Guide for Safety in AC Substation Grounding
IEEE-3003.1:2019	Recommended Practice for System Grounding of Industrial & Commercial Power Systems
IEEE 142	IEEE Recommended Practice for Grounding of Industrial and Commercial Power Systems

G. UNINTERRUPTED POWER SUPPLY

Standard/Code	Description
IEC 62040-1 / IS16242 -1	Uninterruptible power systems (UPS) - Part 1: General and safety requirements for UPS
IEC 62040-2 / IS 16242 -2	Uninterruptible power systems (UPS)-Part2: Electromagnetic compatibility (EMC) requirements
IEC 62040-3 / IS 16242-3	Uninterruptible power systems (UPS) - Part 3: Method of specifying the performance and test requirements

H. BATTERY CHARGER

Standard/Code	Description
IEC60896-22:2004	Stationary lead-acid batteries - Part 22: Valve regulated types-Requirements
IEC60896-21:2004	Stationary lead-acid batteries - Part 21: Valve regulated types-Methods of test
IS1652, IEC60896-11	Specification for stationary cells and batteries, lead acid type (with plant positive plates)
IS8320	General requirements and methods of tests for lead acid storage batteries.
IS 15549	Stationary Regulated Lead Acid Batteries
IEC 60623/ IS 10918	Specification for vented type Nickel Cadmium Batteries.
IEC 60993	Electrolyte for vented Nickel-Cadmium cells

I. LIGHTNING PROTECTION DESIGN REQUIRMENT

Standard/Code	Description

IS/ IEC 62305	PROTECTION AGAINST LIGHTNING
UL-467	Grounding and Bonding Equipment
IEC 62561-7	Requirements for earthing enhancing compounds
CEA regulations for electrical safety 2023	
National Electrical Code of India 2023	

J. 132 /220 kV Switchyard Equipment

Standard/Code	Description
IEC62271-100	High Voltage Switchgear and Control gear - Part 100: AC Circuit Breakers
IEC60376, IS 13072	Specification of technical grade sulfur hexafluoride (SF6) for use in electrical equipment
IEC62271-102	High Voltage Switchgear and Control gear - Part 102: AC Dis connectors and Earthing Switches
IEC61869	Instrument Transformers
IS 2099, IEC 60137	Bushings for alternating voltages above 1000 Volts
IS 2544, IEC 62231	Porcelain post insulators for systems with nominal voltage greater than 1000 Volts
IS 335, IEC60296	Insulating oil
IS/IEC60034	Rotating electrical machines
IS 996, IEC 60034	Single-phase AC industrial motors for general purpose
IS 15086	Surge Arrestors
IEC60099-4	Surge arresters - Part 4: Metal-oxide surge arresters without gaps for A.C. systems

K. Power Transformer (at Pooling Substation)

Standard	Description
IS2026, IEC60076 (All Parts)	Specification of Power Transformers
IEC60137	Bushings for alternate voltage above 1000V
IS – 8468 (Part 1)	Tap – Changers (Part 1) Performance Requirements and Test Methods (First Revision)
IS335, IEC60296	Insulating oil
IS3639	Fittings and Accessories for Power Transformers
IEC-60214-1	Tap-changers - Part 1: Performance requirements and

Standard	Description
	test met
IEC/IEEE 60214-2	Tap-changers - Part 2: Application guidelines
IS - 1866	Mineral Insulating Oils in Electrical Equipment Supervision and Maintenance Guidance
IS - 6792	Insulating Liquids - Determination of the Breakdown Voltage at Power Frequency - Test Method (Second Revision)
IS - 3347	Dimensions for Porcelain Transformer Bushings for Use in Lightly Polluted Atmospheres
IS - 1271	Electrical Insulation – thermal Evaluation and Designation
IS/IEC- 60137	Insulated Bushings for Alternating Voltages above 1000 V

L. Power and control cables

IEC 60228 / IS8130	Conductors of Insulated Cables
IEC 60502	Power cables with extruded insulation and their accessories for rated voltages from 1 kV (Um = 1,2 kV) up to 30 kV (Um = 36 kV) –
IS:7098 (Part -I)	Cross linked polyethylene insulated PVC sheathed cables for working voltages upto and including 1100V.
IS:7098 (Part -II)	Cross linked polyethylene insulated PVC sheathed cable for (Part -II) working voltage from 3.3 kV upto & including 33 kV.
IS :1554	PVC insulated (heavy duty) electric cables for working voltages upto and including 1100V.
IS : 8130	Conductors for insulated electrical cables and flexible cords.
IS : 10810	Methods of tests for cables.
IS : 3961	Recommended current ratings for cables
IS : 3975	Low carbon galvanised steel wires, formed wires and tapes for armouring of cables.
IEC 60332	Tests on electric and optical fiber cables under fire conditions

7.18 OPERATION & MAINTENANCE CHECKS

The successful bidder shall carry out O&M checks at regular intervals viz. daily, weekly, monthly, quarterly, half yearly and yearly basis during warrantee period and O&M period for which details of such checks shall be furnished along with the bid.

7.19 ELECTRICAL SYSTEM FOR INTERFACING WITH THE GRID

Each WEG will be connected to grid through unit transformer of suitable capacity and voltage ratio, internal overhead line, common control & metering station(s),if required / common EHV sub-station(s) at Windfarm up to grid interconnection point., external overhead line up to the grid sub-station of SEB / DISCOM's complete with all associated switch gears and materials including the requirement of reactive power management and data communication equipment so as to meet the requirements of State Load Dispatch Centre (SLDC) and State / applicable Grid Code including Connectivity requirements System needs to be designed looking to the requirement for scheduling & forecasting.

Bidder shall design electrical system in accordance with the CEA Safety Regulations 2023, Chief Electrical Inspector General (CEIG) requirements, Standard Practices of DISCOM's Code of Practices issued by Bureau of Indian Standards (BIS).
Bidder shall submit complete scheme for grid interfacing & interconnection for Windfarm at each site including schematic diagrams and the basis of design & brief specifications of equipment, materials and installations along with the offer. Additionally, all these documents shall be paginated, tabulated and mentioned at a single place.

All equipment / materials shall be suitable for the site conditions and shall be manufactured strictly in accordance with latest relevant Indian Standards published by BIS and all similar materials and removable parts shall be uniform and interchangeable with one and another. Adequate preventive measures shall be taken against hostile climatic conditions like temperature, corrosion, salinity, humidity, sand storms, wind pressure etc.

Electrical installations shall be constructed strictly according to the following:

I. Relevant Code of Practices issued by Bureau of Indian Standards (BIS).

II. Electricity Act, 2003.

III. Statutory requirements by Chief Electrical Inspector (CEI) of the State.

IV. IEGC notified by CERC

V. Standard Practices followed by SEBs / DISCOMs

VI. Central Electricity Authority (CEA) Guidelines.

VII. Central Board of Irrigation and Power (CBIP) Manuals.

VIII. Rural Electrification Corporation (REC) Manuals.

Any item not specifically mentioned but found essential for successful operation of electrical system with full safety according to statutory requirements shall be included in scope of work of the bidder.

Unit substation area of each WEG shall be provided with fencing of 1800 mm height,

7.20 MCCB / ACB

MCCB / ACB provided at the power panel of each WEG shall be capable of meeting requirement of full load current continuously and handling the making and breaking current etc.

7.21 CABLES

Power cables for interconnection from generator terminals to power panel; power panel to step up transformer and all other cables used in the Windfarm shall fulfill requirement of IEC / BIS codes with a minimum rated voltage of 1100 / 600 V. Core insulation shall be colour-coded or identified by wrapping colour tapes. The bidder shall furnish size, number of cores and rating of the cables in the bid. All XLPE power cables, AL / Copper cables as per IS-7098 Part 1 & 2.

7.22 SOURCES OF COMPONENTS

The bidder shall furnish the make and source of various components of the WEG as per format given in the bidding document. List of preferred suppliers of bought out items are given at Annexure–VI.

7.23 DESIGN IMPROVEMENT

The bidder may suggest for improvement in specifications, if any, of equipment which could yield in better performance of machines. Such suggestions could be discussed based on merits and modifications in the specifications could be considered, if found appropriate.

If any of the agreed change is such that it affects completion schedule, the parties may agree for revised completion schedule before the bidder proceeds with the change.

7.24 TEST / INSPECTION

Refer Clause No. 4.26 of Section-IV (Special Conditions of Contract for Supply, Erection & Commissioning) of the Tender document.

7.25 STANDARDS & STATUTORY REQUIREMENTS

The WEGs and other equipment should conform to the relevant International / Indian Standards and shall meet all the CEA / CEIG and local statutory requirements. The Bidder shall furnish the standards adopted by them.

7.26 TECHNICAL INFORMATION TO BE PROVIDED BY THE CONTRACTOR

The successful bidder shall be required to provide three copies of the following information, drawings and documents, within two weeks of the placement of order:

i) Soil test report indicating safe bearing capacity including soil resistivity for earthing system design.

ii) Concrete design mix report.

iii) Batch test certificate of reinforcement steel and steel used for towers.

iv) Equipment drawings and instruction manuals of original equipment manufacturer for major / critical equipment.

v) Final Micro -siting plan of WEGs

vi) Windfarm layout drawings indicating WEGs, roads, overhead lines, sub-stations, buildings etc.

vii) Copies of type test certificates, routine tests and acceptance tests of major items of WEG, transformers and CBs.

viii) Technical particulars and general data of WEGs, Generator, Rotor, Tower, Yawing system, Brake system, Gear system (in case of geared machines), Hub, Nacelle, Main shaft, Main bearing, Coupling, Power panel, Control system, Power factor compensation (if required), AC-DC-AC convertor (if required).

ix) Technical particulars of transformers indicating losses, circuit breakers, current transformers, potential transformers and cables.

x) Description of erection procedure.

xi) Specification of anti-corrosion treatment.

xii) PERT / GANTT diagram showing broad time schedule of supply, erection and commissioning.

xiii) Protection scheme of unit substation and WEG.

xiv) G A drawing of entire electrical system for grid interfacing & Interconnection.

xv) Foundation drawings for towers.

xvi) SLD of the evacuation system with conductor size etc like unit substation, 33kV internal overhead line, common group control and metering station, if required, common EHV substation, external overhead line up to the grid substation of the sub-station

xvii) Operation & maintenance and troubleshooting manual including drawing for local control system.

7.27 STATUTORY AND OTHER REGULATIONS

All works shall be done as per statutory Acts, Rules and Regulations of the Central / State Govt. and our own Authorities or as applicable.

7.28 PROTECTION AGAINST HIGH TEMPERATURE, CORROSION, DUST STORMS ETC.

WEGs need to be suitably protected against high temperature and dust storms. All

equipment shall be designed to withstand high temperature and dust storms of the area where the WEGs will be installed.

All materials, components and equipment shall function and work properly during the lifetime without deterioration due to the aggressive soil, climatic conditions, cyclones and dust loading. Bidder shall submit protection methods / precautions to be adopted for the satisfactory Performance of WEGs for such conditions, without fail.

7.29 CENTRAL MONITORING AND CONTROL SYSTEM (CMCS) / SCADA

At the project site CMCS on sharing basis with proper software such as SCADA shall be provided. This should be complete with all hardware and software for displaying, recording; monitoring and control of operational parameters of all WEGs. Necessary interface facilities shall be provided. “Supply of Central Monitoring & Control System (CMCS) complete in all respect with necessary software, hardware, cables etc”. The system is to be designed in the manner that the generations, the relevant details& operational parameters sourced from CMCS would be made available to owner on real time basis at its OWNER / Consultant designated office through in house customer portal via internet for required analysis and report preparation / forecasting and onward transmission to meet the requirements of State Load Dispatch Centre (SLDC).

Electrical supply from the grid for CMCS room shall be arranged by the contractor which shall meet all electrical load requirements such as lighting, air conditioning, SCADA system, battery charging etc. There shall be an un-interrupted power supply (UPS) system of appropriate capacity for CMCS

SCADA connectivity as above shall be completed on or before completion of stabilization period

Communication Connectivity of pooling station to MSETCL Grid for the purpose of scheduling & forecasting as per their requirement.

Contractor shall take all necessary measures & carryout necessary works for monitoring all the data related to the windmill from the centralised OWNER’s monitoring dash board located at HQ in Mumbai. Contractor shall Provide necessary software integrations for securely transferring data from field location or from cloud provisioned by vendor to the OWNER cloud, in the OWNER’s compatible file & format. All the required hardware, fire walls, software and other licences for transferring data from CONTRACTOR's SCADA to OWNER's dashboard shall be in the scope of the Contractor and Contractor shall also assist OWNER’s IT team for integration. Rates offered by the Bidder is deemed to be inclusive of all works as stated above and nothing extra shall be paid.

7.30 WEG FOUNDATION AND OTHER CIVIL WORKS

A) Scope of Work

The scope of work under civil work shall include:

a. Land development for the Windfarm.

b. Conducting contour survey and soil testing.

c. Foundations of WEGs.

d. Switchyard civil works including foundations of step-up transformers & HT switchgear kiosk and structural steel.

e. Room for housing WEG local control panels (applicable for WEGs with lattice type tower).

f. Construction of suitable control room for housing the CMCS equipped with air conditioner on shared basis. One room with basic amenities shall be dedicated for OWNER's officials in control room who will visit the site.

g. Office cum stores building on sharing basis.

h. Windfarm approach road and internal roads on sharing basis

i. Basic amenities for staff on sharing basis.

B) Design Criteria

All civil, structural and architectural work shall be designed, supplied and constructed as per latest editions of Indian Codes and Standards with addendums and supplements issued by BIS. Wherever Indian Standards are not available / formulated, applicable BS or International Standards shall be followed. In case of ambiguity between codes, specifications and drawings, the more stringent of them shall govern.

The Bidder shall conduct geo-technical investigation and decide on various design parameters he proposes to adopt for foundation design. No commercial implications for any variations in this regard during execution shall be entertained.

All structures and portions thereof shall be analyzed and designed to sustain various loads and combinations thereof, conforming to the latest revision of applicable Indian Standards, specifications, engineering practice and other technical requirements. All structures shall be designed to sustain worst combination of dead loads plus assigned live loads, equipment, wind, seismic, temperature or other loads it is being subjected to.

However, factors of safety given in relevant Standards and codes shall also be taken care of. Contractor shall provide a certification from IIT / NIT / SERC (Structural Engineering Research Centre of CSIR) about the stability of the civil structure design.

Minimum factors of safety against overturning, sliding and hydrostatic uplift adopted for design shall be mentioned by the bidder in the bid.

Stability of structures shall be investigated for loading conditions during construction. However, factors of safety given in relevant Standards and codes shall also be taken care of.

C) Materials & Job Specifications

All materials which may be used in the work shall be of standard quality manufactured by renowned concerns conforming to Indian Standards or equivalent, shall have IS mark as far as possible, unless otherwise approved by Engineer In-charge. The Contractor shall get all the materials approved from Engineer In-charge prior to use. The Engineer In-charge shall have right to determine whether all or any of the materials are suitable. Any materials procured or brought to site and not conforming to specifications and satisfaction of the Engineer-in-charge shall be rejected and the Contractor shall have to remove the same immediately from site at his own expense and without any claim for compensation due to such rejection.

Providing & operating necessary measuring and testing devices and materials including all consumables are included in the scope of work. No separate measurement or payment for testing the work shall be made. The rates quoted for various items shall be deemed to include the cost of such tests which are required to ensure achievement of specified qualities.

D) Detailed Contour Survey & Soil Investigation of the Site(s)

A detailed contour survey with 2 m contour interval in case of uneven land and at 5 m interval in case of even land shall be carried out and drawings prepared by the EPC Contractor. Boundary stones shall be fixed for identification of land along the border of the area. The EPC Contractor shall also be responsible for detailed soil investigation at all WEG locations for the purpose of foundation design.

E) Land Development for site(s) activities

The EPC Contractor shall be responsible for making the site ready by clearing of bushes, felling of trees (if required), leveling of ground (wherever required) etc. for commencing the project. All necessary approvals in this regard shall be in Contractor's scope.

F) WEG Tower Foundation

i) General

The work shall comprise of design and construction of wind turbine foundations as per locations indicated on the final layout drawings prepared after Micro siting.

The successful bidder shall furnish sources of steel (Reinforcement and structural), cement and concrete ingredients i.e coarse aggregate, fine aggregate, water and admixture. The foundation design shall suit the local soil conditions and the materials used viz. cement, reinforcement steel etc. shall conform to relevant standards. Bidder shall furnish the safe bearing capacity of soil, concrete mix design calculations, and detailed construction drawing for the foundation for the WEGs to OWNER before proceeding with the work. The Contractor shall mention the survival wind speed considered for design of WEG Tower Foundations.

ii) Excavation, back filling and stone pitching

The Contractor shall carry out all excavation works in accordance with the dimensions and levels indicated on the drawings.

The excavated material under above categories shall be kept separately, so that good quality material can be used, as required.

Excavation shall be carried out in accordance with the guidelines given in IS: 3764-1992 "Safety code for excavation work".

Blasting, if required, shall be carried out strictly in accordance with IS: 4081-1986 "Safety code for blasting and related drilling operations" and the latest State laws, regulations and rules. Blasting, if done, shall at all times be carried out under the supervision of fully qualified, experienced and licensed supervisors.

If any damage of any kind occurs, the Contractor shall be solely responsible for such damages or any claims that may arise there from, and shall, at his own expense, carry out repairs or restoration as the Site Engineer may direct.

The Contractor shall obtain written permission of the Site Engineer for each location where the Contractor wants to use explosives. Approvals to use explosives to be arranged by bidder without any time & cost implication to OWNER.

Back filling of foundation shall be carried out as shown on the drawings or directed by the Site Engineer with suitable materials. Filling materials shall be spread, leveled and thoroughly compacted in layers not more than 20 cm thick or as directed by Site Engineer. Each layer shall be separately compacted to achieve the required state of compaction to be confirmed by FDD test.

Wherever shown on the drawings / directed by Site Engineer, dry stone pitching shall be placed at suitable locations to protect the slopes the area to be pitched shall be trimmed and any loose material re-compacted. Pitching shall be laid on a bed of approved granular material.

Alternatively, for erosion control, stone pitching / soil filled geocell with vegetative cover may be adopted. For stone pitching, the area to be pitched shall be trimmed and any loose material re-compacted. Pitching shall be laid on a bed of approved granular material. For soil filled geocell with vegetative cover following technical specification may be followed.

Technical Specifications for Geocells

(a) Material composition: High density polyethylene (HDPE) with a density of minimum 0.92 g / cc (tested as per ASTM D 1505).

(b) Carbon black content: 1.50-2 % by weight (tested as per ASTM D 1603).

(c) Cells with nominal opening of 450 cm2 to 1250 m2.

(d) The polyethylene strip shall be perforated with horizontal rows of maximum 10 mm diameter holes. Cell perforations area shall not exceed 12% of cell surface area.

(e) Creep rupture strength (ASTM D2990): Creep rupture load at 10000 hours shall be 1KN minimum obtained from the 95% prediction interval at 10000 hrs considering a logarithmic time / creep rupture model.

f) Cell depth (+ / -3%): 75 mm.

(g) Cell weight: min 0.4 kg / m2 for 75 mm cell depth (calculated as section weight without packaging divided by the expanded section area as per suppliers' specifications).

(h) Sheet wall thickness: min 1.3 mm (tested as per ASTM D 5199)

(i) Seam peel strength: min 400 N per 75 mm joint (tested as per EN ISO 13426 Method-B)

(j) Environmental stress – Cracking Resistance (ESCR): min 4000 hrs (tested as per ASTM D 1693 for any standard style)

(k) Seam hang strength: min 7 days (tested as per ASTM D 751 for any standard style).

Filling Material:

Geo cell shall be filled with locally available soil. Vegetation shall be grown over it to make the erosion control more effective. f) Cell depth (+ / -3%): 75 mm

iii) Reinforced Concrete & Plain Cement Concrete Works

The works shall consist of making and placing concrete for reinforced concrete works in conformity with the drawings or in accordance with the written instructions of the Site Engineer.

All materials, workmanship and testing shall comply with the latest revisions of the relevant Indian Standards Codes of Practices referred to in these specifications and notes given on the drawings.

Unless otherwise stated in these specifications, the IS: 456-2000 "Code of practice for Plain and Reinforced Concrete", and the standards referred to in this code of practice are applicable to reinforced concrete work.

Water used for all purposes throughout the works shall be according to IS: 456-2000.

Potable water is generally satisfactory but it shall be tested prior to use in works and confirm to the permissible limits outlined as per IS: 456-2000, when tested in accordance with IS: 3024-1964. The pH value of water shall not be less than 6.

Coarse aggregate shall be sampled and tested according to IS: 456-2000 and IS: 2386 (part 1 to 8)-1963 (reaffirmed 1990). To be acceptable, the results shall fall within the grading indicated in IS: 383-1990. Coarse aggregates shall be obtained from natural sources crushed or uncrushed or combination thereof from approved quarries. It shall be hard, strong, dense, durable, clean and free from foreign matters. It shall be roughly cubical in shape and shall comply with IS: 383-1999. Maximum quantities of deleterious materials in the coarse aggregate shall not exceed the limits laid down in IS: 383-1999.

Single sized coarse aggregates shall be graded as specified in IS: 383-1990. Maximum size of coarse aggregate shall be 40 mm for Plain Cement Concrete and 20 mm for Reinforced Cement Concrete.

Fine aggregates shall be sampled and tested according to IS: 456-2000 and IS: 2386 (part 1 to 8) -1963 (reaffirmed 1990). To be acceptable the results shall fall within the grading zones I-III laid down in IS: 383-1990 (reaffirmed 2002).

Fine aggregates shall be hard, durable, clean and free from adherent coating and organic matter and shall not contain clay. Sand shall not contain harmful impurities such as iron, pyrites, coal particles, lignite, mica shell or similar laminated and other impurities which might affect the durability of concrete or attack the reinforcement.

When tested as per IS: 2386 (part 1 to 8) 1963 (reaffirmed 1990) fine aggregate shall not exceed the permissible quantities of deleterious materials outlined in IS: 383-1990. It shall be obtained from natural sources such as Natural River or pit sand, crushed stone sand or mixture of these alternatives.

The Contractor shall perform trial mixes and preliminary tests of each class of concrete. The selection criteria will be compressive strength, workability and surface finish and shall follow the procedures outlined in IS: 456-2000.

Concrete tests shall be carried out before undertaking the works according to the composition selected for the purpose of the concrete works.

The concrete shall be mixed in a mechanical mixer. The mixing shall be according to IS: 4926-2003.

Concreting in unfavorable weather will not be permitted. Precautions outlined in IS: 7861 (part 1)-1974 (reaffirmed 2011) and IS:7861 (Part-2) 1981(reaffirmed 2011) shall be followed.

All concrete surfaces shall be maintained in moist condition and protected against harmful effects of weather, for at least for two weeks of placing.

iv) Shuttering & Formwork:

The works shall consist of supply, fabricating, placing and removing all temporary forms for shaping of concrete, together with all temporary

construction required to support such forms. The Contractor shall be responsible for the correct dimensions, alignment, leveling, cleaning and oiling. All shuttering shall be approved by Engineer-in- charge but it will not dilute in any way Contractor's responsibility.

Shuttering shall not be removed before the concrete is sufficiently set and hardened.

v) Steel Reinforcement

The work shall consist of supplying, cutting, bending, placing and fixation of reinforcement bars of the grade, type and size specified on the drawings. Unless otherwise stated in this specification the IS: 2402-1963 (reaffirmed 2001) shall be applied to this work.

Reinforcement shall be high strength deformed bars grade Fe-415, Fe-500 as mentioned in the drawing, confirming to IS: 1786-1985 (reaffirmed 2004). The Contractor shall furnish test documents of steel reinforcements to be used in the works or get required tests done at an approved laboratory.

vi) Anchor Plates / Anchor Bolts / Stubs / Circular Embedment

Anchor plates / Anchor Bolts / Stubs / Circular Embedment along with necessary templates will be provided by the wind electric generator supplier. The Contractor shall be responsible for correct placing and fixation in accordance with dimensions, levels and specifications within the tolerances given on the drawings.

vii) P.V.C Tubing

P.V.C tubing for laying of cables shall be provided as per diameters shown on the HT yard and PSS drawings. P.V.C tubing shall be of Class-3 and suitable for a working pressure of 6 kg / cm^2. The P.V.C tubing shall comply IS: 4984-2000 (reaffirmed 2002) and IS: 7834 -1987(reaffirmed 2003). Solvent cement shall be used for jointing of P.V.C. tubing.

viii) Soil Investigation

Records of all soil investigations shall be kept as a part of final project data. Soil investigations shall be carried out in compliance with IS: 1892-1979 (reaffirmed 2002), IS: 1498-1970 (reaffirmed 2007), IS: 2720 (part 28)-1974 (reaffirmed 2010), IS:2131-1981 (reaffirmed 2002BB) or any other pertinent Indian Standard or recognized specification to the approval of the Site(s) Engineer.

G) Control Cabin

In case of lattice type towers for the WEGs, it is essential to provide control cabin for housing the switchboard and local control panels. The control cabin shall be designed to suit the soil conditions. The size of the cabin shall be adequate to

house the equipment with required clearances and operating space as required by CEA / CEIG. Cabin shall be constructed by using good quality stones / bricks. The wall thickness shall be minimum 200 mm. Roof slab shall be of RCC as per standard practice. Door, Window, Ventilators shall be of metal construction and painted with 2 coats of paint over two coats of suitable primer. Cable trench as required shall be provided. The Contractor shall furnish the plan and construction details of the control cabin, in the bid, in case the bid is for WEGs with Lattice Towers.

H) Switch yard civil works

Switchyard civil work includes step up transformer plinth, HT Switchgear kiosk plinth, two pole / 4 pole structure foundation, earth pits, metal spreading curb wall in and around switchyard and fencing. The transformer / HT switchgear kiosk plinth shall be made of concrete or dressed stones masonry conforming to relevant standards. The height of transformer / HT Switchgear kiosk plinth shall be decided based on the requirement of ground clearance as per voltage of unit substation. It should also be Min. 300mm above HFL

Earth pit construction shall be of brick masonry with precast RCC (1:2:4) cover. The fencing of the switchyard shall be with GI chain link of 1800 mm height with MS Angle posts. The gate shall be made of steel of the same height as that of the fencing..

I) Building

For the operation & maintenance of Windfarm the Office cum control room building of suitable size (100 sq meter minimum) should be constructed as per relevant Indian Building Standards for common use. Contractor to provide necessary fire fighting facilities and first aid facilities in the Windfarm as per applicable standards and regulations.

Control room building shall comprise of the following:

- CMCS Room: This room shall house the CMCS and shall be sized suitably as per the requirements of the offered equipment. There should be adequate facilities for officers visiting on behalf of the Owner during their visit to the site which includes sitting arrangement, arrangement of water, electricity, Toilet, washroom, etc. The room shall be appropriately air- conditioned to maintain suitable temperatures for personnel & equipment in the building during all climatic conditions.

- Store room: A store room or storage space on sharing basis within the building of appropriate size for spares and consumables shall be provided in the building.

J) Approach Roads & Internal Roads

All the WEGS shall be accessible through all-weather approach roads and internal roads suitably for transporting the plant equipment, spares, cranes & other maintenance machinery. The bidder shall furnish the drawing of approach road / internal road taking into account geographical terrain of the area. Width of the carriageway shall be kept as 5.0 meters (Minimum) Extra width shall be provided at curves and hair pin bends. For all other minor roads, carriageway shall be of 3.75 m width. Roads shall be provided with proper roadside ditches, under drains and R.C.C pipe culverts as per site requirement to carry out the natural flow of water. Where ever necessary embankment and retaining wall shall be provided of adequate strength to sustain heavy vehicular movement.

SECTION–VIII

FORMS AND FORMATS

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BID RESPONSE SHEETS

CONTENTS

ANNEXURE

(To be submitted for each lot)

Bid Response Sheet No. 1

COVERING LETTER

To

The Procurement Leader CPO Mktg. Group-4
Bharat Petroleum Corporation Limited (BPCL)
"A" Installation, Sewree Fort Road,
Sewree (East), Mumbai, 400015

Sub: RFP Document No. XX Dated XX/XX/2023 for Works Contract on LSTK basis for Setting Up 25 MW (±5%) Windfarm Projects in the States of Madhya Pradesh (2 Nos.) and Maharashtra (2 Nos.).

Dear Sir,

We, the undersigned, have considered and complied with the "Instructions to Bidders" and have accepted the terms stipulated in the RFP documents for Works Contract on LSTK basis for Setting Up 25 MW (±5%) Windfarms in the States of Madhya Pradesh (2 Nos.) and Maharashtra (2 Nos.).

Also, we have familiarized ourselves with the, land surface and subsurface, metrological, climatological and environmental conditions which may exist in the installations area. In full cognizance and compliance with these aforesaid conditions and the regulations of local government authorities, we the undersigned do hereby offer "Works Contract on LSTK basis for Setting Up 25 MW (±5%) Windfarms in the States of Madhya Pradesh (2 Nos.) and Maharashtra (2 Nos.)". The work covered under the Bid shall be completed to the entire satisfaction of yourselves or your representative in conformity with the RFP documents at the prices accompanying this Bid.

It is a term of our Bid that the Project shall be handed over installed, interconnected, tested, commissioned and modified and shall achieve commissioning not later than 21 months from the date of LOI. This shall be the essence of the Contract between us.

We further agree and stipulate as follows:

1. Until the final Contract Documents are prepared and executed the RFP documents with any modifications, additions, deletions agreed with the Company(s) and your written acceptance thereof, shall constitute a binding Contract between us, upon terms contained in aforesaid documents and the Financial Proposal accompanying the Bid.

2. That the Company will not supply any material. In all respects we shall be fully self-sufficient in the performance of the work.

3. I / We understand that you are not bound to accept the lowest of the Bid you may receive.

4. I / We shall make available to the Company any additional information it may find necessary or require to supplement or authenticate the qualification statement.

5. I/ We undertake that in event of our offer for more than One lot doesn't meet the conditions of Bid Qualification Criteria, our offer for all lots may be summarily rejected by the Owner and I /We shall be solely responsible for this.

6. I / We acknowledge the right of the Company to reject our Bid without assigning any reason or otherwise and hereby waive, to the fullest extent permitted by applicable law, our right to challenge the same on any account whatsoever.

7. I / We understand that you may cancel the bidding process at any time and that you are neither bound to accept any Application that you may receive nor to invite the Applicants to Bid for the Project, without incurring any liability to the Applicants.

8. I / We further certify that in regard to matters relating to security and integrity of the country, we or any of our Associates have not been charge-sheeted by any agency of the Government or convicted by a Court of Law.

9. I / We further certify that no investigation by a regulatory authority is pending either against us or against our Associates or against our CEO or any of our directors / managers / employees.

10. I / We undertake that in case due to any change in facts or circumstances during the bidding process, we are attracted by the provisions of disqualification in terms of the provisions of this RFP; we shall intimate the Company of the same immediately.

11. We understand that the selected Bidder shall either be an existing Company incorporated under the Indian Companies Act, 1956 or Companies Act 2013.

12. I / We hereby irrevocably waive any right or remedy which we may have at any stage at law or howsoever otherwise arising to challenge or question any decision taken by the Company in connection with the selection of Applicants, selection of the Bidder, or in connection with the selection / bidding process itself, in respect of the above-mentioned Project and the terms and implementation thereof.

13. I / We agree and undertake to abide by all the terms and conditions of the RFP document.

14. We agree to keep the bidding valid for acceptance for a period of 120 days from the date of opening of the Technical Bid (hereinafter referred to as validity period) and the Bid shall not be withdrawn on or after the opening of bidding till the expiration of the validity period or any extension thereof.

15. We also undertake not to vary / modify the Bid during the validity period or any extension thereof.

16. We represent that we have fully satisfied ourselves as to the nature and location of the Project having in mind the general and local conditions and other factors incidental to the performance of the works and the costs thereof.

17. We further represent that from our own investigation of the Site of the Project we have fully satisfied ourselves as to the character, quality and quantity of surface and other conditions to be encountered in the performance of the works and we understand and represent that any failure to acquaint ourselves in respect of these matters and the other factors and conditions as set forth shall not relieve us from any responsibility for estimating properly the difficulty and cost of successfully performing the works.

18. We also acknowledge and accept that you shall not pay for any discontinuance or low performance rate resulting from malfunction of / or inadequacy of our equipment, instruments or personnel.

19. We agree to return to you all reports and technical data provided for our use in preparing this Bid and in the subsequent conduct of the works. We undertake that we will not use the same for any other work / purpose.

20. We further represent that we have familiarized ourselves with all the terms and provisions of the various parts of the bidding documents and that in making our Bid, we do not rely upon any representation made by any agent or employee of yourselves in respect of the terms of the bidding documents or the nature of the performance of the works.

21. We submit this Bid with the full understanding that our Bid fully complies with all the terms and conditions of the RFP/NIT documents including Bid evaluation criteria and that no deviation / exception to the RFP/NIT documents have been taken by us. We also agree that in case we have taken any exceptions / deviations to the RFP/NIT documents, the Company will be free to reject our offer on account of such exceptions / deviations.

Dated this _____ day of _____ 2023

Signature: _____

In the capacity of: _____

Duly authorized to sign Tenders for and on behalf of (Name & Address)

_____
_____
_____

Witness _____

(To be submitted for each lot)

Bid Response Sheet No 2

BIDDER'S GENERAL INFORMATION

To

The Procurement Leader CPO Mktg. Group-4
Bharat Petroleum Corporation Limited (BPCL)
"A" Installation, Sewree Fort Road,
Sewree (East), Mumbai, 400015

Sub: RFP Document No. XX Dated XX/XX/2023 for Works Contract on LSTK basis for Setting Up 50 MW (±5%) Wind Farms in the States of Madhya Pradesh and Maharashtra with minimum capacity of 25 (±5%) at single location, Cumulative capacity up to 100 MW (±5%).

1. Name of the bidder ----------

2. Status of Firm / Company: [Mark √] Proprietorship Firm / Partnership Firm / Company (Private or public)/Joint Venture

3. Number of years in the business ----------

4. Registered Office Address: ----------

   ----

5. Operational Address: ----------
   [If different from above] ----------
   ----

6. Telephone No. & Fax No.: ----------

7. E-mail ID & Website: ----------

8. Licensed capacity to manufacture:

Description of equipment	Size Capacity	Licensed Capacity	No. of units manufactured		
			Current Year	Last Year	Second Last Year

9. Plant Details:

   a) Location

   b) Description

10. Type of the equipment manufactured / supplied / installed during last 4 years.

Name of Equipment	Capacity / size / Model	Nos. manufactured / supplied / installed	Project to which supplies have been made	No. of orders in hand

11. Details of testing facilities available at works:

    a) List of testing equipment.

    b) Tests, which are carried out on items offered

    c) Details of the test organization available.

12. Describe Quality Control Organization, if any, and give the organization chart.

    a) Are goods offered subject to batch test, random sampling, or full 100% test for Quality check?

    b) Are tests carried out by factory employees or by a separate testing agency?

    c) Are independent quality Control Organization checks made and certificates issued?

13. ISO Certification [If any] [If 'Yes', Please Furnish Details]:

14. Nearest service center to offered

    Location with phone number

15. Names and contact details of three buyers to whom similar equipment have been supplied, installed and commissioned in the past to which reference could be made by us regarding the bidder's technical and delivery ability.

    ---

16. Schedule for furnishing technical data and certified drawings after receipt of orders.

Signature of Bidder

(To be submitted for each lot)

Bid Response Sheet No 3

LIST OF ENCLOSURES

To

The Procurement Leader CPO Mktg. Group-4
Bharat Petroleum Corporation Limited (BPCL)
"A" Installation, Sewree Fort Road,
Sewree (East), Mumbai, 400015

Sub: RFP Document No. XX Dated XX/XX/2023 for Works Contract on LSTK basis for Setting Up 25 MW (±5%) Windfarm Projects in the States of Madhya Pradesh (2 Nos.) and Maharashtra (2 Nos.).

Dear Sir,

We are enclosing the following documents as part of the bid:

(i) Power of Attorney of the signatory to the Bidding Document along with Board Resolution.

(ii) Documents showing Financial Situation Information for the last three years such as annual reports, profit and loss account, net worth along with information as sought in Bid Response Sheet No 4

(iii) Copy of Bidding Documents along with addendum / corrigendum signed in token of confirmation that Bid Documents are considered in full while preparing the bid and in case of award, work will be executed in accordance with the provisions detailed in Bid Documents.

(iv) Documentary Evidences showing the Bidder's claim of meeting Bid Eligibility Criteria as mentioned in Clause 3.5.

(v) EMD in the form of NEFT/BG.

(vi) Proof of payment towards Bid Fee.

(vii) Copy of agreement confirming evacuation of full capacity generated power from the Wind Power Project.

Signature of Bidder

(To be submitted for each lot)

Bid Response Sheet No 4

FINANCIAL INFORMATION

To

The Procurement Leader CPO Mktg. Group-4
Bharat Petroleum Corporation Limited (BPCL)
"A" Installation, Sewree Fort Road,
Sewree (East), Mumbai, 400015

Sub: Summary of Financial Statement

Ref: RFP Document No. XX Dated XX/XX/2023 for Works Contract on LSTK basis for Setting Up 25 MW (±5%) Windfarm Projects in the States of Madhya Pradesh (2 Nos.) and Maharashtra (2 Nos.).

Dear Sir,

This is to certify that..... *[Insert name of Bidder]* (The "Bidder") having its Registered Office at..... *[Insert Registered Address of the Bidder]* with PAN No. ..... *[Insert PAN No. of the Bidder]* is in the business of..... *[Insert briefly the nature of the business]*, has recorded the following turnovers and net worth:

Financial Year	Turnover (in INR)	Net Worth (in INR)	For Official Use Only
			Audited Statement Attached?
2020 -21			Yes / No
2021 -22			Yes / No
2022 -23			Yes / No

[Official seal of the Chartered Accountant]

Sincerely yours,

Date: [Insert Date]
Place: [Insert Place]

.....
[Insert Name of the Chartered Accountant]
[Insert address and contact information of the Chartered Accountant]

All figures indicated herein are arrived from the Audit Reports of the Bidder duly submitted to the Income Tax Department.

All figures indicated herein are calculated as per the guidelines mentioned in the Tender.

NOTES:

A. If the Bidder is seeking financial qualification based on the financial standing of the Parent Company, then a similar certificate summarizing the financial statement of the Parent Company shall be attached by the Bidder as a part of the Bid.

B. All audited statements to be attached by the Bidder as a part of the Bid.

(To be submitted for each lot)

Bid Response Sheet No 5(a)

LETTER OF AUTHORITY FOR ATTENDING SUBSEQUENT 'NEGOTIATIONS' / 'PRE-BID MEETINGS' / 'UN-PRICED BID OPENING' / 'PRICE BID OPENING'

[Performa for Letter of Authority for Attending Subsequent 'Negotiations' / 'Pre-Bid Meetings' / 'Un-priced Bid Opening' / 'Price Bid Opening']

Ref: Date:

To,

The Procurement Leader CPO Mktg. Group-4
Bharat Petroleum Corporation Limited (BPCL)
"A" Installation, Sewree Fort Road,
Sewree (East), Mumbai, 400015

Sub: RFP Document No. XX Dated XX/XX/2023 for Works Contract on LSTK basis for Setting Up 25 MW (±5%) Windfarm Projects in the States of Madhya Pradesh (2 Nos.) and Maharashtra (2 Nos.).

Dear Sir,

This is to certify that I, _____, am the duly authorized signatory appointed on behalf of my organization to submit this Bid. The authorization letter is attached herewith.

I agree to all the terms and conditions set forth in this RFP/NIT Document.

If awarded the job, the job work shall also conform to the terms and conditions, as well as specifications indicated in the RFP/NIT documents and as finally indicated by the Evaluation Committee.

I further certify that all the information provided in this document is accurate to the best of my knowledge.

Signature:	Designation:
_____	_____
Name:	Organization:
_____	_____
Address:	Phone:
_____	_____
Email:	
_____	

(To be submitted for each lot)

Bid Response Sheet No 5(b)

PROFORMA OF LETTER OF AUTHORITY

To,
The Procurement Leader CPO Mktg. Group-4
Bharat Petroleum Corporation Limited (BPCL)
"A" Installation, Sewree Fort Road,
Sewree (East), Mumbai, 400015

Sir,

RFP Document No. XX Dated XX/XX/2023 for Works Contract on LSTK basis for Setting Up 25 MW (±5%) Windfarm Projects in the States of Madhya Pradesh (2 Nos.) and Maharashtra (2 Nos.).

We _____ confirm that Mr. _____ (Name and address) as authorized to represent us to Bid, negotiate and conclude the agreement on our behalf with you against Bid Invitation No. _____ for hiring of services for _____.

We confirm that we shall be bound by all and whatsoever our said representative shall commit.

Yours Faithfully,

Signature: _____

Name & Designation: _____

For & on behalf of: _____

Note: This letter of authority shall be on printed letter head of the Bidder and shall be signed by a person competent and having the power of attorney (power of attorney shall be annexed) to bind such Bidder. If signed by a consortium, it shall be signed by members of the consortium.

(To be submitted for each lot)

Bid Response Sheet No 6

DECLARATION EPC (CONTRACT)

To

The Procurement Leader CPO Mktg. Group-4
Bharat Petroleum Corporation Limited (BPCL)
"A" Installation, Sewree Fort Road,
Sewree (East), Mumbai, 400015

Sub: RFP Document No. XX Dated XX/XX/2023 for Works Contract on LSTK basis for Setting Up 25 MW (±5%) Windfarm Projects in the States of Madhya Pradesh (2 Nos.) and Maharashtra (2 Nos.).

Dear Sir,

This to certify that I, ----------, am the duly authorized signatory appointed on behalf of my organization to submit this bid. Authorization letter is attached herewith

I agree to all the terms and condition set forth in this RFP document

Signature of Bidder

(To be submitted for each lot)

Bid Response Sheet No 7

NO DEVIATION CERTIFICATE

Date:

To

The Procurement Leader CPO Mktg. Group-4
Bharat Petroleum Corporation Limited (BPCL)
"A" Installation, Sewree Fort Road,
Sewree (East), Mumbai, 400015

Sub: RFP Document No. XX Dated XX/XX/2023 for Works Contract on LSTK basis for Setting Up 25 MW (±5%) Windfarm Projects in the States of Madhya Pradesh (2 Nos.) and Maharashtra (2 Nos.).

Dear Sir,

We, _____
(Bidder's name), confirm our acceptance to all terms and conditions mentioned in the RFP Document, and all subsequent clarifications, in totality and withdraw all deviations raised by us, if any.

_____

SEAL AND SIGNATURE OF BIDDER

Date: _____

(To be submitted for each lot)

Bid Response Sheet No 8

DECLARATION OF RELATIONSHIP WITH DIRECTORS / ANY OTHER EMPLOYEE / ASSOCIATES.

To

The Procurement Leader CPO Mktg. Group-4
Bharat Petroleum Corporation Limited (BPCL)
"A" Installation, Sewree Fort Road,
Sewree (East), Mumbai, 400015

Sub: RFP Document No. XX Dated XX/XX/2023 for Works Contract on LSTK basis for Setting Up 25 MW (±5%) Windfarm Projects in the States of Madhya Pradesh (2 Nos.) and Maharashtra (2 Nos.).

Dear Sir,

Sub: Declaration of relationship with Directors / any other employee / associates.

Dear Sir,

This has reference to our proposed Works Contract on LSTK basis for Setting Up Windfarms of Minimum of 25 MW (±5%) Capacity Or In Multiple Thereof At Single Or Multiple Sites, Totaling Up To 100 MW (±5%), Anywhere In The States of Madhya Pradesh and Maharashtra to be entered into Agreement with Bharat Petroleum Corporation Limited (OWNER).

For the purpose of Section 297 / 299 of the Companies Act, 1956 we certify that to the best of my / our knowledge;

i) I am not a relative of any Director of OWNER.

ii) We are not a firm in which a Director of OWNER or its relative is a partner.

iii) I am not a partner in a firm in which a Director of OWNER, or its relative is a partner.

iv) We are not a private company in which a Director of OWNER is a member or director.

v) We are not a company in which Directors of OWNER hold more than 2% of the paid-up share capital of our company or vice-versa.

_____

Authorised Signatory of the Contracting Party

Place:
Date:

(To be submitted for each lot)

Bid Response sheet No 9

AGREED TERMS & CONDITIONS

Sub: RFP Document No. XX Dated XX/XX/2023 for Works Contract on LSTK basis for Setting Up 25 MW (±5%) Windfarm Projects in the States of Madhya Pradesh (2 Nos.) and Maharashtra (2 Nos.).

Bidder's Name:

This Questionnaire duly filled in, signed & stamped must form part of Bidder's Bid and should be returned along with Un-Priced Bid. Clauses confirmed hereunder need not be repeated in the Bid.

Sl. No.	DESCRIPTION	BIDDER'S CONFIRMATION
1.	Confirm that quoted prices are with 9 years O&M	
2.	Confirm quoted prices will remain firm and fixed as per Bid document till complete execution of the order.	
3.	Confirm GST included i) Confirm in case of delay on account of bidder, any new or additional taxes and duties imposed after contractual delivery shall be to bidder's account.	
4.	Indicate item wise rate of GST on finished products:	
5.	Confirm transit insurance is included in the quoted prices.	
6.	Confirm acceptance of relevant Terms of Payment specified in the Bid Document.	
7.	Confirm that SPBG (10% of value of land, engineering, supply, erection etc. without O&M as per clause 4.8 will be furnished as per Bid Document.	
8.	Confirm compliance to commissioning Schedule as specified in Bid document.	
9.	i) Confirm acceptance of price reduction schedule for delay in commissioning period specified in Bid document. ii) In case of delay, the bills shall be submitted after deducting the price reduction due to delay. Confirm.	
10	Confirm goods to be supplied by you shall be guaranteed for Performance as per Bid document.	

Sl. No.	DESCRIPTION	BIDDER'S CONFIRMATION
11.	Confirm your offer is valid for 180 days from the bid closing date or extension, if any, of Techno-commercial Bids.	
12.	(a) Confirm Documentation & Testing charges as per Technical Specifications / Bid Document are inclusive in your quoted prices. (b) Inspection shall be carried out by Owner / Third Party as envisaged in the bid document. Please confirm that no extra charges shall be payable to you on this account.	
13.	i) Confirm acceptance of complete Bid Document (all sections). ii) Confirm that printed terms and conditions of bidder are not applicable.	
14.	Confirm all the raw materials & components and those required to be imported for the manufacture and supply of items will be independently procured by you at your cost and expenses. Purchaser will not provide any Import License for the same.	
15.	Please furnish EMD details: a) DD / BG No. & date (i) Value	
16.	Confirm that Balance sheets and Profit & Loss A / c for the last three financial years are furnished along with the Un-Priced Bid.	
17.	Confirm that, in case of contradiction between the confirmations provided in this format and terms & conditions mentioned elsewhere in the offer, the confirmations given in this format shall prevail.	
18.	The bidder is required to state whether any of the Directors of bidder is a relative of any Director of Owner or the bidder is a firm in which any Director of Owner or his relative is a partner.	
19.	Confirm that Bidder has not been banned or de-listed by any Government or Quasi-Government agencies or Public-Sector Undertakings. If Bidder has been banned or de-listed by any Government or Quasi-Government agency or Public-Sector Undertakings, then this fact must be clearly stated. If this declaration is not furnished bid shall be treated as non-responsive and liable for rejection.	
20.	Confirm that Bidder has signed & attached the enclosed Integrity Pact (IP).	

Signature of Bidder

(To be submitted for each lot)

Bid Response Sheet No 10

PROFORMA FOR FURNISHING DETAILS OF PAST EXPERIENCE IN WIND ENERGY PROJECTS DURING LAST TEN YEARS (TURNKEY PROJECT)

a) Total Aggregate capacity of all Windfarms executed on turnkey basis in India in the last ten years in MW.

Attach separate sheet for each Windfarm (at least for three projects)

Sl. No.	Description	
1	Name of works & Owner's address, contact person with telephone numbers.	
2	Detailed scope of work.	
3	Type of plant & machines used (only for major components).	
4	Capacity of the plant, No. of WEGs with capacity and height of tower.	
5	Whether O&M is being looked after? Please indicate period of O&M contract.	
6	Commissioning time as per contract.	
7	Actual commissioning time.	
8	If delayed, then reasons for delay.	
9	Period of successful operation.	
10	Actual generation achieved per machine per year (month-wise) since date of commissioning.	
11	Compensation on account of low Machine availability, if any	
12	Additional information, if any.	

b) O&M works of wind energy projects undertaken in India for total capacity.

c) O&M contract for last three years in hand indicating capacity thereof.

d) Number of machines of quoted model in operation in India with no. of years in operation.

e) Number of WEGs commissioned in current financial year up to date of submission of offer in India & in offered state.

Signature of Bidder

(To be submitted for each lot)

Bid Response Sheet No 11

LIST OF WEGs INSTALLED THRU TURNKEY PROJECTS (1000 KW & ABOVE) IN INDIA DURING PRECEDING SEVEN YEARS FROM DUE DATE OF OPENING OF OFFERS AT LEAST 20 WEGS

Date of Commissioning of WEGs	Rating of WEG (kW)	No. of WEGs	Site(s) Details	Address & contact number of Investor

Signature of Bidder

(To be submitted for each site)

Bid Response Sheet No 12

WORK SHEET FOR ESTIMATED ANNUAL ENERGY PRODUCTION (for Each Site)

Bidder shall furnish calculations for estimated Annual Energy Production (AEP) of the Windfarm based on actual micro siting of WEGs for each site(s). Procedure followed viz. WAsP / PARK method or any other method and factors considered for calculating AEP shall be detailed in the offer.

The bidder shall furnish the following in soft copy:

1. MAP file containing orography / contour and roughness of the site(s) and surrounding area in digitized form.
2. Input wind data file for WAsP / PARK in the form TAB file.
3. WTG file duly corrected at site air density for WAsP input.
4. Raw wind data in excel format.
5. Total capacity of the Windfarm planned at site.
6. All the coordinates (in UTM format) of the Windfarm including coordinates of existing WEGs & proposed in future at offered site.
7. Coordinates (in UTM format) of all the existing WEGs of other developer(s).
8. Micro siting drawing of the Windfarm indicating all the WEGs.
9. Actual energy generation of the WEGs already existing in offered area or nearby area from the date of commissioning.
10. Distance of the reference met mast from the nearest & farthest offered WEG location.
11. Chart showing Yearly & Monthly Wind Variation.
12. Detailed Methodology used in arriving Annual Energy Production at P (90) along with detailed wind resource assessment report of Windfarm.
13. Certified Power Curve of the offered WEG model.
14. Site(s) Air Density and corrected certified power curve at site(s) air density.
15. Power Law Index (PLI).

Time series Wind Data (speed & direction) or Directional Frequency Distribution Data in the following table:

TABLE – I

Class Interval M/s.)	Mid Wind Speed (M/s.)	Frequency percent (%)	Total hours (%)

Details of Reference Met Mast of NIWE near each of offered site(s) be furnished

Obtaining correct site(s) information with relevant details for working out AEP shall be the

responsibility of the bidder.

Following information which has direct bearing on working out AEP should be furnished:

1)	Correction Factor for Air Density, %	:	
2)	Array Efficiency, %	:	
3)	Modeling Error, %	:	
4)	Machine Availability (Not less than 96%)	:	
5)	Any other factor	:	
6)	Annual Energy Production per WEG at controller after applying correction factors	:	
7)	Grid System availability, %	:	
8)	Guaranteed Evacuation Losses, % (supported by calculation sheet)	:	
9)	Estimated Saleable Energy at metering point	:	

AEP should be provided at

P 90

P 75

P 50

Note: Above information be furnished separately for each option.

Signature of Bidder

(To be submitted for each lot)

Bid Response Sheet No.13

GUARANTEED POWER CURVE OF WEG OFFERED (For each WEG model)

Wind Speed (M/s.)	Power (kW)	Thrust Coefficient (C_t)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

Air Density ……

Reference of Certified Power Curve be given and a copy thereof furnished.

Signature of Bidder

(To be submitted for each lot)

Bid Response Sheet No.14

BID ELEGIBILITY CRITERIA FORM (Technical & Financial)

Sl. No.	Item	Reference of supporting Document	Supporting document at Page Number of offer
A	**TECHNICAL**		
	Offers are invited in 4 lots where 2 lots are for each state (Maharashtra and Madhya Pradesh) and each lot shall have cumulative capacity of 25 (+/-5%) MW with maximum 2 sites of having minimum capacity of 10 MW (+/-5%) at any one site. Bidder(s) can quote for one lot, two lots, three lots or all four lots depending upon their capability as per the Bidder's Qualification Criteria.		
1	Bidder should have experience of completed similar works of below capacities in last 10 (Ten) years ending last date of the month prior to which tender is invited: *For single lot of 25 (±5%) MW capacity Windfarm during last 10 years:* Single order of capacity not less than 20 MW (+/-5%) OR Two orders of capacity not less than 12 MW (+/-5%) OR Three orders of capacity not less than 10 MW (+/-5%) **Definition of Similar Work:** *a.Supplied/procured, erected/ supervised erection, commissioned/ supervised commissioning of grid connected Wind Power Project(s).* ***Or*** *b.Developed and commissioned grid connected wind power project including civil, electrical and allied works.*		
2	The bidder should have the experience of successful operation and maintenance of at least one Windfarm of 10 (±5%) MW capacity having WEGs of 1000 kW rating or above, for a period at least of one year ending last date of the month prior to which tender is invited.		

Sl. No.	Item	Reference of supporting Document	Supporting document at Page Number of offer
3	The bidder should have its name & the offered model of Wind Electric Generator (WEG) included in the latest list of "Manufacturers of Wind Electric Generators / Wind Turbine equipment" – RLMM list published by National Institute of Wind Energy [Formerly known as Centre for Wind Energy Technology (C-WET), Ministry of New & renewable Energy (MNRE) and Government of India.		
4	The offered model of WEG shall be of 2000 kW rating or above		
5	The quoted model of WEG (of offered rotor diameter and Hub height by Bidder) should have been installed and commissioned by the bidder and is under operation for at least for one year. Bidder to furnish Supporting data		
6	All equipment shall be new and shall comply with all regulatory requirement for establishing wind/renewable energy project in India (Maharashtra and Madhya Pradesh)		
7	The quoted model of WEG should have Type Certification from an accredited test house such as RISO Denmark, DEWI - Germany, Germanischer LLOYD - Germany, NIWE or any other agency approved by Ministry of New and Renewable Energy (MNRE), Government of India. Such Type Certificate should be valid as on bid validity date. Copy of Type Certificate along with copy certified power and thrust curve shall be submitted with the bid. Certified power curve and thrust curve should be in graphics as well as tabular form.		
8	The bidder should have the experience of successful operation and maintenance of at least one Windfarm of 30 MW capacity having WEGs of 2000 kW rating or above, for a period at least of one year as on the date of submission of bid.		
9	The WEG supplier shall have manufacturing unit for critical component established in India and should have with repair & service facilities fully established and functioning with requisite set up in India.		
10	The WEGs design should ensure smooth interconnection with the grid and shall comply with prevailing norms and standards for grid connectivity specified by SLDC /CEA/ Regulatory authorities.		
11	The Bidder shall be capable of providing post commissioning trouble shooting, operation and maintenance services to achieve high standards of		

Sl. No.	Item	Reference of supporting Document	Supporting document at Page Number of offer
	performance as prescribed in Request for Proposal (RfP)/NIT.		
11	The quoted Windfarm capacity of single project shall be minimum 25 MW (±5%) with one site of minimum capacity 10 MW (+/-5%) in single state.		
12	Identification and suitable arrangements for transfer bu outright purchase and/ or lease and/ or sub-lease of 100% (hundred per cent) land in favour of OWNER is required at the time of bid submission.		

Note: Bidder shall enclose Bid Response Sheet No.14 separately for each lot where he intends to offer the bid.

Bid Response Sheet No.14 contd..

Sl. No.	Item	Reference of supporting Document	Supporting document at Page No of offer
B	**FINANCIAL**		
1	The average annual turnover of the Bidder for the last three audited accounting years should be equal to or more than **Rs. 40.08 Cr (USD 4.81 Million) for each lot .** **If a bidder wants to qualify for 2 lots** average annual turnover of the Bidder for the last three audited accounting years should be equal to or more than **Rs. 80.16 Cr (and USD equivalent) and like-wise for additional lots.** The Bidder shall submit audited annual report of FYs 2020-21, 2021-22 & 2022-23. (If not audited then provisional account along with certification from Chartered Accountant shall be required).		
2	Net worth of the bidder must be positive for previous audited year as per audited financial statement immediately preceding the current financial year. Bidder to provide certificate from Statutory Auditor in this regard.		

Note:

1. Bidders to enclose documentary evidence in support of above.
2. Bidders shall enclose Bid Response Sheet No.14 separately for each lot where he intends to offer the bid.

Signature of the Bidder

(To be submitted for each lot)

Bid Response Sheet No.15

TECHNICAL PARTICULARS OF QUOTED MODEL OF WEG (For each WEG Model, WEG model shall remain for each lot)

General Data		
1	Make of WEG	
2	Type	
3	Rated output	
4	Current (Amps.)	
5	Voltage (V)	
6	Voltage Variation (%)	
7	Frequency Variation (%)	
8 a	Maximum Asymmetric Voltage (%)	
8b	Maximum Asymmetric Current (%)	
9	Wind Speed at rated output (M/s.ec)	
10	Cut in wind speed (M/s.ec)	
11	Cutout wind speed (M/s.ec)	
12	Tip speed (M/s.ec)	
13	Survival wind speed (M/s.ec)	
14	Hub height (m)	
15	Rotor speed (rpm)	
16	Nacelle tilt angle	
17	Regulation	
18	Designed max. temp. (deg. C)	
19	Designed life (years)	
20	Designed turbulence intensity	
21	Noise level (dB) (also specify distance)	
22	Frequency (Hz)	
23	Maximum designed rotor speed	
24	Pitch angle for stall regulated machine	
25	Rotor orientation (upwind / downwind)	
26	No. of blades	
27	Rotor diameter (m)	

Weight		
1	Rotor (kg)	
2	Nacelle (kg)	
3	Tower (kg)	
4	Total (kg)	

Generator		
1	Make	
2	Rated power output (kW)	
3	Type – Synchronous / asynchronous	
4	Output Voltage and RPM	
5	No. of poles	
6	Insulation Class	
7	Protection class	
8	Coupling	
9	Current in Amps.	
10	Frequency	
11	Dual speed / Variable speed	
12	Type of cooling	
13	If forced cooling, then	
	a) a) Type & quantity of coolant	
	b) Pump rating	
	c) Motor make & rating	
	d) No. of phase	
	e) Motor duty cycle	
14	KVAr consumption of generator at:	
	- No Load	
	- 25% Load	
	- 50% Load	
	- 75% Load	
	- 100% Load	

Rotor		
1	Blade material	
2	Make	
3	Number of blades	
4	Rotor diameter (m)	
5	Swept area (Sq. m)	
6	Length of blade(m)	
7	NACA Specification	
8	Blades profile	
9	Weight of each blade	
10	Reference Standards	
11	Lightning protection for blades	

Tower		
1	Height (m)	
2	Type	
3	Material	
4	No. of Sections	
5	Mode of Assembly	
6	Ladder type	
7	Safety system	
8	Surface treatment protection	
9	No. & type of landing platforms	
10	Make	
11	Type of reptile protection	

Yawing System		
1	Make & Type	
2	Gear Ratio	
3	Rated capacity of yaw motor (kW)	
4	No. of yaw motors	
5	Type of yaw brake	
6	No. of yaw brakes	

Brake System		
1	Aero Dynamic	
	i) Type	
	ii) Control	
2	Mechanical or other type	
	i) Make & Type	
	ii) Position	
	iii) No. of calipers	
	iv) Motor capacity (kW)	

Gear Box (If required for the system)		
1	Type / model	
2	Gear ratio	
3	No. of steps	
4	Max. power transmission (kw)	
5	Lubricants	
6	Designed life	
7	Make	
8	Type of oil cooling	
9	Weight without oil (kg)	
10	Quantity of oil	

Hub		
1	Make & Type	
2	Material	

Main Shaft		
1	Make & Type	
2	Material	

Main Bearing		
1	Make	
2	Type & specification	

Coupling		
1	Make	
2	Type & specification	

Nacelle		
1	Material	
2	Type of nacelle bed	
3	Facility of loading & unloading	
4	Lightning protection	

Reactive Power Compensation		
(required for WEGs with asynchronous generators)		
1	Capacity (KVAR)	
2	Number of capacitor units	
3	No. of steps	
4	Designed life of capacitors	
5	Type	
6	Make	
7	Current in Amps.	
8	Estimated kVArh consumption as percentage of annual kWh generation	
9	Power factor at: loads after compensation:	
	- No load	
	- 25% load	
	- 50% load	
	- 75% load	
	- 100% load	

Power Panel		
1	Voltage	
2	Short circuit level	
3	Rating of main MCCB	
4	Provision for earth fault protection	
5	Dimension	
6	Relevant standards	

Control System		
1	Type	
2	List of display (please attach separate sheet)	
3	List of error messages (please attach separate sheet)	
4	List of annunciations (please attach separate sheet)	
5	Stop features	
6	Remote control facility	
7	Printer facility	
8	Details of special accessories (Like Lap-top computer) for retrieval of parameters including power curve data.	
Details of AC-DC- AC Converters / Inverter system (for variable speed WEGs)		

Sensors		
1	List of sensors (please attach separate sheet)	

Details of CMCS		
Power cable (between generator & power panel)		
1	Type & Make	
2	Conductor material	
3	Conductor size	
4	No of core	
5	Ref. standard	

ISO 9000 Certification		
1	Category of certification	
2	Date of certification	

Signature of Bidder

Bid Response Sheet No.16

TECHNICAL DATA FOR TRANSFORMER

Sl. No	Description	Unit	Specification
1.	Service	Outdoor / indoor	
2.	Type	Oil filled / Dry type	
3.	Rating	kVA	
4.	Rated frequency	Hz	
5	Number of phases:		
	HV	No	
	LV	No	
	Neutral (separate outside)	No	
6.	Rated Voltage		
	a) HV winding	kV	
	b) LV winding	kV	
7.	Vector group	Star / Delta	
8.	Type of cooling	ONAN / ONAF	
9.	Insulation level:		
	a) Power frequency withstands (HV / LV)	kV rms	
	b) Impulse withstand voltage (HV / LV)	kV	
	c) Power frequency withstands (neutral)	kV rms	
10.	Method of earthing		
11.	Duty		
12.	Short circuit level	kA	
13.	Off circuit tap changer:		
	a) Range	%	
	b) In steps of		
	c) Tapping provided on HV side		
14.	Tap changer type		
15.	Temperature rise above 40^0 C ambient: {Temp. rise shall take care of harmonics developed in the system as per IS2026-16}		
	a) Top of oil by thermometer	^{0}C	
	b) Winding by resistance	^{0}C	
16.	Terminal details:		
	a) HV side		
	b) LV side		

Sl. No	Description	Unit	Requirement
17.	Losses (at 75^{0}C and principal tapping):		
	a) No load loss at rated voltage and frequency	kW	
	b) Load loss at rated current (ONAN)	kW	
	c) Total loss maximum rated power	kW	
18.	Efficiency at 75 ^{0}C and 0.9 PF:		
	a) At full load (ONAN)	%	
	b) At 75% load (ONAN)	%	
	c) At 50% load (ONAN)	%	
19.	Hot spot temperature in winding limit to	^{0}C	
20.	Shipping dimensions:		
	a) Height	mm	
	b) Breadth	mm	
	c) Length	mm	
21.	Painting		
22.	Reference standards		
23.	Make		
24.	Minimum creep age distance	mm / kV	
25.	Overall dimensions (L x B x H)	mm	
26.	% Impedance (±10% Tolerance) **Following to be added:** 1) Neutral CT 2) Marshalling Box details to be added like IP-54, etc. 3) Rated HV/LV current at No Load & Full Load 4) OTI & WTI - Alarm & Trip temp settings 5) Resistance & reactance at HV/LV side at 75 deg C, X1/R1 ratio, X0/R0 ratio, Inrush current and duration 6) Oil conforming to IS 335 7)make of oil 8) Bushing make, type, voltage class 9) Clearances in air, creepage distances, 10) List of accessories installed in transformer (PRV, Bucholz relay, etc.) 11) Dimensions & weight of Transformer 12) Construction details like core, thickness of core pates, type of insulation of core lamination, winding material, insulating material between primary & secondary, between core & winding, etc. 13) Radiator & Tank details 14) Regulation at full load	%	

27.	Quantity of Oil	liters	
28.	Details of Instruments and protection provided with the Transformer (Make & Type)		

Signature of Bidder

(To be submitted for each lot)

Bid Response Sheet No.17

TECHNICAL PARTICULARS HV SWITCHGEAR

I.	**DESIGN DATA SHEET**		
Sr. No.	**Description**		**Details**
1	Item	:	
2	Reference Standards	:	
3	Service	:	
4	Design Ambient Temperature		
5	Highest system Voltage		
6	Insulation Level		
7	Rated lightning impulse withstand voltage		
8	Rated short duration power frequency withstand voltage		
9	Fault Level		
10	Voltage and variation		
11	Frequency and variation		
12	Phase & wire		
13	System earthing		
	Vacuum Circuit Breaker Panels		
14	Type		
15	Panel Degree of Protection		
16	Thickness of sheet metal		
17	Cable Entry		
18	Bus duct Connection		N.A.
19	Bus PT – Separate panel required (Yes / No)		
	Circuit Breaker		
20	Type of Circuit Breaker based on Quenching Medium		
21	Minimum Breaker nameplate rating		
22	Duty Cycle of Circuit Breaker		
23	A.C. Symmetrical Breaking Current		
24	Making Current		
	Bus bar		
25	Rating		
26	Material		
27	Insulation		
28	Earthing (Switch / Trolley)		
	Earth Busbar		
29	Material		
30	Earth bus short circuit rating		
31	Control Supply for HV Circuit Breaker		

32	Spring Charging Motors		
33	Closing Circuit		
34	Trip Coil		
35	Alarm		
36	Indication		
37	Relay Auxiliary Supply		
38	Heaters and illumination in Panels		230V AC, 1-Ph
39	Protection		
40	Metering		-do-
41	Annunciation		-do-
42	Indication		-do-
43	Provision for Extension		Yes
44	Type of Cable Termination		Heat Shrinkable
45	Panel Space heater		Required
46	Panel Illumination lamp		Required
47	1-Ph Socket		Required
48	Emergency Trip for Breaker		For all Feeders (electrical as well as mechanical)
49	Control and Selector Switches		Trip-Neutral-Close control switch
50	Closing operation		Yes
51	Tripping		Independent.
52	Painting		RAL 7032
53	Relays (Make)		
54	DCS interface		All multifunction meters shall be communicable type with serial communication
II.	**Guaranteed Technical Particulars**		
1	Manufacturer		
2	Type reference		
3	Switchgear Designation		
4	Applicable Codes and Standards		
5	Service		
6	Overall Dimensions & Maximum Weight		
7	Testing Authority		
8	Type test certificate furnished		
	Busbars		
9	Rated Voltage		
10	Rated current of main busbars at design Temp.of 45 ^{0}C		
11	Number of phases		
12	Short time withstand current for Busbars for 3 sec		

13	Material of Busbars		
14	Type of Busbars Sleeving		
15	Shrouds on joints		
16	Cross sectional area of busbars		
17	Maximum temperature rise over design temp		
18	Clearance in Air		
19	Location of Busbars		
20	Earth busbar material & size		
	Circuit Breakers		
21	Make & Type Designation		
22	Highest System Voltage		
23	No. of Poles / phase		
24	Rated Frequency		
25	Rated Current of circuit breaker		
26	Short time Withstand Current		
	a) 1 s		
	b) 3 s		
27	Peak Withstand Current		
28	Power Frequency Withstand Voltage		
29	Lightning Impulse Withstand Voltage		
	a) Interrupting medium for circuit breaker		
	b) Insulation medium for Switchgear		
30	Rated operating duty cycle of circuit breaker		
31	Opening time for Circuit breaker		
32	Independent hinged type lockable door provided for each cubicle		
33	Rated short circuit breaking current for circuit breaker		
	a) Symmetrical		
	b) DC Component		
34	Rated short circuit making current (peak)		
35	Total Closing / Opening time		
36	Method of closing		
37	Method of tripping		
38	Electrical antipumping feature provided		
39	Over voltages developed during current interruption		
	a) Breaker		
	b) Surge suppressors provided to limit over voltages		

40	Maximum temperature rise over specified ambient temp.		
41	Spring charge motor provided for CB		
42	Spring charging starts after breaker closing OR tripping		
43	Time required to charge spring from fully discharged condition		
44	Control Supply voltage considered [Ref SLD]		
45	Power Consumption at Control Supply:		
	a) Maximum tripping coil consumption / CB		
	b) Maximum closing coil consumption / CB		
	c) Spring Charging Motor / CB		
46	**Safety Features**		
	a) Heat shrinkable sleeves, rated to withstand the system line to line voltage for one minute, provided on busbar		
	b) Removable FRP shrouds for all busbar joints and tap-off connections provided.		
	c) Arc propagation barrier in busbar compartment provided		
	d) Breaker service, test and drawn-out position provided		
	e) Distinct overall lockable door for breaker compartment provided		
	f) Automatic safety shutter provided		
	g) Independent pressure release flaps provided for all HV compartments		
47	**Whether following are provided as per Specification & SLD**		
	a)Referred SLD Number		
	b) Indicating/measuring instruments		
	c) Current transformers		
	d) Voltage transformers		
	e) Auxiliary contacts		
	f) Busbar earthing facility provided with necessary electrical and mechanical interlocks		
	g**) Interlock system**		

	(i) between earth switch & main breaker		
	(ii) between incomer cable side earth switch and sending end breaker		
	h)Selector / control switches / push buttons		
	i) Protection Relays		
	j)Auxiliary Relays		
	k) Lock-out Relays		
	l) Trip Circuit Supervision Relays		
	m) Portable Earthing equipment (if required)		
	n) Service/test/earthed position switches		
	o) Emergency mechanical trip push-button		
	p) Operation counters		
	q) Hours run counters		
	r) Cable side earthing switch		
	s) Type of Busbar earthing system offered		
	t) Stabilising resistors		
48	**Current Transformers**		
	a)Manufacture Name		
	b)Type		
	c)Type of CT mounting / location		
	d)Rating		
49	**Potential Transformers**		
	a)Manufacture Name		
	b)Type		
	c)Type of PT mounting / location		
	d)Rating		
50	**Internal wiring**		
	a)Conductor size		
	b)Solid/Stranded		
	c)Color Code :		
	(i) Control		
	(ii) Power		
	(iii) Indication		
	(iv) CT/PT circuit		
51	**Paint shade**		
	a)Inside		
	b)Outside		

52	**Heat Load**		
	a)Heated load per panel (kW)		
	b)Total heat load (kW)		

Note: Bidder is required to submit single line diagram of the whole Windfarm from WEG up to grid sub-station.

Signature of Bidder

(To be submitted for each lot)

Bid Response Sheet No.18

SOURCE OF COMPONENTS

Sl. No.	Item Description	Vendor	Type offered	Source country
1	Generator			
2	Blade			
3	Hub			
4	Tower			
5	Yawing System			
6	Brake calipers			
7	Hydraulic Disc brake system			
8	Main Shaft			
9	Main Bearing			
10	Local control system			
11	Gear Box			
12	Distribution transformer			
13	Horn Gap fuse			
14	Lightening Arrestor			
15	Interconnecting cable from WEG to Transformer			
16	AB Switch			
17	33 kV Vacuum / SF6 Circuit breaker			
18	Flexible coupling			
19	Power Panel			
20	Control Panel			
21	Capacitors			
22	CMCS (if offered)			
23	AC-DC-AC converter / inverter for variable speed			
24	Flexible cables			
25	PVC cable			
26	Contactors			
27	MCCBs			
28	Sensors (furnish information for all type of sensors)			
29	Gear Oil			

Signature of Bidder

(To be submitted for each lot)

Bid Response Sheet No.19

DETAILS OF POWER EVACUATION

S. No.	Item	Supporting Document Page No.
1	Furnish allocation letter from MSETCL/MPPTCL confirming reservation of adequate power evacuation capacity for the project	
2	Furnish all relevant technical details like single line diagram of the proposed system indicating voltage & length of line, conductor size, capacity of proposed equipment / sub-station and line etc. along with its technical specification of general nature.	
3	Furnish detailed calculations for losses in Transformer(s), HT Line, EHV Line etc up to the point of interconnection including import of energy & auxiliary consumption	
4	In case power evacuation approval is in the name other than bidder please indicate details of such company & its relation with bidder.	
5	Indicate common facilities and RoW and RoU available in bidder name such as land, road and power evacuation	
6	Indicate O&M cost considered on account of O&M of s. no. 5 above in annual O&M cost at BRS P-V	……..%

Note: Above information be furnished separately for each site.

Signature of the Bidder

(To be submitted for each Site (s) for each lot)

Bid Response Sheet No.20 (a)

DRAFT ACTIVITY CHART

(To be submitted for each site(s))

Bidder shall furnish Bar Chart for the following activities and his plan to for implementation of the project to meet the commissioning date. This information shall be in addition to detailed project schedule and other information he is required to furnish as part of his offer. The activities indicated herein are minimum activities for which bidder shall furnish the required information. Bidders are encouraged to furnish more detailed information in their offer.

Sl. No.	Activity
1	Land acquisition and transfer to Owner
2	Sanctions / Approvals / Clearances
a.	Application / NOC from State Nodal Agency / State Govt./CPCB/Forest / District Administration
b.	Wheeling & Banking Agreement
c.	Approval from Chief Electrical inspector of the state / CEA
d.	Clearance from Aviation Department, if applicable
e.	Clearance from Defense, if applicable
g.	Any other
3	Micro-siting
4	Approach Road
5	Internal Road
6	WEG Tower Foundations
7	Control Cabins (in case of lattice Towers)
8	Office cum Control Room Building
9	Storage Shed
10	Permanent Water Supply
11	Supply of Equipment and Materials
a.	Towers for WEGs
b.	Nacelle for WEGs
c.	Blades for WEGs
d.	Control panels, Power Panels, Cables and Balance items of WEGs
e.	Equipment and Materials for Unit Sub-Stations
f.	Equipment and Materials for Internal OH Lines
g.	Equipment and Materials for common Sub-Stations / Metering Stations
h.	Equipment and Materials for External OH Lines
i.	Equipment and Materials for Modification at Grid Sub-Stations of Transmission Corporation Ltd. / MSETCL/ MPPTCL
j.	Wind Mast and Data logger
k.	Central Monitoring and Control System

Sl. No.	Activity
12	Erection of Equipment and Materials
a.	Towers for WEGs
b.	Nacelle for WEGs
c.	Blades for WEGs
d.	Control panels, Power Panels, Cables and Balance items of WEGs
e.	Unit Sub-Stations
f.	Internal OH Lines
g.	Common Sub-Stations / Metering Stations
h.	External OH Lines
i.	Modification at Grid Sub-Stations of TRANSCO / DISCOM/PGCIL
j.	Wind Mast and Data logger
k.	Central Monitoring and Control System
13	Grid Interconnection of the Windfarm
14	Commissioning of the Windfarm
15	Training of OWNER Engineers
16	Power Curve Performance Test
17	96 Hours Short Time Test Run Test
18	Handing over to OWNER

Note: Above information be furnished separately for each site (s) of each lot.

Signature of the Bidder

(To be submitted for each lot)

Bid Response Sheet No.20 (b)

THE METHODOLOGY OF VARIOUS ACTIVITIES

Sr. No.	Item	Methodology
1	(i) Methodology of land transfer to OWNER (ii) Obtaining Non-Agriculture use certificate wherever required	
2	Methodology of use of common path & ways	
3	Methodology of use of common power evacuation system	
4	Any other Item	

Note: Above information be furnished separately for each site

Signature of Bidder

(To be submitted for each lot)

Bid Response Sheet No. 21

LIST OF COMPONENTS HAVING LIFE LESS THAN 25 YEARS

Sl. No.	Description of Item	Make	Expected Life

Signature of the Bidder

(To be submitted for each lot)

Bid Response Sheet No. 22

DRAWINGS TO BE ENCLOSED BY THE BIDDER

The Bidder should enclose the following drawings with the bid:

i. Contour plan and layout of Windfarm
ii. WEG Tower Foundation
iii. Single line schematic diagram of electrical system for grid interfacing and grid interconnection from WEG up to grid substation clearly indicating metering point with voltage and line lengths with type of conductor used.
iv. General drawings of electrical installations including unit substations control & metering station, EHV substations, overhead lines etc.
v. General arrangement drawings and circuit diagrams of major i.e. Nacelle, Hub, Rotor Baldes, Tower and transformer.

Note: Above information be furnished separately for each site.

Signature of the Bidder

(To be submitted for each site (s) of each lot)

Bid Response Sheet No.23

DETAILS OF LAND FOR WIND ENERGY PROJECT

Sl. No.	Item	Particulars
1.	Nearest Village / Town	
2.	Location w.r.t. nearest village / town	
3.	Taluka / Tehsil	
4.	District	
5.	State	
6.	Nearest Railway station	
7.	Nearest Airport	
8.	Nearest Highway	
9.	Altitude of area	
10.	Approx. Land area (Ha) of the Windfarm.	
11.	Total Land area(Ha) to be transferred to OWNER	
12.	Approx. Land area per WEG to be transferred to OWNER	
13.	Whether land already been acquired or is in process of acquiring	
14.	Ownership Details (Also indicate basis of holding Ownership / lease / sub-lease)	
15.	Approach details	
16.	Estimated installed capacity considering WEG model	
17.	Nearest C Wet / MNRE Wind Monitoring Mast	
18.	Distance & direction from nearest C Wet / MNRE Wind Monitoring Mast	
19.	Details of Wind Monitoring Mast installed by the Bidder in this land (if any) i.e. height of mast, date of establishment of mast, date of closing of data collection (in case mast is already removed)	
20.	Whether sanction of project obtained or yet to be obtained.	

Signature of Bidder

Note:

1. The Bidder should give all relevant documents to satisfy OWNER regarding above information and attach extra sheets (if necessary).

2. If the land offered is a private land, the Bidder shall furnish the following documents along with the bid:

2.1 Copy of the Registered Sale Deed/Registered Lease deed in favour of the Bidder w.r.t. the land offered. In the event of the bidder being the lessee of the land offered, then such lease in favour of the bidder shall be for a minimum period of 30 years from the date of commissioning of the project and the said lease must not have any condition restricting sub lease in favour of the Owner.

-Or-

2.2 An Agreement to Sell/Agreement to Lease/MoU executed by the bidder with a third party (an individual or company) who is/are the landowner(s) and is in possession of such private land offered. In such cases, bidder must also submit an undertaking on non-judicial stamp paper from the Landowner stating that the landowner has no objection to get the land conveyed or leased for minimum 30 years from the date of commissioning of the entire project, as the case may be, to the Owner on the same lease/rental charges quoted by the bidder in financial bid, in the event of award of the contract to the Bidder.

3. In event of the land being offered on outright purchase basis bidder shall provide notarized copy of the latest available Circle/ Revenue rate of the proposed land.

4. If the land offered is a revenue land, the Bidder shall furnish the following documents along with the bid:

4.1 Copy of allotment letter in favor of bidder.

4.2 Copy lease deed, if singed.

4.3 If Allotment Letter of competent authority is not available, the recommendation of allotment of offered land from the Nodal Agency will also be considered. In such case, the Bidder will have to submit an undertaking on non-judicial stamp paper that the land offered will be sub leased to the Owner within a period of maximum 9 (nine) months from the date of LOI/LOA after taking all necessary approvals/permissions as may be required for the purpose of such sub lease.

4.4 In event of the Revenue or Forest land being offered on Lease or Sub-lease bidder shall provide notarized copy of the Government Lease rate of the proposed land with the conditions of any increase or decrease in lease rentals over a period of entire lease or sub-lease duration.

5. If the land offered is a forest land, the Bidder shall furnish the following documents along with the bid:

5.1 Copy of Stage-1 clearance from MoEF in favor of bidder.

5.2 Bidder will have to produce a certificate from a Local Advocate stating that there are no restrictions under the local laws/ rules for taking the plot on lease by the Owner for the purpose of commissioning Windfarm project.

6. Above information be furnished separately for each site (s) of each lot.

Signature of Bidder

(To be submitted for each site)

Bid Response Sheet No. 24

DETAILS OF WIND DATA

Sl. No.	Item	Particulars
A.	**Details of Wind Mast**	
1.	Whether Wind mast of NIWE / Bidder's own	
2.	Source of wind data (Published or own data)	
3.	Distance & direction from the proposed site(s) (To mark on SOI map)	
4.	Height of wind mast	
5.	Make of data logger (in case of own mast)	
6.	Whether approved by MNRE / State Nodal Agency (in case of own mast)	
7.	Period of Wind data collection	
8.	Period of wind data used for annual energy production	
9.	Whether measurement has been carried out at two heights (If yes then indicate the heights)	
B.	**Details of wind data to be furnished along with the offer**	
1.	Annual frequency distribution in tabular form	
2.	Annual wind rose data in tabular form	
3.	Annual Average Air Density (mention source)	
4.	Annual average power law index (mention source)	

Note: Above information be furnished separately for each site.

Signature of Bidder

(To be submitted for each lot/site as applicable)

Bid Response Sheet No. 25

STATUTORY PERMISSION / CLEARANCE (For each site)

Sl. No.	Clearance Detail	Status	Supporting Document Page No.
1	NOC and Project Registration with state Nodal Agency (MEDA / MPNRED)		
2	Grid Connectivity Clearance from TRANSCO		
3	To submit Micro-siting details with coordinates to state nodal agency for approval		
4	No Objection Certificate (NOC) from District Collector (DC) office of the relevant District in Which the Wind project is proposed to the located		
5	Application for bay Extension to TRANSCO, if required - Prior to Project Execution		
6	Consent to Establish form State Pullulation Control Board (SPCB) – Only to inform prior to Project Execution.		
7	Wheeling and Banking Agreement with TRANSCO & DISCOM		
8	Right of way for transmission line from Gram / Zila Panchayat.		
9	Metering Approvals by TRANSCO.		
10	Meter testing / CT/ PT testing inspection certificate - CEIG / TRANSCO		
11	Clearance from Mining department, if the site in Mining area		
12	Clearance from Aviation Authority (AAI) if the site is near to Airport.		
13	Clearance form Chief Electrical Inspector / CEA		
14	Railway Department if there is any crossing / line.		
15	National Highways Authority / Roads & Building Department		
16	Permission for Charging from TRANSCO		
17	Certificate of Commission from Nodal Agency / TRANSCO/ DISCOM after Commissioning of Project as per state requirement.		
18	Any other site-specific permissions/ clearances required.		

(To be submitted for each site (s) of each lot)

Bid Response Sheet No. 26

DETAILS OF APPROACH ROAD (For each site)

Sl. No.	Approach Road Details	Type (RCC/ PCC/ Bituminous/ WBM/ GSB/ Boulder with moorrum packing/ Kachcha road/ or any other please specify)	Carriageway width of Road in Meter
1	Type of motorable all weather Approach Road up to Windfarm Project Site from existing Village/ district road/ State Highway/ National Highway		
2	Type of motorable all weather Approach Road up to Grid Sub-station from existing Village/ district road/ State Highway/ National Highway		
3	Type of motorable all weather Approach Road around Control Room and Office in existing Windfarm		

Note: Bidders to show the proposed layout of all-weather road with Section showing thickness of various layers proposed for the projects separately for each site (s) of each lot.

(To be submitted for each lot)			
SCHEDULE OF PRICE/ PRICE BID			
We declare that the following are the quoted prices for the entire scope of "*Works Contract on LSTK basis for Setting Up 25 MW (±5%) Windfarm Project in One lot"*			
		Amount	**In INR (Indian Rupees)**
Sl. No.	**Description**	**Total Amount**	
		in figures	**(in words)**
1	Total Price for "Supply of WEGs" complete in all respect as per **BRS No. P-II**	**0**	
2	Total Price for "Erection, testing, commissioning of WEGs & allied systems including supply of Balance of Plant and integration with MSETCL/MPPTCL including all civil works complete in all respect" as per **BRS No. P-III**	**0**	
3	Total Price for "Arranging required land and land development" complete in all respect as per **BRS No. P-IV**	**0**	
4	**Total of the prices of above Schedules for the entire scope of work under the EPC Contract (Sl. No.1 + Sl. No.2+ Sl. No. 3.)= Sub Total- (A)**	**0**	
5	Total price for "Comprehensive Operation & Maintenance charges for 10 years" as per **BRS No. P-V**	**0**	
6	Total price for "lease rent charges for 30 years" as per **BRS No. P-VI**	**0**	
7	Total price for "S&F charges for 10 years" as per **BRS No. P-VII**	**0**	
8	**Total of the prices of above Schedules for the entire scope of work under the O&M Contract for 10 years including land lease charges of 30 years (Sl. No.5+ Sl. No.6+ Sl. No. 7.)= Sub Total- (B)**	**0**	
9	**Grand Total of the price of EPC Contract and Comprehensive O&M Contract for 10 years including land lease charges of 30 years (Sl. No.4 and Sl. No.8)= (A)+(B)**	**0**	
NOTE:			

1. Any item of work not mentioned in the above particulars but written elsewhere in the scope of work or in Technical Specification or essentially required for completion of works, proper operation and maintenance of Wind Power Project, safety of equipment and operating personnel shall be deemed to have been included in the above particulars.
2. The prices quoted shall be inclusive of all taxes, duties and cess.

(To be submitted for each lot)

Bid Response Sheet No. P-II

Schedule of price for "Supply of WEGs" complete in all respect consisting of following items at site:

							Amount	**In INR (Indian Rupees)**
Sl. No.	**Item**	**Qty. (No. of WEG)**	**Unit price F.O.R. Destination**	**Rate of applicable GST (in %)**	**Amount of applicable GST**	**Unit price F.O.R. including Taxes**	**Total price for Windfarm F.O.R. including Taxes**	
							In figures	**In words**
A	B	C	D	E	F= DXE/100	G=D+F	H=C X G	
1	Supply of Nacelle Assembly including Hub and Control panel, components of renewable energy Device – Wind Mill complete in all respect.				0	0	0	
2	Supply of Rotor Blades (Set of 03 Nos.), components of renewable energy Device – Wind Mill complete in all respect.				0	0	0	
3	Supply of Tower suitable for Wind Electric Generator (WEGs), components of renewable energy Device – Wind Mill complete in all respect.				0	0	0	
4	Supply of Transformer complete in all respect, components of renewable energy Device – Wind Mill complete in all respect.				0	0	0	

	Sub total of BRS No. P-II (in Figures)							
	Sub total of BRS No. P-II (in Words)							
NOTE:								
1. Any item of work not mentioned in the above particulars but written elsewhere in the scope of work or owner's requirements (Technical specifications) are essentially required for completion of works, proper operation and maintenance of Wind Power Plant, safety of equipment and operating personnel shall be deemed to have been included in the above particulars.								
2. The Bidder is required to indicate applicable rate of Taxes, as on Bid closing date.								
3. Bidder should consider all the benefits / exemptions available for Wind Operated Electricity Generators and its components in the quoted rates.								

(To be submitted for each lot)

Bid Response Sheet No. P-III

Schedule of price for "Erection, testing, commissioning of WEGs & allied systems including supply of Balance of Plant and integration with MSETCL/MPPTCL including all civil works complete in all respect" with following break ups:

							Amount	**In INR (Indian Rupees)**
Sl. No.	**ITEM**	**No. of WEG**	**Unit Price**	**Applicable Rate of GST (per WEG) (%)**	**Amount of GST (per WEG)**	**Unit Price including Taxes**	**Total Price Including Taxes**	
							In figures	**In words**
A	B	C	D	E	F= DXE/100	G=D+F	H=C X G	
1	Civil Works including WEGs Foundations, Transformer platforms, Approach roads, other civil works and allied works for installation of WEGs all complete as per detailed scope of work.				0	0	0	
2	Erection and Commissioning of Tower, Nacelle, Blades, Control Panels and other WEG equipment.				0	0	0	
3	Providing Electrical works of renewable energy devices in respect of Windfarm project for WEG viz. 33 kV electrical lines &unit sub-station works all				0	0	0	

	complete as per detailed scope of work.							
4	Contribution towards apportioned Power Evacuation infrastructure cost incurred for evacuating the power from pooling sub-station to main grid without transferring right of possession and effective control all complete as per detailed scope of work.				0	0	0	
	Sub total of BRS No. P-III (In figures)						0	
	Sub total of BRS No. P-III (In words)							
NOTE:								
1. Any item of work not mentioned in the above particulars but written elsewhere in the scope of work or in Owner's requirements (Technical specifications) are essentially required for completion of work of wind power plant, safety of equipment and operating personnel shall be deemed to have been included in the above particulars.								
2. The Bidder is required to indicate applicable rate of Taxes, as on Bid closing date.								

(To be submitted for each lot)

Bid Response Sheet No. P-IV

Schedule of price for Arranging required land, Services for arrangement of land and land development complete till the date of commissioning in all respect.

				Amount	**In INR (Indian Rupees)**
Sl. No.	**ITEM**	**NO. OF WEGs**	**UNIT PRICE**	**TOTAL PRICE**	
				In figures	**In words**
A	B	C	D	E = C x D	
1	Providing either private land on outright purchase basis / Revenue land on lease or sub-lease basis / Forest land on lease transfer basis and right of suitable access of surrounding (including free access, right of way, right of use, Aerial rights etc.), including services for arrangement of land and land development including deposits, stamp duty, registration charges, lease or sub-lease rental, searching of title as per directions and requirement of Owner & other details including all Taxes **till the date of commissioning**.			0	
	Sub total of BRS No.P- IV			0	
NOTE :					

1. The Prices in this schedule shall be quoted all-inclusive of applicable statutory and legal charges on lump sum basis as on Bid closing date.

2. The detailed break-up for cost of land and arrangement of land including land development should be submitted by the successful bidder before raising of invoice/ bill.

3.If Stamp duty, Registration charges, application fees, statutory charges related to land is required to be paid by the Owner as per the guidelines, same shall be paid by the Owner on request of the bidder with supporting order/guidelines and same shall be recovered from the immediate bill of the Contractor.

(To be submitted for each lot)

Bid Response Sheet No. P-V

PRICE SCHEDULE FOR COMPREHENSIVE O&M CHARGES

					Amount	**In INR (Indian Rupees)**
Year	**Basic annual Comprehensive O&M charges per WEG.**	**No. of WEGs**	**Rate of applicable GST**	**Amount of GST (Per WEG)**	**Comprehensive O&M Charges per WEG (inclusive of all taxes)**	**Total Comprehensive O&M Charges for WPP (inclusive of all taxes)**
			(in %)			**In figures**
A	B	C	D	E = B x D/100	F = B + E	G = C x F
1st year	NA		NA	NA	NA	NA
2nd year				0	0	0
3rd year				0	0	0
4th year				0	0	0
5th year				0	0	0
6th year				0	0	0
7th year				0	0	0
8th year				0	0	0
9th year				0	0	0
10th year				0	0	0
Sub Total - {A}	0	0	0	0	0	0
Sub Total of BRS No. P-V (in Figures)						0
Sub Total of BRS No. P-V (in Words)						
NOTE:						

1.O&M values for 1st year from the date of stabilization are not available for quote and deemed to be included in EPC prices

2. Annual O&M year cost for second year should not be less than 1% of EPC value.

3. Year to year annual escalation should not be more than 5%.

4. Instructions specified at sr. no 1 to 3 needs to be followed strictly else owner shall evaluate the bids based on figures quoted and order values shall be suitably corrected (reduced only) while placement of order.

5. Bidder should consider benefits / exemptions available for execution of Wind Power Project in the quoted rates in the price bid.

6. The Bidder is required to indicate applicable rate of Taxes as on Bid closing date
7. Bidder should furnish documentary evidence towards all recurring statutory charges such as CIEG, Meter Calibration, MSETCL/MPPTCL or any other charges as applicable to be deposited to Govt. authorities/ utilities during O&M period alongwith Technical bid at BRS No. 9.
8. Any variation in taxes, levies / fees, duties or newly imposed taxes, duties, cess etc. shall be regulated as per the guidelines of Govt. of Maharashtra /Madhya Pradesh/ India against documentary evidence for the same

(To be submitted for each lot)			
Bid Response Sheet No. P-VI			
Schedule of Price for "Lease Rental Charges from the date of commissioning of the entire project & Statutory Charges for Wind Power Project payable by OWNER during O&M for 30 (Thirty) years."with following break ups:			
		Amount	**In INR (Indian Rupees)**
Sr. No	**Year**	**Lease Rental charges in figure**	**Lease Rental charges in words**
A	B	C	D
1	1st Year		
2	2nd year		
3	3rd year		
4	4th year		
5	5th year		
6	6th year		
7	7th year		
8	8th year		
9	9th year		
10	10th year		
11	11th year		
12	12th year		
13	13th year		
14	14th year		
15	15th year		
16	16th Year		
17	17th Year		
18	18th year		
19	19th Year		
20	20th Year		
21	21st Year		
22	22nd Year		
23	23rd Year		
24	24th Year		
25	25th Year		
26	26th Year		

27	27th Year		
28	28th Year		
29	29th Year		
30	30th Year		
	Sub Total BRS No. P-VI (in Figures)	0	
	Sub Total BRS No. P-VI (in Words)		
NOTE:			
1. The lease/sub-lease rental charges for Private land and/ or Revenue land and/ or Forest land after the date of the commissioning of the project to be quoted by the bidder considering single type and or mixture of land. Payment towards lease or sub-lease rental shall be paid to the landowner/ bidder (as the case may be) after completion of that year annually within 30 days of certification of invoice by the Engineer In charge. Statutory deduction shall be done as per law. Lease or Sub-lease charges to the Revenue and/ or Forest land shall be paid to Government Authorities as per the terms of the lease or sub-lease deed.			
2. The Bidder shall quote the statutory and other charges as applicable on Bid closing date. In case, the charges quoted are lower than applicable or not quoted it will be presumed that the same will be borne by the Bidder as part of O&M cost quoted in price schedule-II and will be recovered from the O&M charges payable.			
3. The bidder shall include taxes and duties as applicable in the charges quoted above. The break-up of basic rates and taxes and duties as considered shall be provided by the successful bidder before signing the contract agreement.			

(To be submitted for each lot)					
Bid Response Sheet No. P-VII					
Schedule of Price for "Scheduling & Forecasting Charges for Wind Power Project payable by OWNER during O&M for 10 (Ten) years from the date of commissioning"					
				Amount	**In INR (Indian Rupees)**
Sr. No.	**Year**	**Basic Scheduling & Forecasting charges per annum for WPP**	**GST for Basic Scheduling & Forecasting charges (in %)**	**GST for Basic Scheduling & Forecasting charges**	**Total annual S&F charges for the WPP (inclusive of GST) in figures**
A	**B**	**C**	**D**	**E= C x D/100**	**F=C+E**
1	1st year			0	0
2	2nd year			0	0
3	3rd year			0	0
4	4th year			0	0
5	5th year			0	0
6	6th year			0	0
7	7th year			0	0
8	8th year			0	0
9	9th year			0	0
10	10th year			0	0
	Sub Total BRS No. P-VII (in Figures)	**0**	**0**	**0**	**0**
	Sub Total BRS No. P-VII (in words):				
NOTE	1. The S&F (scheduling & Forecasting) charges shall be payable from the 1st year of comprehensive O&M. In case the same is done by the utility, these charges will not be paid to Contractor.				
	2. The Bidder is required to indicate applicable rate of GST as on Bid closing date.				

Annexure-I

FORMAT OF POWER OF ATTORNEY AS AUTHORIZED SIGNATORY

(On a non-judicial stamp paper of appropriate value)

Know all men by these presents, we ……. (name of the firm and address of the registered office) do hereby irrevocably constitute, nominate, appoint and authorise Mr. / Ms (Name), son / daughter / wife of …… and presently residing at …….., who is presently employed with us and holding the position of ……..., as our true and lawful attorney (hereinafter referred to as the "Attorney") to do in our name and on our behalf, all such acts, deeds and things as are necessary or required in connection with or incidental to submission of Works Contract on LSTK basis including Engineering, Supply, Procurement, Installation, Commissioning, Comprehensive O&M of 50 MW (± 5%) Wind Power Project at the suitable site(s) in the state of Maharashtra with its Comprehensive Operation & Maintenance for 10 Years

RFP document no. _____ issued by Bharat Petroleum Corporation Limited ("OWNER"),including but not limited to signing and submission of all applications, Bids and other documents and writings, participate in Bidders' and other conferences and providing information / responses to the Company, representing us in all matters before the Company, signing and execution of all contracts including the Contract Agreement and undertakings consequent to acceptance of our Bid, and generally dealing with the Company in all matters in connection with or relating to or arising out of our Bid for the said Project and / or upon award thereof to us and / or till the entering into of the Contract Agreement with OWNER.

AND we hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers conferred by this Power of Attorney and that all acts, deeds and things done by our said Attorney in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.

IN WITNESS WHEREOF WE, ……... THE ABOVE-NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS …… DAY OF …... 20……

For……

(Signature, name, designation and address)

Witnesses:

1.

2.

Accepted Notarised

(Signature, name, designation, and address of the Attorney)

Notes:

1. The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.

2. Wherever required, the Bidder should submit for verification the extract of the charter documents and documents such as a board or shareholders resolution / power of attorney in favour of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Bidder.

3. For a Power of Attorney executed and issued overseas, the document will also have to be legalised by the Indian Embassy and notarised in the jurisdiction where the Power of Attorney is being issued. However, the Power of Attorney provided by Bidders from countries that have signed The Hague Legislation Convention, 1961 are not required to be legalised by the Indian Embassy if it carries a conforming Apostle certificate.

4. This format for Power of Attorney is for reference and in case a Bidder has a different format approved by their management then the same can submitted.

Annexure-II

PROFORMA OF BANK GUARANTEE
FOR SECURITY DEPOSIT TOWARDS PERFORMANCE
(On non-judicial paper of appropriate value)

As per General Conditions of Contract (GCC)

Annexure-III

FORMAT OF BANK GUARANTEE FOR PERFORMANCE OF O & M

Reference No. ……. Bank Guarantee No. ……. Dated: …….

To:
The Procurement Leader CPO Mktg. Group-4
Bharat Petroleum Corporation Limited (BPCL)
"A" Installation, Sewree Fort Road,
Sewree (East), Mumbai, 400015

Dear Sir,

WHEREAS ……. *[Insert name of the Contractor]* with address ……. *[Insert address of the Contractor]* having its registered office at ……. *[Insert address of the Contractor]* (Hereinafter, the "Bidder") wishes to participate in RFP document No. XXX issued by Bharat Petroleum Corporation Limited ("OWNER") (hereinafter, the "Beneficiary") for Operation and Management of Performance of Wind Power Project.

And WHEREAS a Bank Guarantee for Rupees *[……]* valid till ……. *[Insert date for 13 months from the date of commissioning]* is required to be submitted by the Contractor as per the terms and conditions of the RFP.

We, …….*[Insert name of the Bank and address of the Branch giving the Bank Guarantee]* having our registered office at ……. *[Insert address of the registered office of the Bank]* hereby give this Bank Guarantee No. ……. *[Insert Bank Guarantee number]* dated ……. *[Insert the date of the Bank Guarantee]*, and hereby agree unequivocally and unconditionally to pay immediately on demand in writing from the Beneficiary any officer authorized by it in this behalf any amount not exceeding Rupees *[……]* to the said Beneficiary on behalf of the Bidder.

We ……. *[Insert name of the Bank]* also agree that withdrawal of the Bid or part thereof by the Bidder within its validity or non-submission of further O&M Performance Bank Guarantee by the Bidder within the stipulated time of the Letter of Intent to the Bidder or any violation to the relevant terms stipulated in the RFP would constitute a default on the part of the Bidder and that this Bank Guarantee is liable to be invoked and encashed within its validity by the Beneficiary in case of any occurrence of a default on the part of the Bidder and that the encashed amount is liable to be forfeited by the Beneficiary.

This agreement shall be valid and binding on this Bank up to and inclusive of ……. *[Insert the date of validity of the Bank]*and shall not be terminable by notice or by Guarantor change in the constitution of the Bank or the firm of the Bidder Or by any reason whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, conceded with or without our knowledge or consent by or between the Bidder and the Beneficiary.

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

[Insert the address of the Bank with complete postal branch code, telephone and fax numbers, and official round seal of the Bank]

[Insert signature of the Bank's Authorized Signatory]

Attested:
……. [Signature] (Notary Public)

Place: ……. Date: ……..

INSTRUCTIONS FOR FURNISHING BANK GUARANTEE

- The Bank Guarantee by Bidders will be given on non-judicial stamp paper as per stamp duty applicable at the place where the Tender has emanated. The non-judicial stamp paper should be in name of the issuing bank.
- The Bank Guarantee by the Bidder shall be given from bank only given in Annexure V.
- This Bank Guarantee / all further communication relating to the bank guarantee should be forwarded to ……
- The full address along with the Telex / Fax No. and email address of the issuing bank to be mentioned.

ANNEXURE IV

FORMAT OF ADVANCE PAYMENT BANK GUARANTEE

(To be submitted by Bidder on a Non-Judicial Stamp Paper of Appropriate Value)

The Procurement Leader CPO Mktg. Group-4
Bharat Petroleum Corporation Limited (BPCL)
"A" Installation, Sewree Fort Road,
Sewree (East), Mumbai, 400015

Dear Sirs,
Guarantee No. & Date:
Amount of Guarantee: **Rs**.
Valid up to:
Last Date for lodgment of claim:

1. WHEREAS Bharat Petroleum Corporation Limited, having its registered office at The Procurement Leader CPO Mktg. Group-4 Bharat Petroleum Corporation Limited (BPCL) "A" Installation, Sewree Fort Road, Sewree (East), Mumbai, 400015 (hereinafter referred to as the "Corporation", which expression shall unless repugnant to the context or meaning thereof include its successors and assigns) has awarded to ----------, having its registered office at ---------- and a corporate office at ---------- (hereinafter referred to as the "Contractor", which expression shall unless repugnant to the context or meaning thereof, include its successors and assigns) the work of setting up of ----- MW Wind Power Project of the Corporation in the State of ---------- (hereinafter referred to as the "Project") under and in terms of a Contract evidenced by LAO No…….. Dated……. along with the relevant Tender Documents (Tender No……dated.……) (hereinafter collectively referred to as the "Contract", which expression shall include all amendments and/or modifications therein or in terms of the Advance as stipulated hereinafter).

2. AND WHEREAS the Contractor in terms of the Contract is required to render EPC services such as supply WEG of and its erection testing & commissioning as described in the Contract to the Corporation for the Project (hereinafter referred to as the **"EPC**" and shall include the title and all rights including (but not limited to) the user for non-agricultural purpose).

3. AND WHEREAS pending such a complete commissioning as aforesaid of the EPC contract to the Corporation, the Corporation has agreed to advance the sum of Rs. [] (Rupees in words only) (hereinafter referred to as the **"Advance"**) to the Contractor upon the condition that the said advance shall be secured by a Guarantee/Undertaking from the Bank as hereinafter appearing.

4. We [] (Name of the Bank), a nationalized bank within the meaning of Reserve Bank of India Act. and constituted under the Banking Companies (Acquisition & Transfer of Undertaking), 1970 having its Registered Office/Head Office at [] (hereinafter called the "Bank" which expression shall include its successors and assigns), at the request of the Contractor and with the intent to bind the Bank and its successors and assigns, do hereby unconditionally and irrevocably undertake to pay the Corporation at their Mumbai Office [] (Name of the Place) forthwith on first demand without protest or demur or proof or satisfaction and without reference to the Contractor, any and all amounts demanded from

us by the Corporation with reference to this Guarantee up to an aggregate limit of Rs. [] (Rupees in words only).

5. AND the Bank doth hereby further agrees as follows:

   i. This Guarantee shall be a continuing Guarantee and shall remain valid and irrevocable for all claims of the Corporation upon the Bank made up to the midnight of_____ provided that the Bank shall upon the written request of the Corporation made upon the Bank at any time within 24 (Twenty Four) months from the said date extend the validity of the Bank Guarantee by a further period of 6 (six) months from the said date with the intent that the validity of this Guarantee shall automatically stand extended by a further period of 6 (six) months upon such request by the Corporation.

   ii. The Corporation shall have the fullest liberty without reference to the Bank and without affecting in any way the liability of the Bank under this Guarantee, at any time and/or from time to time to amend or vary the contract and/or any of the terms and conditions thereof or relative to the Advance and/or to extend time for performance of the contract in whole or part and/or payment of the Advance in whole or part or to postpone for any time and/or from time to time any of the obligations of the Contractor and/or the rights, remedies or powers exercisable by the Corporation against the Contractor and either to enforce or forbear from enforcing any of the terms and conditions of or governing the Contract and/or the Advance, or the securities, available to the Corporation and the Bank shall not be released from its liability under these Presents and the liability of the Bank shall remain in full force and effect notwithstanding any exercise by the Corporation of the liberty with reference to any or all the matters aforesaid or by reason of time being given to the Contractor or any other forbearance, act or omission on the part of the Corporation or any indulgence by the Corporation to the Contractor or of any other act, matter or thing whatsoever which under any law could (but for this provision) have the effect of releasing the Bank from its liability hereunder or any part thereof and the Bank hereby specifically waives any and all contrary rights whatsoever.

   iii. The obligations of the Bank to the Corporation hereunder shall be as principal to principal and shall be wholly independent of the Contract and it shall not be necessary for the Corporation to proceed against the Contractor before proceeding against the Bank and the Guarantee herein contained shall be enforceable against the Bank as Principal debtor notwithstanding the existence of any Undertaking or security for any indebtedness of the Contractor to the Corporation (including relative to the Advance) and notwithstanding that any such Undertaking or security shall at the time when claim is made against the bank or proceedings taken against the Bank hereunder, be outstanding or unrealised.

   iv. As between the Bank and the Corporation for the purpose of this Guarantee, the amount stated in any claim, demand or notice made by the Corporation on the Bank with reference to this Guarantee shall be final and binding upon the Bank as to be the amount payable by the Bank to the Corporation hereunder.

   v. The liability of the Bank to the Corporation under this Guarantee shall remain in full force and effect notwithstanding the existence of any difference or dispute between the Contractor and the Corporation, the Contractor and/or the Bank and/or the Bank and the Corporation or otherwise howsoever touching or affecting these presents or the

liability of the Contractor to the Corporation, and notwithstanding the existence of any instructions or purported instructions by the Contractor or any other person to the Bank not to pay or for any cause withhold or defer payment to the Corporation under these presents, with the intent that notwithstanding the existence of such difference, dispute or instruction, the Bank shall be and remain liable to make payment to the Corporation in terms hereof.

vi. This Guarantee shall not be determined or affected by any change in the constitution of the Bank or that of the Contractor or the Corporation or any irregularity in the exercise of borrowing powers by or on behalf of the Contractor.

vii. Without prejudice to any other mode of service, a demand or claim or other communication may be transmitted by the Corporation to the Bank either by post or by fax. If transmitted by fax, the transmission shall be complete as soon as acknowledged by bank.

viii. Notwithstanding anything contained herein:

a) The Bank's liability under this Guarantee shall not exceed _____ (Amount in figures & words);

b) This Guarantee shall remain in force up to _____ and any extension(s) thereof; and

c) The Bank shall be released and discharged from all liability under this Guarantee unless a written claim or demand is issued to the Bank on or before _____or the date of expiry of any extension(s) thereof if this Guarantee/Undertaking has been extended.

ix. The Bank doth hereby declare that Shri _____ who is the _____ (designation) of the Bank is authorized to sign this Undertaking on behalf of the Bank and to bind the Bank thereby.

Dated this _____ day of 2023 at _____.

Authorized Signatory

Annexure-V

LIST OF APPROVED BANKS

Bank Guarantee submitted by the vendors either for EMD/ Security Deposit or for Performance Guarantee shall be from any bank as detailed below:

SN	Particular	B G Value	Stipulations
1		Up to Rs. 1 crore	Bank Guarantees up to Rs. 1 crore issued by any scheduled bank (II Schedule to RBI Act) shall continue to be accepted.
2		More than 1 crore	Bank Guarantees above Rs. 1 crore which are issued by banks, who meet the norms as per rating agencies viz. Moody's, S&P, CRISIL, CARE, ICRA etc. only shall be accepted.
3	Replacement of BG		In case rating falls below stipulated level or that bank is under moratorium by RBI, all BGs issued by such bank must be replaced.

ANNEXURE -VI

PREFERRED VENDOR LIST FOR ELECTRICAL ITEMS

SL No.	Item Description	Approved Vendor List
1.	Cables: Control-PVC (130D)	1. ASSOCIATED FLEXIBLES AND WIRES (P) LTD- A132 2. CMI LTD- C019 3. CORDS CABLES INDUSTRIES LTD- C144 4. DELTON CABLES LTD- E012 5. ELKAY TELELINKS LTD- E063 6. EVERSHINE ELECTRICALS- E024 7. FINOLEX CABLES LTD- F013 8. GEMSCAB INDUSTRIES LTD- G146 9. GOYOLENE FIBRES (INDIA) PVT. LTD- G142 10. HAVELL'S INDIA PVT. LTD- H060 11. KEI INDUSTRIES LTD- K082 12. NICCO CORPORATION LTD.- N033 13. NORTH EASTERN CABLES PVT. LTD- N112 14. PARAMOUNT COMMUNICATIONS LTD- P-243 (MANUFACTURING UNIT- PARAMOUNT CABLES CORPORATIONS) 15 POLYCAB WIRES PVT. LTD – P-244 16. RADIANT CABLES PVT. LTD- R047 17. RAVIN CABLES LTD. – R179 18. SUYOG ELECTRICALS LTD. – S304 19. TORRENT CABLES LTD- T124 20. UNIVERSAL CABLES LTD. – U003 21. ASSOCIATED CABLES PVT. LTD- A034 22. ECKO CABLES PVT. LTD- E169 23. HINDUSTAN VIDYUT PRODUCT- H122 24. THERMO CABLES LTD. – T212 25 LAPP INDIA LTD.
2.	SWITCH BOARDS-MV:MCC / PCC / PMCC-DRAWOUT (13BC)	1. BCH ELECTRIC LTD- B002 (TYPE:MCC) 2. CONTROLS &SCHEMATICS LTD-C024 (TYPE:MCC,PCC,PMCC) 3. CONTROLS & SWITCHGEAR LTD-C007 (TYPE MCC,PCC,PMCC) 4. GE INDIA INDUSTRIAL (P) LTD- G147 (TYPE MCC,PCC,PMCC) 5. LARSEN & TOUBRO LTD- L001C (TYPE MCC,PCC,PMCC) 6. SCHNEIDER ELECTRIC INDIA PVT. LTD- S0440 (TYPE MCC,PCC,PMCC) 7. SIEMENS LTD- S003 (TYPE MCC,PCC,PMCC)
3.	SWITCH BOARDS-MV:MCC / ASB / LDB-FIXED TYPE (13BB)	1. BCH ELECTRIC LTD- B002 (TYPE: MCC, LDB,ASB) 2. CONTROLS &SCHEMATICS LTD-C024 (TYPE: MCC, LDB,ASB) 3. CONTROLS & SWITCHGEAR LTD-C007 (TYPE: MCC, LDB,ASB) 4. GE INDIA INDUSTRIAL (P) LTD- G147 (TYPE: MCC, LDB,ASB) 5. LARSEN & TOUBRO LTD- L001C (TYPE: MCC, LDB,ASB)

SL No.	Item Description	Approved Vendor List
		6. M.K. ENGINEERS & CONTROLS PVT. LTD- M138 (TYPE: MCC, LDB,ASB) 7. SCHNEIDER ELECTRIC INDIA PVT. LTD- S0440(TYPE: MCC, LDB,ASB) 8. SIEMENS LTD- S003 (TYPE: MCC, LDB,ASB)
4.	TRANSFORMERS-DISTRIBUTION- UPTO 4MVA (13KB)	1. BHARAT BIJLEE LTD – B048 2. CROMPTON GREAVES LTD –C010 3. EMCO LTD- E014 4. INDO TECH TRANSFORMERS LTD -1178 5. KANOHAR ELECTRICAL PVT. LTD- K017 6. KIRLOSKAR POWER EQUIPMENT LTD. – K134 7. TRANSFORMERS & RECTIFIERS (I) LTD. – T129 8. VIJAY ELECTRICALS LTD. –V076 9. VOLTAMP TRANSFORMERS (P) LTD –V003 10. AREVA T&D INDIA LTD. – A347 11. RIME TRANSFORMERS & CONDUCTORS PVT. LTD R163
5.	SIGNAL CABLES (14CB)	1. ASSOCIATED FLEXIBLES AND WIRES (P) LTD – A132 2. CMI LIMITED –C019 3. CORDS CABLES INDUSTRIES LTD. – C144 4. DELTON CABLES LIMITED – D102 5. ELKAY TELELINKS LTD.- E063 6. FINE CORE CABLES PVT. LTD- F139 7. GOYOLENE FIBRES (INDIA) PVT. LTD- G142 8. KEI INDUSTRIES LIMITED – K082 9. LAPP CABLES INDIA LTD, BANGALORE 10. NETCO CABLE INDUSTRIES PVT. LTD- N094 11. NICCO CORPORATION LTD.- N033 12. PARAMOUNT COMMUNICATIONS LTD – P243 13 POLYCAB WIRES PVT. LTD- P244 14. RADIANT CABLES PVT. LTD- R047 15. SUYOG ELECTRICALS LTD. – S304 16. THERMOCABLES LTD. (FORM T-140)- T212 17. UNIVERSAL CABLES LTD. – U003 18. ASSOCIATED CABLES PVT. LTD. – A034
6.	NEUTRAL GROUNDING RESISTORS- H.V. (13 RA)	1. BCH ELECTRIC LTD. – B002 2. RESIITECH ELECTRICALS PVT. LTD. – R062 3. RSI SWITCHGEAR PVT. LTD. – R001 4. SR NARKHEEDE ENGINEERING PVT. LTD. – S146
7.	LIGHTING FIXTURES FOR NON-HAZARDOUS AREA (14LB)	1. BAJAJ ELECTRICALS LTD. – B011 (MANUFACTURER- M/S. ALPINE ELECTRICAL MFG.CO.PVT.LTD) 2. CROMPTON GREAVES LTD. –C010 3. PHILIPS INDIA LTD. – P-037 4. HAVELL'S INDIA LTD. – H060 5. M/S. VENTURE LIGHTING INDIA, CHENNAI
8.	CABLES: HIGH VOLTAGE- XLPE (130A)	1. INDUSTRIAL CABLES (I) LTD- 1028 2. NICCO CORPORATION LTD. – N033 3. POLYCAB WIRES PVT. LTD. – P244

SL No.	Item Description	Approved Vendor List
		4. TORRENT CABLES LTD. – T124 5. UNIFLEX CABLES LTD. – U084 6. UNIVERSAL CABLES LTD. – U003
9.	H.V. – CAPACITORS	1. ABB LTD, BANGALORE – A200 2. BHEL, BHOPAL- B041A 3. KAPSALES ELECTRICALS LTD.- K029 4. SHREEM CAPACITORS PVT. LTD. – S266 5. UNIVERSALS CABLES LTD. – U003 6. MADHAV CAPACITORS (P) LTD., PUNE
10.	SWITCH BOARDS- HV (INDOOR) WITH VCB ITEM (13BA)	1. ABB LTD., NASIK –A300 2. BHEL, BHOPAL –B041A 3. CROMPTON GREAVES LTD. –C010 4. SIEMENS LTD. – S003 5. AREVA T&D INDIA LTD. –A347 6. JYOTI LTD. –J001
11	CONSUMABLES/LUBE OIL/CUTTING GAS/TRANSFORMERS OIL/COOLANTS ETC.	BPCL MAKE PRODUCTS SHALL BE PREFERRED.

Annexure-VII

MEMORANDUM OF AGREEMENT

Please refer General Conditions of contract (GCC)

ANNEXURE-VIII

INTEGRITY PACT

Attached Separately

ANNEXURE- IX

FORMAT FOR PRE-BID QUERIES

To

The Procurement Leader CPO Mktg. Group-4
Bharat Petroleum Corporation Limited (BPCL)
"A" Installation, Sewree Fort Road,
Sewree (East), Mumbai, 400015

Sub: Tender No. :

Dear Sir,

Having examined the General and Special Conditions of Contract and the Terms of Reference including all attachments thereto, the receipt of which is hereby duly acknowledged, we have some queries and the same are submitted as per the format provided in the tender documents.

S. No.	Clause No.	Existing provision	Bidder's Querry	Owner's Reply

---
Signature

_____
(In the capacity of)

ANNEXURE- X

POWER CURVE PERFOMANCE TEST

Power curve performance test on one WEG at each Site in the Windfarm shall be conducted for ascertaining performance of the WEG with reference to certified power curve of the machine. The test shall be conducted first year of the wind energy project in accordance with the methodology as described below-

Power curve performance test shall be carried out for a period of one month during windy season as specified in the Contract.

Contractor shall submit a proposal suggesting at least two WEGs along with locations of corresponding wind masts in the Windfarm observed suitable for carrying out power curve test for consideration by OWNER. In case two options are not feasible to offer due to site constrains, contractor and OWNER / consultant shall discuss, mutually agree and finalize the mast location.

Following factors shall be taken into consideration for submission of proposal:

- Topographical variations
- Other wind turbines
- Obstacles (buildings, trees etc.)
- Location of meteorological (wind) mast

OWNER, its Consultant and Contractor's officials shall jointly inspect the Windfarm site for selection of one designated turbine with related wind mast out of the short-listed machines for the purpose of power curve test. The test shall be carried out on this designated turbine.

OWNER, its Consultant and Contractor's officials shall jointly inspect the Windfarm site for selection of one designated turbine with related wind mast out of the short-listed machines for the purpose of power curve test. The test shall be carried out on this designated turbine.

Site checking supply & installation of wind mast and onsite facilities / support for testing and monitoring shall be the responsibility of the Contractor.

Contractor shall install a wind mast of height equal to hub height of the designated turbine near the selected location at a distance between 2D-2.5D (where D is rotor diameter) from the designated turbine in consultation with OWNER / consultant.

Mounting height of primary anemometer, temperature sensor, pressure sensor and RH meter shall the same as hub height of the test turbine. The mast shall be provided with lightening protection covering complete wind mast installation against any surge. The mast shall record wind data at height equal to that of hub height of the turbine.

The wind data recorded by this mast during test period shall be taken as reference data for purpose of power curve verification test turbine. The mast shall be maintained at site up to completion of power curve test and acceptance by OWNER and defect liability period whichever is later.

Power curve verification

For Power curve verification the following equipment are to be installed along with wind mast, wind vanes etc.:

a) Cup anemometer shall be Class A type or Class B type depending upon the requirement of topographical variations.

b) Pressure gauge, Temperature sensor and Humidity recorder at suitable height

c) Data logger with Solar panel, battery, modem for real time remote monitoring and recording of data

d) Metering arrangement with LT current transformers (CTs) of suitable ratio, LT potential transformers (PTs) of appropriate ratio & TVM duly calibrated by an accredited test laboratory / house shall be provided near the LCS or on generation side or on the low voltage side of DP yard transformer.

e) The entire metering arrangement shall be sealed for the test period. Similarly, data logger at the wind mast shall also be sealed.

f) Accuracy class of all the measuring equipment shall be 0.5 or better. Bidder shall furnish valid calibration certificates of the measuring instrument in this regard.

g) For any further reference, IEC-61400-12-1: 2005(E) updated as on the date of testing, titled “Power Performance Measurements of Electricity Producing Wind Turbines” shall be followed.

h) In case bidder offers more than one site the power curve performance test will be conducted at all the sites,

Setting up of the system for verification of power curve

1) Contractor shall furnish required drawings of wind mast along with arrangement for mounting of all sensors.

2) Contractor shall furnish valid latest calibration certificates of all the sensors to be mounted on the wind mast.

3) Contractor shall furnish technical specifications of all measuring instruments & TVM.

   Valid latest calibration certificates / reports of all the measuring instruments & TVM from NABL accredited test laboratory shall be furnished by the Contractor. All required instrumentation including for relative humidity measurement shall be provided.

   Consultant shall examine the information furnished by Contractor and submit recommendation to OWNER.

4) Contractor shall proceed ahead with setting up of wind mast after approval by OWNER. Care shall be taken that guys at highest for holding the wind mast structure in vertical position are fixed at a point which is at least 1.5 m lower than primary anemometer level.

5) Consultant shall monitor and verify the correctness of wind mast installation and give

appropriate guidelines to Contractor for operation of the same for the purpose of verification of power curve.

6) Recorded wind data (speed and direction) of wind mast and WEG under test will be verified for similarity, confirming that the wind at WEG & Mast is of same intensity and direction.

Power curve verification exercise

1) Contractor shall carry out necessary prior checks on the selected WEG to avoid any stoppage of the turbine during test period.

2) After checking the wind mast and related instrumentation, operation for ascertaining operational reliability shall be carried out. Contractor shall confirm readiness for commencement of the test and finalize date of start in consultation with OWNER & its consultant

3) OWNER, Consultant and Contractor's representative shall jointly witness commencement of the test. The test would commence with synchronization of the data logger of wind mast, LCS of test turbine and energy meter (TVM). Immediately after synchronization, required sealing shall be done by the team jointly.

4) All relevant initial readings at the time of the commencement of the test would be recorded jointly by the team.

5) The parameters to be recorded shall be as per table given below:

Sl. No.	Date	Turbine Status	Error Code	Description of Error	Duration of Stoppages			Remarks
					From	To	Time Duration	

* Grid Non-availability shall be specifically recorded in Column "Remarks"

6) On the date of completion of the test, the team would jointly open the seals and retrieve the data from data logger, LCS and energy meter, if applicable. Final readings at the time of the commencement of the test would be recorded jointly by the team.

7) Analyse the data gathered for consistency and suitability for analysis.

8) Stoppages details provided shall be verified from relevant records at LCS, CMS and substations at the end of test duration.

9) In case, the data gathered is found to be erroneous and not suitable for analysis, should find out the reason for the same, advice corrective action to the contractor and repeat Steps 3 to 7.

10) Finalize the data sets to be considered for preparing wind speed distribution and for calculation of correction factors for air density, array loss, machine availability, grid availability.

Analysis and report on power curve guarantee verification

a) Average site air density shall be considered for test period shall be calculated from

pressure and temperature data downloaded from the logger after correction for humidity as measured. GEEG would be corrected for air density and array losses as calculated.

b) The period on account of non-availability of grid and WEG for individual stoppage slot, should be removed from the wind speed data recorded in 10-minute bins.

c) Wind speed frequency distribution for the test period shall be prepared from the raw wind data captured by the mast during the test after removing the data as per (b).

d) Certified power curve (CPC) of the WEG as considered in the Contract, shall be applied to the above wind speed distribution to arrive at gross expected energy generation (GEEG).

e) Following factors shall be applied for arriving at net expected energy generation (NEEG)

   (i) The power curve should be corrected at site Air density worked out for the site from the data as actually recorded.

   (ii) Array loss at the actual factor for test turbine as per Final Micro Siting Report of the complete Windfarm by wind flow modelling software viz. WAsP shall be considered.

   (iii) 2% on account of flow distortion and Measuring accuracy

f) Once the WEG is shortlisted for the test, only preventive checks and maintenance activities as indicated in the test procedure shall be carried out till the time the test is completed. No modification / calibrations to the selected WEG or parameters of WEG, other than those indicated in the procedure, should be carried out till completion of the test. Any work to be carried out on the test turbine prior to start and completion of the test would be intimated to OWNER and Consultant.

Acceptance Criteria and Compensation for lower performance.

g) The NEEG worked out as per methodology given above shall be verified against actual energy generated by the WEG as recorded by the tri-vector meter (TVM) during test period.

h) If actual generation recorded by TVM is equal to or more than 95% of NEEG then the turbine shall be deemed to have met power curve performance guarantee.

i) If the actual generation as recorded at the WEG meter is less than 95% of the calculated net estimated generation from the wind mast data, then bidder shall conduct the test again after making necessary checks & settings, as per the above procedure.

j) In case the test is again unsuccessful, technical explanation for this shall be given by Contractor to OWNER. If OWNER feels satisfied with the explanation submitted by the contractor, it may consider for having fulfilled the requirement of Power Curve test.

k) In case OWNER is not satisfied with such technical explanation submitted by the contractor, the contractor shall have the option to get the power performance measurement Test carried out / done by NIWE as per prevailing standards. However,

all costs towards the same shall be borne by the Contractor. If the test by NIWE proves the power curve performing up to 95% of the offered power curve, the power curve performance Test shall be considered as successful.

l) In case, the contractor does not opt for further Testing by NIWE or the test conducted by NIWE also fails to show performance of power curve for at least 95%, the Contractor shall compensate the loss due to shortfall in the test in the manner as given here under: -

(i) For every 1% (or part thereof) shortfall in actual generation than 95% of NEEG, the contractor shall pay to OWNER @ 0.5% (half percent) of the Contract Value of supply, erection and commissioning of wind power project.

(ii) In case the actual energy generation as recorded at the TVM is less than 90% of AEP, the bidder shall rectify defects in all the WEGs, as the case may be, in the manner that power generation is not less than 95% of AEP. In such an event the power curve performance test should be repeated again after rectification at the cost of bidder. In case the actual generation, after rectification work, is equal to or more than 95% of NEEG the test will be deemed to have passed the performance test. In this case, the Contractor shall compensate OWNER for the actual revenue loss during the period when generation was lower due to poor performance of the WEGs i.e since commissioning to completion of rectification works.

Annexure – XI

Sample calculations of Bid Evaluation

Bidder	A	B	C	Remarks
Capacity Quoted in MW	24.5	25.2	25.7	As Quoted
Total EPC Cost (X1) in Rs lakhs	22050	23310	23901	As Quoted
Total O&M Cost per Year-in Rs lakhs				
1	0	0	0	As quoted for 10 years
2	270	277	283	
3	283	291	297	
4	297	306	312	
5	312	321	327	
6	328	337	344	
7	344	354	361	
8	361	371	379	
9	379	390	398	
10	398	410	418	
NPV of O&M Price(X2)	1696.216	1744.679	1779.296	As calculated
Total S&F Cost per Year-in Rs lakhs				
1	10	9	11	As quoted for 10 years
2	11	10	12	
3	12	11	13	
4	13	12	14	
5	14	13	15	
6	15	14	16	
7	16	15	17	
8	17	16	18	
9	18	17	19	
10	19	18	20	
NPV Rate	12.00%	12.00%	12.00%	As per tender
NPV of S&F charges (X3)	87.101	80.773	93.430	As calculated
Total land lease / Year-in Rs lakhs				
1	100.000	105.000	95.000	As quoted for 30 years
2	100.000	105.000	95.000	
3	100.000	105.000	95.000	
4	105.000	110.250	99.750	
5	105.000	110.250	99.750	
6	105.000	110.250	99.750	
7	110.250	115.763	104.738	
8	110.250	115.763	104.738	
9	110.250	115.763	104.738	
10	115.763	121.551	109.974	
11	115.763	121.551	109.974	

Bidder	A	B	C	Remarks
12	115.763	121.551	109.974	
13	121.551	127.628	115.473	
14	121.551	127.628	115.473	
15	121.551	127.628	115.473	
16	127.628	134.010	121.247	
17	127.628	134.010	121.247	
18	127.628	134.010	121.247	
19	134.010	140.710	127.309	
20	134.010	140.710	127.309	
21	134.010	140.710	127.309	
22	140.710	147.746	133.675	
23	140.710	147.746	133.675	
24	140.710	147.746	133.675	
25	147.746	155.133	140.358	
26	147.746	155.133	140.358	
27	147.746	155.133	140.358	
28	155.133	162.889	147.376	
29	155.133	162.889	147.376	
30	155.133	162.889	147.376	
NPV Rate	12.00%	12.00%	12.00%	As per tender
NPV of Land Lease Price(X4)	1006.922	1057.268	956.576	Derived
AEP as per tender Clause 4.24 For Bid Evaluation (Y) - Lakh kWh	729.708	794.707	878.015	Considered by Consultant
10 Year Generation(Y1) - Lakh kWh	7297	7947	8780	Y x 10
EBV - Rs / kWh	3.404	3.296	3.044	(X1+X2+X3+X4) / Y1
For discounting purpose, all payments are assumed to be done at the beginning of the year.				

Annexure – XII

FORMAT OF FUNCTIONAL TEST

The following tests should be conducted after the commissioning and stabilization of the WEG.

WEG NO.
DATE:

SL. NO.	TEST	OBSERVATION	REMARKS
1	YAW CONTROL – Operational checks by Manual and Automatic Mode		
	a. Manual Yawing: Out of Wind direction 90° to 180°, Clockwise and Anticlockwise		
	b. Putting the Machine in AUTO mode to YAW into the wind direction		
	c. Yawing calibration		
	d. Wind Vane operational accuracy		
	e. Anemometer operational accuracy		
2	PITCH OPERATION		
	a. Manual- Demonstration of manual pitching of blades, Pitch OUT-Pitch IN-Pitch OUT		
	b. Auto Mode Pitch IN through control system		
3	CUT-IN OPERATION		
	a. AUTO Yawing IN		
	b. AUTO Pitching IN		
	c. Rotor picking up gradually		
	d. Cutting IN of Generator		
	e. Active Power Generation		
4	CUT-OUT OPERATION		
	a. WTG Cut-Out at prescribed wind speed		
5	LCS TERMINAL OPERATION		
	a. Operation of all group of Keypads		
	b. Operation of Turbine/Yaw control Keys		
	c. Handling integrated buttons at bottom cabinet		
6	LCS/CMS OPERATION		
	a. Monitoring of various parameters Machine wise		
	b. Trending of various parameters Machine wise		

SL. NO.	TEST	OBSERVATION	REMARKS
	c. Control of individual Machine		
	d. Capture of events Machine wise		
	e. Monitoring of various analogue and digital inputs/output to the control system		
7	POWER EVACUATION		
	a. Functioning of TRI VECTOR Energy Meter		
	b. Familiarization with the modalities of Power Evacuation		
	c. Functioning of Oil Level Gauge/Oil Temperature Gauge and Winding Temperature Gauge of Transformer		
	d. Demonstration of day to day feeding of Power to Grid at metering end/SS with readings		
8	SAFETY RELATED OPERATIONS		
	a. Aerodynamic Pitch Breaking of Rotor Blades		
	b. Activation of Parking brake electrically and manually		
	c. Operation of Rotor Lock to keep the stalled rotor in position		
	d. Activation of Emergency STOP from Nacelle		
	e. Activation of SOFT/NORMAL Breaking from Nacelle		
	f. Observation of FSS Control Panel in Nacelle		
	g. Observation of Main Control Panel in Nacelle with Manual control provision for individual motors		
	h. Functioning of Wind Anemometers and Wind Vanes from Nacelle Top		
	i. Observation of Horizontal and Vertical Vibration detectors in Nacelle and checking function of the same		
	j. Observation of Climbing of the tower ladder/ nacelle top with safety equipment - arrestor system, harness, carabineer hook		
	k. Operation of Winch for transportation of tool/spares/equipment		
	l. Manual operation of vibration switch		
	m. Simulation of Grid failure and Restoration of Operation for one turbine		
	n. Demonstration of sensor readings - Sensors, viz. temperature, proximity sensor etc.		
	o. Soft braking/ Normal braking operation		
	p. Request for Safety Test		

SL. NO.	TEST	OBSERVATION	REMARKS
9	TEMPERATURE RISE- Measurement and checking		
	a. Stator		
	b. Generator bearing – DE		
	c. Generator bearing – NDE		
	d. Hub bearing		
	e. Gear Oil sump		
	f. Gear box – DE bearing		
	g. Gearbox – NDE bearing		
10	TWISTING OF CABLES IN TUBULAR TOWERS		
	a. Clockwise and Counter-clockwise twisting of cables during operation of WTG and un-winding of cables		

Annexure – XIII

HSE POLICY ATTACHED SEPARATELY

Annexure – XIV

PUBLIC PROCUREMENT POLICY AS APPLICABLE ATTACHED SEPARATELY

Annexure – XV

PROFORMA

JOINT BID AGREEMENT

(On Non-Judicial Stamp Paper of Appropriate Value)

To,
Bharat Petroleum Corporation Limited

TENDER NO. ----------

THIS **JOINT BID AGREEMENT** executed on this…….. day of …….. Two thousand……between M/s…….a Company incorporated under the laws of…….. and having its Registered Office at ……(hereinafter called the "Member-1." Which expression shall include its successors, executors and permitted assigns)

AND

M/s…… a Company incorporated under the laws of …… and having its Registered Office at ……..(hereinafter called the "Member - 2", which expression shall include its successors, executors and permitted assigns),

AND

M/s…… a Company incorporated under the laws of …… and having its Registered Office at ……..(hereinafter called the "Member - 3", which expression shall include its successors, executors and permitted assigns),for the purpose of making a joint bid and entering into the Contract (in case of award) ---------- of M/s. Bharat Petroleum Corporation Limited, a Company incorporated under the Indian Companies Act, 1913, and having its Registered Office at Bharat Bhavan, P.B.No. 688,. 4 & 6 Currimbhoy Road, Ballard Estate, Mumbai 400 001 (hereinafter called the Owner).

The above-mentioned Member-1, Member – 2, Member – 3 are collectively referred to as the "Members" and each is individually referred to as a "Member"

WHEREAS, the Owner invited Bids for Engineering, Procurement and Construction (EPC) contract for XX MW capacity Wind Power Project at suitable location in India with its Comprehensive Operation & Maintenance for 10 years vide its Tender No. ----------.

AND WHEREAS Bid Documents stipulates that the successful bidder may be a Consortium / Joint Venture comprising of incorporated companies under applicable law and further stipulates that in that case, the bidder shall provide along with the bid, a joint undertaking as per this format in which the Partners in the Consortium / Joint Venture are jointly and

severally liable to the Owner to perform all the contractual obligations.

AND WHEREAS, by a Consortium / Joint Venture Agreement dated ……. entered into amongst Members, it is inter alia agreed to bid for the above project. A copy of the said Agreement will be furnished to Owner.

AND WHEREAS we are authorized by our respective Board of Directors vide separate resolutions to form Consortium / Joint Venture in the name and style i.e. ……..having its registered office…….for the execution of "Engineering, Procurement and Construction (EPC) contract for XX MW capacity Wind Power Project at suitable location in India with its Comprehensive Operation & Maintenance for 10 years" of the Owner as well as to sign the same (certified copy of Board Resolution to these effects enclosed) AND

WHEREAS the bid is being submitted to the Owner vide proposal No…… dated……. based on the Consortium / Joint Venture Agreement being these presents and the bid in accordance with the requirement of Bid document have perused and understood and as a token of acknowledgement has been signed jointly by all the members and submitted to the Owner.

NOW THIS INDENTURE WITNESSETH AS UNDER:

In consideration of the above premises and agreements both the partners to this joint venture do hereby now agree as follows:-

1. In consideration of the Award of the contract for Engineering, Procurement and Construction (EPC) contract for XX MW capacity Wind Power Project at suitable location in India with its Comprehensive Operation & Maintenance for 10 years ("the Contract") by the Owner to the Consortium / Joint Venture, we the members to the Consortium / Joint Venture Agreement, do hereby agree and declare that Member - 1 (M/s……) shall act as the Lead Member for self and for and on behalf of Member-2 and Member -3 and further declare and confirm that we shall be jointly and severally bound unto the Owner for the execution of the Contract in accordance with the Contract Terms and shall be jointly and severally liable to the Owner to perform all the contractual obligations including the technical guarantees. Further, the lead member is authorized to incur liabilities and receive instructions for and on behalf of any and other members of the Constortium / Joint Venture and the entire execution of the Contract including payment shall be received exclusively by the Lead Member.

2. In case of any breach of the Contract committed by any of the partners of the Consortium / Joint Venture, the other member (s), shall be fully responsible for the consequences and for the successful performance of the Contract in accordance with the terms of the Contract.

3. Further, if the Owner suffered any loss or damage on account of any breach of the Contract or any shortfall in the performance of the completed equipment in meeting the performance guaranteed parameters as per Specifications of the Contract, all the members of these presents jointly and severally undertakes to promptly make good such loss or damage caused to the Owner, on its demand without any demure. It shall not be

necessary or obligatory for the Owner to proceed against the member (1) to these presents before proceeding against the member (2) and member (3).

4. The financial liability of the members of the consortium / joint venture agreement to the Owner with respect to any and all claims arising out of the performance or non performance of the Contract shall, however, be not limited in any way so as to restrict or limit the liabilities of either/any/any one of the member.

5. It is expressly understood and agreed between the members to this agreement that the responsibilities and obligations of each of the members shall be delineated in ***Appendix-I** to this agreement. It is further agreed by the members that the above sharing of responsibilities and obligation shall not in any way be a limitation of joint and several responsibilities / liabilities of the members under the contract.

6. This Deed shall be construed and interpreted in accordance with the Laws of India and Courts of Mumbai shall have the exclusive jurisdiction in all matters arising there under.

7. In case of an award of contract, we the members to the Consortium / Joint Venture Agreement do hereby agree that we shall furnish the Contract Performance Guarantee from a Bank in favour of Owner for a value as stipulated under the Contract and this shall be in the name of the consortium / joint venture.

8. It is further agreed that the Consortium / Joint Venture Agreement shall be irrevocable and shall form an integral part of the Contract and shall continue to be enforceable till the Owner discharges the same. It shall be effective from the date first mentioned above for all purposes and intents.

9. The Members hereby undertake to participate in the Bidding Process only through this Consortium / Joint Venture and not individually and/ or through any other consortium / joint venture constituted for this Project, either directly or indirectly

10. The Members undertake that a minimum of 26% (twenty-six per cent) stake in the Consortium / Joint Venture shall, at all times till the completion of contract, be held by each Member

11. We have satisfied ourselves regarding our role described in Appendix-I in the Project as specified in the Bid. If the Bidder/Joint Venture/Consortium is awarded the Project, we shall perform our role as outlined in the Bid. We have examined the Bid in detail and the commitments made in the same. We agree and undertake to abide by the Bid and the commitments made therein.

IN WITNESS WHEREOF, the members to the consortium / joint venture agreement have, through their authorized representatives, executed these presents and affixed common seals of their respective companies on the day month and year first mentioned above.

For M/s……..

(Member-1)

1. Common Seal of M/s.……..……
……..
has been affixed in my/our presence (Signature of the Authorized representative / s to Board of Directors)

Resolution No. dated ……

Name……...…...……

Signatures……..……

Designation ….
…… Name……...…...…… Common Seal of the
Company ……...

Designation……...…...……

For M/s……..

(Member-2)
1. Common Seal of M/s.……..……
……..
has been affixed in my/our presence (Signature of the Authorized representative / s to Board of Directors)

Resolution dated ……

Name……...…...……

Signatures……..……

Designation …. ……

Name……...…...…… Common Seal of the
Company
……...

Designation……...…...……

For M/s……..

(Member-3)
1. Common Seal of M/s.……..……
……..
has been affixed in my/our presence (Signature of the Authorized representative / s to Board of Directors)

Resolution dated ……

Name……..…..……

Signatures……..……

Designation …. ……

Name……..…..……

Common Seal of the Company ……...

Designation……...…..……

Notes:

1) ***** To be incorporated by the members suitably.

In case of Incorporated Joint Venture, JV Company will also be a member in this Joint Bid Agreement execution.

Annexure – XVI

DRAFT FORMAT OF AGREEMENT / BACK-TO-BACK GUARANTEE BETWEEN BIDDER AND THEIR PARENT COMPANY / DIRECT SUBSIDIARY / INDIRECT SUBSIDIARY COMPANY / GROUP COMPANY *(As the case may be)*

(**TO BE EXECUTED ON STAMP PAPER OF REQUISITE VALUE AND NOTORISED**)

This agreement / made this ___ day of ____ month ____ year by and between M/s. _____ (Fill in the Bidder's full name, constitution and registered office address) hereinafter referred to as bidder on the first part and M/s. _____ (Fill in full name, constitution and registered office address of Parent Company/ Direct Subsidiary/ Indirect Subsidiary/ Group Company , as the case may be) hereinafter referred to as "Parent Company/ Direct Subsidiary/ Indirect Subsidiary/ Group Company (Delete whichever not applicable)" of the other part:

WHEREAS

M/s. Bharat Petroleum Corporation Limited (hereinafter referred to as BPCL) has invited offers vide their tender No. _____ for _____ and M/s _____(Bidder) intends to bid against the said tender and desires to use the own credentials of M/s. _____ [Parent Company/ Direct Subsidiary/ Indirect Subsidiary/ Group Company -(Delete whichever not applicable)] for the **Technical Criteria and Financial Criteria** and whereas Parent Company/ Direct Subsidiary/ Indirect Subsidiary/ Group Company (Delete whichever not applicable) represents that they have gone through and understood the requirements of subject tender and are capable and committed to provide the guarantee/support/services as required by the bidder for successful execution of the contract, if awarded to the bidder.

Now, it is hereby agreed to by and between the parties as follows:

1. M/s._____(Bidder) will submit an offer to BPCL for the full scope of work as envisaged in the tender document as bidder and liaise with BPCL directly for any clarifications etc. in this context.

2. M/s. _____ (Parent Company/ Direct Subsidiary/ Indirect Subsidiary/ Group Company (Delete whichever not applicable) undertakes to provide technical support and expertise, expert manpower and procurement assistance and project management to support the bidder to discharge its obligations as per the Scope of work of the tender / Contract for which offer has been made by the Parent Company/Subsidiary Company (Delete whichever not applicable) and accepted by the bidder.

   We M/s. _____ (Parent Company/ Direct Subsidiary/ Indirect Subsidiary/ Group Company (Delete whichever not applicable) hereby agree to provide back to back guarantee to the Bidder having established address at _____, for the supplied product /executed works for this tender such that in case of failure of any supply / execution / performance of the equipment / work in all/any respects or as per the warranties

/guarantees/CAMC that have been given, then we will assume all obligations under the contract. The Guarantee shall extent to the extent of the Contractor;s liability under the contract

We M/s. _____ (Parent Company/ Direct Subsidiary/ Indirect Subsidiary/ Group Company (Delete whichever not Applicable) as the Guarantor unconditionally agrees that in case of non-performance by the bidder of any of its obligations in any respect, immediately on receipt of notice of demand by BPCL, take up the job without any demur or objection, in continuation and without loss of time and without any cost to BPCL and duly perform the obligations of the Company to the satisfaction of BPCL. The Guarantor represents that this Guarantee has been issued after due observance of the appropriate laws in force in India. The obligations of the Guarantor shall be in addition to and shall be independent of any other security which beneficiary may at any time hold in respect of any of the obligations of the Bidder.

M/s. _____ (Parent Company/ Direct Subsidiary/ Indirect Subsidiary/ Group Company would like to confirm you that as on date of this writing, we own a share of XXX% in the capital of……. (Bidder's company name), and undertake the following:

a. We are fully aware that…… (Bidder's Company Name) is aiming to get pre-qualified by BPCL to be part of its suppliers/vendors list, on the strength of our Company's financial of turnover, existence and net worth.
b. We would like to inform you that we will maintain the stake in the bidder without any dilution. Otherwise, prior approval shall be taken from BPCL in the event of any transfer of ownership (including by change of ownership or control), our rights and obligations, during the entire contractual period, in whole or part thereof. We will ensure that the new owner shall fulfil the contractual commitment and obligation, by issuing an undertaking to this effect
c. To ensure that…….. (Bidder's company name) is in a position to meet its obligations, we would like to confirm you that, we shall financial support……. (bidder Company name) with the funding and other modes needed to make it possible for…… (bidder Company name) to meet its contractual obligations towards you at all the times.

3. This agreement will remain valid till validity of bidder's offer to BPCL including extension if any and till satisfactory performance of the contract in the event the contract is awarded by BPCL to the bidder.

4. It is further agreed that for the performance of work during contract period bidder and Parent Company/ Direct Subsidiary/ Indirect Subsidiary/ Group Company (Delete whichever not applicable) shall be jointly and severely responsible to BPCL for satisfactory execution of the contract.

5. However, the bidder shall have the overall responsibility of satisfactory execution of the contract awarded by BPCL.

For and on behalf of
(Bidder)

For and on behalf of

(Parent Company/ Direct Subsidiary/ Indirect Subsidiary/ Group Company (Delete whichever not applicable)

Common Seal of M/s.……..……..has been affixed in my/our presence (Signature of the Authorized representative / s to Board of Directors) vide Resolution dated ……

Name……..…..……

Signatures……..……

Designation …. ……

Name……..…..……

Common Seal of the Company

INSTRUCTIONS FOR FURNISHING PARENT COMPANY/ DIRECT SUBSIDIARY/ INDIAN SUBSIDIARY/ GROUP COMPANY GUARANTEE

1. Guarantee should be executed on stamp paper of requisite value and notarised.
2. The official(s) executing the guarantee should affix full signature (s) on each page.
3. Resolution passed by Board of Directors of the guarantor company authorizing the signatory (ies) to execute the guarantee, duly certified by the Director / Company Secretary should be furnished along with the Guarantee.

SECTION–IX

DECLARATION

Annexure: A

Date:_____

CERTIFICATE CONFIRMING ELIGIBILTY FOR BENEFITS OF PUBLIC PROCUREMENT POLICY

Ref: Tender No…….. for ……

This is to confirm that we have verified the investment limits and other details of Unit pertaining to M/s and certify that they satisfy the eligibility criteria as per MSMED Act, 2006 and other notifications/circulars/amendments issued from time to time in this regard. Accordingly, M/s is a **Micro/Small enterprise** under the said Act and are eligible to claim the benefits of public procurement policy for the tender mentioned above.

In case applicable:

Based on our verification of share holding pattern and other details, it is certified that M/s. meets the eligibility criteria under SC/ST provision of Public Procurement Policy Order 2012 and other notifications/circulars issued from time to time in this regard and are hence eligible to claim benefits pertaining to SC/ST under the act.

In case applicable:

Based on our verification of share holding pattern and other details, it is certified that M/s meets the eligibility criteria under Women Entrepreneur provision of Public Procurement Policy Order 2012 and other notifications/circulars issued from time to time in this regard and are hence eligible to claim benefits pertaining to Women Entrepreneur under the Act.

Name of CA Firm:

[Signature of Authorized Signatory] Name:
Date: Designation:
Seal:
Membership no.
UDIN no.

Annexure-B

UNDERTAKING BY BIDDER TOWARDS MANDATORY MINIMUM LC

(IN CASE SEEKING BENEFIT OF PPP-MAKE IN INDIA)

To,

M/s BHARAT PETROLEUM CORPORATION LIMITED

SUBJECT:
TENDER NO:

Dear Sir

We, M/s **(Name of Bidder)** have submitted bid against aforesaid tender.

We have read and understood the Purchase Preference to Make In India Order/policy attached with the tender document. Accordingly, we hereby confirm that our local content percentage for the tendered item is ***……%. The certificate from Statutory Auditor or Cost Auditor of the Company (in the case of companies) or from a Practising Cost Acountant or Practicing Chartered Accountant (in respect of suppliers other than company)in this regard has been submitted in technical bid.*** (Applicable in case of tenders for value greater than Rs. 10 Crs.)

We further confirm that in case we fail to meet the minimum local content, BPCL will take action as per provision of tender document/ PPP-MII Order/Policy..

Place:

Date:

[Signature of Authorized Signatory of Bidder having power of attorney]

Name:

Designation:

Seal:

Annexure-C

CERTIFICATE BY CHARTERED ACCOUNTANT OF BIDDER TOWARDS MANDATORY MINIMUM LC

(IN CASE BIDDER SEEKING BENEFIT OF PPP-MAKE IN INDIA)

To,
M/s BHARAT PETROLEUM CORPORATION LIMITED SUBJECT:
TENDER NO:

Dear Sir

We,…… (**Name of the issuing CA Firm**) have verified relevant records of M/s (Name of the bidder) and certify that the local content percentage for the tendered item mentioned by M/s. ……(Name of the bidder) is ……%.

Name of CA Firm:

Date:

[Signature of Authorized Signatory]
Name:
Designation:
Seal:
Membership no.
UDIN no.

Annexure-D

CERTIFICATE BY STATUTORY AUDITORS OF BIDDER TOWARDS MANDATORY MINIMUM LC
(IN CASE BIDDER SEEKING BENEFIT OF PPP-MAKE IN INDIA)

To,

M/s BHARAT PETROLEUM CORPORATION LIMITED

SUB:
TENDER NO:

Dear Sir

We,…… (Name of the Statutory Auditor) have verified relevant records of M/s (Name of the bidder) and certify that the local content percentage for the tendered item mentioned by M/s. ……(Name of the bidder) is ……%.

Name of Audit Firm:

Date:

[Signature of Authorized Signatory]
Name:
Designation:
Seal:
Membership no. UDIN no.

Annexure-E

FORMAT for Declaration of Holiday Listing orders issued by BPCL or MOPNG debarring us from carrying on business dealings with BPCL/ MOPNG or serving a banning order by another Oil PSE.

(On Company Letter Head, to be signed by the duly authorized person)

SUBJECT: _____

TENDER NO:

To,

M/s BHARAT PETROLEUM CORPORATION LIMITED
CPO-M, A-Installation,
Sewri Fort Road,
Sewri East Mumbai-400015

Dear Sir/Madam,

I / We declare and confirm that we are currently not serving any Holiday Listing orders issued by BPCL or MOPNG debarring us from carrying on business dealing with BPCL/ MOPNG or convicted of an offence –

a) Under the Prevention of Corruption Act, 1988: or
b) The Indian Penal Code or any other law for the time being in force, for causing any loss of life or property or causing a threat to public health as part of execution of a public procurement contract.

[Signature of Authorized Signatory]
Name:
Designation:
Seal:

Annexure F

AFFIDAVIT CONFIRMING SUBMISSION OF TPIA CERTIFIED BQC DOCUMENTS - MANDATORY DOCUMENT

To,

M/s BHARAT PETROLEUM CORPORATION LIMITED

SUB:
TENDER NO:

Dear Sir

We, M/s..... hereby declare that all documents submitted by us towards
Technical and Financial Bid Qualification are true and genuine.

In case we become the L1 bidder in the tender, we hereby confirm that we will get the technical and financial documents submitted verified with originals by TPIA agency as specified in the tender and submit the hard copy to BPCL.

[Signature of Authorized Signatory]
Name:
Designation:
Seal: