

is permitted on written acceptance of power by Buying Entity. In order to facilitate this, SPD shall inform the Buying Entity / NR and REMC Ltd. well in advance the date on which it intends to synchronize the Power Project to the Grid System. The SPD shall be required to give an advance notice of at least 90 days prior to the proposed commissioning date.

18. Joint Meter Reading (JMR) shall be taken at Delivery Point at the time of connectivity of the Project with Grid. This shall include information of respective meters installed at delivery/ interconnection point and pooling substation/plant premises.
19. SPD is permitted to schedule the Commissioning of the Project in full as per the commissioning procedure elaborated in Annexure C of the RfS.
20. SPD shall demonstrate the proposed BESS application.
21. SPD shall demonstrate the BESS integration to the grid and operation performance according to the stated purpose.

Solar Power Developers would be required to plan commissioning/ synchronization with grid at least 10 (Ten) Days ahead of the last permissible date for commissioning. If not done so, whole responsibility for not meeting the deadline for commissioning on account of inability of the Committee to visit the project site for commissioning rests solely on the developer.

Note: The commissioning procedure may change subject to any guidelines from Buying Entity.

ANNEXURE D: INSTALLATION REPORT

(To be provided by SPD and to be submitted at least 10 days prior to Commissioning Date which shall be verified by Commissioning Committee)

Sr. No.		
I	Capacity of the Plant (MW)	
	Capacity of the Plant (MWp)	
II	Module Technology used (Mono/ Multi Crystalline/ Thin Film/ Others; please specify along with capacity of each type)	
III	Rating of individual module (Wp)	
IV	Tilt angle (from horizontal) at which array is installed	
V	Number of modules installed of each type	
VI	Source(s) of the cells installed of each type	
VII	Source(s) of the Modules installed of each type	
VIII	Number of PCUs/ Inverters installed	
IX	Source of the PCUs/Inverters(Name of supplier with address)	
X	Rating of PCUs/ Inverters	
XI	Date of Installation of Full Capacity	
	PV Arrays	
	PCUs/ Inverters	
	Transformers	
	BESS	
XII	BESS: Storage Technology used	
	BESS Ratings (Power and Energy with C-rates) and No. of Battery Module Packs	
	BESS: PCU (Nos. and Ratings)	

	OEM Recommended DoD	
	Unit Battery Technical Specifications: Nominal Voltage: Cut-off Voltage:	
	Battery Cycle Life (at OEM Recommended DoD)	
	Operating Temperatures	

ANNEXURE E: FULL COMMISSIONING CERTIFICATE OF THE PROJECT

(To be issued by the REMC Ltd. / NR)

This is to certify that <M/s> having its registered office at..... has successfully commissioned the project consisting of 15 MW solar PV power plant with 7MW/14 MWH BESS on Railway land at Village -----, Tehsil/Taluka ----- & Dist.-----

The Commissioning Certificate has been issued on the basis of the following documents enclosed:

- (i) Installation Report including Snap shots of the Project from various angles.
- (ii) Electrical Inspector Report
- (iii) Synchronization Certificate

ANNEXURE F: PROJECT SITE DETAILS

The bidders shall appraise themselves with the proposed site, land plots details, soil and boundaries, nearest traction substation and transmission substation (STU) and possible routes for evacuation lines and so on.

The land plots offered are at 'Butibori' and are admeasuring around 111 acres. The TSS shall be visited by the bidders during the site visit. The PV plant must be located in the 111 acres at Butibori& the BESS may be installed as co-located at the same plot.



Site location

Site Name

Butti bori, Nagpur Division

Site Location


Longitude & Latitude - 20.55.06 N, 79.00.48 E

Capacity and connectivity

Area and capacity				Connectivity	
Approx. total area (acre)	Encroached area (acre)	Approx. total area without encroachment (acre)	Tentative capacity (MW)	STU (kV)	CTU (kV)
111	0	111	15	220 kV substation at Buttibori is at a distance of approx. 7 kms from plot.	NA

Land and local site features



- The land is well connected with roads.
- There were no encroachments found on the land parcel during survey.
- No wildlife activities have been observed on the site.
- No development activities have been observed on the site.
- The land is majority covered with some trees & vegetation, scattered all throughout the stretch.

Site photographs



Survey summary

Survey Date	August 15, 2020	Site Name	Usable Area in Acres	Number of Land parcels
Railway Zone and Division	CR/Magpur	Butti bori TSS	111 Acres	1

CTU S/S Location: ---	STU S/S Location--Buttiben	DISCOM S/S Location--Sengon
Distance from Site: ---	Distance from Site--7 kms	Distance from Site --5 km
Voltage Level: ---	Voltage Level: 220 kV	Voltage Level: 33/11 kV
Buy Availability: ---	Buy Availability: Yes	Buy Availability: Yes

Nearest Traction Load Details			
	TSS	SSP	SP
Location in kms. from site	220/25 kv-5km		
*Avg. Consumption (MU)			
Min Load (MVA)			

Railway Land parcels	
Nearest Power Line	
Distance	
11 kV	5km
33 kV	5 km
25 kV	5km

Name and Number
Electrical Officer
Mr. Rupesh Kumar SSE/TRD
DISCOM 12322
Engineering Officer

Notes: -

- 1) *Annual /Per Annum
- 2) Location details to be provided in the form of Lat/long
- 3) All documents to be collected wherever 'Enclosed' mentioned

Detailed site drawings & layout for 111 Acres site at Butibori is available with the Indian Railway and is given below in ANNEXURE: M

The kmz file is also shared as follows for the ease of the SPD to get clear idea of the location of the site.




MSETCL Butibori 1 Butibori_Storage_Si BTBR -UMRED and
Substation 220KV.kr te_Location.kmz GMG (1)-3-11 Nagpu

ANNEXURE G:CHECK LIST FOR BANK GUARANTEES

To be submitted along with RfS

S N	Particulars	Yes / No
a)	Is the Bank Guarantee (BG) on non-judicial Stamp paper of appropriate value, as per applicable Stamp Act of the place of execution	
b)	Whether date, purpose of purchase of stamp paper and name of the purchaser are indicated on the back of Stamp paper under the Signature of Stamp vendor? (The date of purchase of stamp paper should be not later than the date of execution of BG and the stamp paper should be purchased either in the name of the executing Bank or the party on whose behalf the BG has been issued. Also, the Stamp Paper should not be older than six months from the date of execution of BG).	
c)	Has the executing Officer of BG indicated his name, designation and Power of Attorney No./Signing Power no. on the BG	
d)	Is each page of BG duly signed / initialled by executants and whether stamp of Bank is affixed thereon? Whether the last page is signed with full particulars including two witnesses under seal of Bank as required in the prescribed Performa?	
e)	Does the Bank Guarantees compare verbatim with the Performa prescribed in the Bid Documents	
f)	Are the factual details such as Bid Document No. / Specification No., / LOI No. (if applicable) / Amount of BG and Validity of BG correctly mentioned in the BG	
g)	Whether overwriting/cutting if any on the BG have been properly Authenticated under signature & seal of executants?	

ANNEXURE H: SPECIAL INSTRUCTIONS TO BIDDERS FOR E-TENDERING AND REVERSE AUCTION

1. GENERAL

The Special Instructions (fore-Tendering) supplement 'Instructions to Bidders', as given in these RfS Documents. Submission of Online Bids is mandatory for this RfS.

e-Tendering is a new methodology for conducting Public Procurement in a transparent and secured manner. Now, the Government of India has made e-Tendering mandatory. Suppliers/ Vendors will be the biggest beneficiaries of this new system of procurement. For conducting electronic tendering, REMC Limited has adopted a secured and user friendly e-tender system enabling bidders to Search, View, Download tender document(s) directly from the e-tendering portal of M/s Electronic Tender.com(India) Pvt. Limited <https://www.bharat-electronictender.com> through ISN-ETS. This portal is based on the world's most 'secure' and 'user friendly' software from Electronic Tender®. A portal built using Electronic Tender's software is also referred to as Electronic Tender System®(ETS).

Benefits to Suppliers are outlined on the Home-page of the portal.

2. INSTRUCTIONS

Tender Bidding Methodology:

Sealed Bid System

Single Stage Two Envelope

Auction

The sealed bid system would be followed by an 'e-Reverse Auction'

3. Broad Outline of Activities from Bidder's Perspective:

1. Procure a Class III Digital Signing Certificate(DSC).
2. Register on Electronic Tender System®(ETS)
3. Create Marketing Authorities (MAs), Users and assign roles on ETS. It is mandatory to create at least one MA
4. View Notice Inviting Tender (NIT) on ETS
5. For this tender -- Assign Tender Search Code (TSC) to a MA
6. Download Official Copy of Tender Documents from ETS. Note: Official copy of Tender Documents is distinct from downloading 'Free Copy of

Tender Documents'. To participate in a tender, it is mandatory to procure official copy of Tender Documents for that tender.

7. Clarification to Tender Documents on ETS
 - a) Query to REMC Ltd. (Optional)
 - b) View response to queries posted by REMC Ltd.
8. Bid-Submission on ETS
9. Respond to REMC Ltd. Post-TOE-queries
10. Participate in e-Reverse Auction if invited

For participating in this tender online, the following instructions are to be read carefully. These instructions are supplemented with more detailed guidelines on the relevant screens of the ETS.

4. Digital Certificates

For integrity of data and authenticity/ non-repudiation of electronic records, and to be compliant with IT Act 2000, it is necessary for each user to have a Digital Certificate (DC), also referred to as Digital Signature Certificate (DSC), of Class III, issued by a Certifying Authority(CA) licensed by Controller of Certifying Authorities (CCA) [refer <http://www.cca.gov.in>].

5. Registration

To use the Electronic Tender® portal <https://www.bharat-electronictender.com>, vendors need to register on the portal. Registration of each organization is to be done by one of its senior persons who will be the main person coordinating for the e-tendering activities. In ETS terminology, this person will be referred to as the Super User (SU) of that organization. For further details, please visit the website/portal, and click on the 'Supplier Organization' link under 'Registration' (on the Home Page), and follow further instructions as given on the site. Pay Annual Registration Fee as applicable.

After successful submission of Registration details and payment of Annual Registration Fee, please contact ISN-ETS Helpdesk(as given below), to get your registration accepted/activated.

Important Note:

1. Interested bidders have to download official copy of the RfS& other documents after login into the e-tendering Portal of ISN-ETS **<https://www.bharat-electronictender.com>**. If the official copy of the documents is not downloaded from e-tendering Portal of ISN-ETS within the specified period of downloading of RfS and other documents, bidder will not be able to participate in the tender.
2. To minimize teething problems during the use of ETS (including the Registration process), it is recommended that the user should peruse the instructions given under 'ETS User- Guidance Centre' located on ETS Home

Page, including instructions for timely registration on ETS. The instructions relating to 'Essential Computer Security Settings for Use of ETS' and 'Important Functionality Checks' should be especially taken into cognizance.

Please note that even after acceptance of your registration by the Service Provider, to respond to a tender you will also require time to complete activities related to your organization, such as creation of users, assigning roles to them, etc.

ISN-ETS/ Helpdesk	
Telephone/ Mobile	<i>Customer Support: +91-124-4229071, 4229072 From 1000 HRS to 1800 HRS on all Working Days i.e. Monday to Friday except Government Holidays)</i>
Email-ID	<i>support@isn-ets.com [Please mark CC: support@electrontender.com]</i>

6. Some Bidding Related Information for this Tender (Sealed Bid)

The entire bid-submission would be online on ETS (unless specified for Offline Submissions). Broad outline of submissions are as follows:

- Submission of Bid-Parts
 - Envelope I(Technical-Bid)
 - Envelope II(Financial-Bid)
- *Submission of digitally signed copy of Tender Documents/Addendum*

In addition to the above, the bidders are required to submit certain documents physically offline also as per Clause No. 3.2, Section-3, ITB of RfS Documents, failing which the technical bids will not be opened.

Note: The Bidder should also upload the scanned copies of all the above-mentioned original documents as Bid-Annexures during Online Bid-Submission.

7. Internet Connectivity

If bidders are unable to access ISN-ETS's e-tender portal or Bid Documents, the bidders may please check whether they are using proxy to connect to internet or their PC is behind any firewall and may contact their system administrator to enable connectivity. Please note that Port SSL/ 443 should be enabled on proxy/firewall for HTTPS connectivity. Dial-up/ Broad and internet connectivity without Proxy settings is another option

8. SPECIAL NOTE ON SECURITY AND TRANSPARENCY OF BIDS

Security related functionality has been rigorously implemented in ETS in a multidimensional manner. Starting with 'Acceptance of Registration by the Service Provider', provision for security has been made at various stages in Electronic Tender's software. Specifically, for Bid Submission, some security related aspects are outlined below:

As part of the Electronic Encrypted® functionality, the contents of both the 'Electronic Forms®' and the 'Main-Bid' are securely encrypted using a Pass-Phrase created by the Bidder himself. Unlike a 'password', a Pass-Phrase can be a multi-word sentence with spaces between words (e.g. I lovethisWorld). A Pass-Phrase is easier to remember, and more difficult to break. It is mandatory that a separate Pass-Phrase be created for each Bid-Part. This method of bid-encryption does not have the security and data-integrity related vulnerabilities which are inherent in e-tendering systems which use Public-Key of the specified officer of a Buyer organization for bid-encryption. Bid-encryption in ETS is such that the Bids cannot be decrypted before the Public Online Tender Opening Event (TOE), even if there is connivance between the concerned tender-opening officers of the Buyer organization and the personnel of e-tendering service provider.

CAUTION: All bidders must fill Electronic Forms® for each bid-part sincerely and carefully and avoid any discrepancy between information given in the Electronic Forms® and the corresponding Main-Bid. For transparency, the information submitted by a bidder in the Electronic Forms® is made available to other bidders during the Online Public TOE. If it is found during the Online Public TOE that a bidder has not filled in the complete information in the Electronic Forms®, the TOE officer may make available for downloading the corresponding Main-Bid of that bidder at the risk of the bidder. **If variation is noted between the information contained in the Electronic Forms® and the 'Main-Bid', the contents of the Electronic Forms® shall prevail.**

In case of any discrepancy between the values mentioned in figures and in words, the value mentioned in words will prevail.

The bidder shall make sure that the Pass-Phrase to decrypt the relevant Bid-Part is submitted into the 'Time Locked Electronic Key Box (EKB)' after the deadline of Bid Submission, and before the commencement of the Online TOE of Technical Bid. The process of submission of this Pass-Phrase in the 'Time Locked Electronic Key Box' is done in a secure manner by first encrypting this Pass-Phrase with the designated keys provided by REMC Limited.

Additionally, the bidder shall make sure that the Pass-Phrase to decrypt the relevant Bid-Part is submitted to REMC Ltd. in a sealed envelope before the start date and time of the Tender Opening Event (TOE).

There is an additional protection with SSL Encryption during transit from the client-end computer of a Supplier organization to the e-Tendering Server/Portal.

9. **OTHER INSTRUCTIONS**

For further instructions, the vendor should visit the home-page of the portal <https://www.bharat-electronictender.com>, and go to the **User-Guidance Center**

The help information provided through 'ETS User-Guidance Center' is available in three categories – Users intending to Register/ First-Time Users, Logged-in users of Buyer organizations, and Logged-in users of Supplier organizations. Various links (including links for User Manuals) are provided under each of the three categories.

Important Note: It is strongly recommended that all authorized users of Supplier organizations should thoroughly per use the information provided under the relevant links and take appropriate action. This will prevent hiccups and minimize teething problems during the use of ETS.

10. **SEVEN CRITICAL DO'S AND DON'TS FOR BIDDERS**

Specifically, for Supplier organizations, the following '**SEVEN KEY INSTRUCTIONS for BIDDERS**' must be assiduously adhered to:

1. Obtain individual Digital Signing Certificate (DSC or DC) of Class III well in advance of your tender submission deadline on ETS.
2. Register your organization on ETS well in advance of the important deadlines for your first tender on ETS viz 'Date and Time of Closure of Procurement of Tender Documents' and 'Last Date and Time of Receipt of Bids'. Please note that even after acceptance of your registration by the Service Provider, to respond to a tender you will also require time to complete activities related to your organization, such as creation of -- Marketing Authority (MA) [i.e. a department within the Supplier/ Bidder Organization responsible for responding to tenders], users for one or more such MAs, assigning roles to them, etc. It is mandatory to create at least one MA. This unique feature of creating an MA enhances security and accountability within the Supplier/ Bidder Organization
3. Get your organization's concerned executives trained on ETS well in advance of your first tender submission deadline on ETS.
4. For responding to any particular tender, the tender (i.e. its Tender Search Code or TSC) has to be assigned to an MA. Further, an 'Official Copy of Tender Documents' should be procured/ downloaded before the expiry of Date and Time of Closure of Procurement of Tender Documents. Note: Official copy of Tender Documents is distinct from downloading 'Free Copy of Tender Documents'. Official copy of Tender Documents is the equivalent of procuring physical copy of Tender Documents with official receipt in the paper-based manual tendering system.
5. Submit your bids well in advance of tender submission deadline on ETS (There could be last minute problems due to internet timeout, breakdown, etc.)

6. It is the responsibility of each bidder to remember and securely store the Pass-Phrase for each Bid-Part submitted by that bidder. The bidders are required to submit correct, valid and operative Pass-Phrase to decrypt either Technical Bid Part or Financial Bid Part in a separate sealed envelope before due date and time of submission of bid. In the event, the bids are not opened with the pass-phrase submitted by bidder, REMC Ltd. may ask for re-submission/clarification for correct pass-phrase. If bidder fails to submit correct pass-phrase immediately as requested by REMC Ltd., the Tender Processing Fee and Tender Document Fee, if applicable, shall be forfeited and bid shall not be opened, and EMD shall be refunded. No request on this account shall be entertained by REMC Ltd..
7. ETS will make your bid available for opening during the Online Public Tender Opening Event (TOE) 'ONLY IF' the status pertaining Overall Bid-Submission is 'COMPLETE'. For the purpose of record, the bidder can generate and save a copy of 'Final Submission Receipt'. This receipt can be generated from 'Bid-Submission Overview Page' only if the status pertaining overall Bid-Submission' is 'COMPLETE'

NOTE:

While the first three instructions mentioned above are especially relevant to first-time users of ETS, the fourth, fifth, sixth and seventh instructions are relevant at all times.

11. ADDITIONAL DOs AND DON'Ts FOR BIDDERS PARTICIPATING IN e-REVERSE AUCTION

1. Get your organization's concerned executives trained for e-Reverse Auction related processes on ETS well in advance of the start of e-Reverse Auction.
2. For responding to any particular e-Reverse Auction, the e-Reverse Auction (i.e. its Reverse Auction Search Code or RASC) has to be assigned to an MA.
3. It is important for each bidder to thoroughly read the 'rules and related criterion' for the e- Reverse Auction as defined by the Buyer organization.
4. It is important to digitally-sign your 'Final bid' after the end of e-Reverse Auction bidding event.

12. Pre-requisite for participation in bidding process

- Bidder must possess a PC/ Laptop with Windows 7 professional operating system and Internet Explorer 8 or 9 for hassle free bidding. Bidder is essentially required to effect the security settings as defined in the portal.
- The Bidder must have a high-speed internet connectivity (preferably Broadband) with internet explorer to access ISN-ETS's e-Tender Portal for downloading the Tender document and uploading/ submitting the Bids.
- A valid e-mail ID of the Organization/Firm

ANNEXURE I: NOT USED

ANNEXUREJ:TERMS& CONDITIONS OF REVERSE AUCTION

After opening of financial bids and short-listing of bidders based on the tariff and total capacity of project of qualified Project(s), REMC Ltd. shall resort to "REVERSE AUCTION PROCEDURE". Reverse Auction shall be conducted as per methodology specified in the provisions of Reverse Auction in RfS Documents and their subsequent Addenda / Amendments / Clarifications. Bidders in their own interest are advised to go through the documents in entirety. The Terms & Conditions and Business Rules mentioned hereunder are in brief and may not give complete explanations. Further these are supplementary in nature.

1. Bidders shall ensure online submission of their 'Bid Price' within the auction period.
2. Bidders shall ensure to take all necessary training and assistance before commencement of reverse auction to the interested bidders on chargeable basis to be paid directly to ISN-ETS.
3. Business rules for Reverse Auction like event date, time, bid decrement, extension etc. shall be as per the business rules, enumerated in the RfS document or intimated later, for compliance.
4. Reverse auction will be conducted on scheduled date & time, as mentioned in the RfS document.
5. Bidders should acquaint themselves of the 'Business Rules of Reverse Auction', which is enclosed separately in the RfS document.
6. If the Bidder or any of his representatives are found to be involved in Price manipulation / cartel formation of any kind, directly or indirectly by communicating with other bidders, action as per extant guidelines of Railways / REMC Ltd. be initiated by Railways / REMC Ltd..
7. The Bidder shall not divulge either his Bids or any other exclusive details of REMC Ltd. to any other party.
8. Period of validity of Prices received through Reverse Auction shall be same as that of the period of validity of bids offered.
9. Bidders should also note that:
 - a) Bidders may note that, although extension time is '8' minutes, there is a time lag between the actual placing the bid on the local computer of the bidder and

the refreshing of the data on to the server for the visibility to the Owner. Considering the processing time for data exchange and the possible network congestion, bidders must avoid the last-minute hosting of the Financial Bid during reverse auction.

- b) Participating bidder will agree to non-disclosure of trade information regarding the purchase, identity of REMC Ltd., bid process, bid technology, bid documentation and bid details.
- c) It is brought to the attention of the bidders that the bid event will lead to the final price of bidders only.
- d) Technical and other non-commercial queries (not impacting price) can only be routed to the REMC Ltd. contact personnel indicated in the RfS document.
- e) Post LOA activities such Submission of PBF & Signing of PPA etc. would be transacted directly between successful bidder(s) and Railways.
- f) LOA shall be placed outside the ETS e-portal & further processing of the LOA shall also be outside the system.
- g) In case of any problem faced by the bidder during Reverse Auction and for all Bidding process related queries, bidders are advised to contact the persons indicated in Bid Information Sheet of the RfS document.
- h) Bidders are advised to visit the auction page and login into the system well in advance to identify / rectify the problems to avoid last minute hitches.
- i) REMC Ltd. will not be responsible for any PC configuration / Java related issues, software / hardware related issues, telephone line glitches and breakdown / slow speed in internet connection of PC at Bidder's end.
- j) Bidders may note that it may not be possible to extend any help, during Reverse Auction, over phone or in person in relation to rectification of PC / Internet / Java related issues and Bidder may lose the chance of participation in the auction.

10. For access to the Reverse Auction site, the following URL is to be used:

<https://www.bharat-electronictender.com>

11. No queries shall be entertained while Reverse Auction is in progress

i. BUSINESS RULES OF REVERSE AUCTION

Reverse Auction shall be conducted as per methodology specified in Section – 3 and other provisions of Reverse Auction in RfS documents and their subsequent Amendments / Clarifications / Addenda. Bidders, in their own interest, are advised to go through the documents in entirety.

The following would be parameters for e-Reverse Auction:

Sl. No.	Parameter	Value
1.	Date and Time of Reverse-Auction Bidding Event	Please refer Bid Information Sheet
2.	Duration of Reverse-Auction Bidding Event	30 minutes
3.	Automatic extension of the 'Reverse-Auction closing Time', if last bid received is within a 'Reverse Auction Closing Time'	Yes
3.1	Pre-defined Time-Duration	08 minutes
3.2	Automatic extension Time-Duration	08 minutes
3.3	Maximum number of Auto-Extension	Unlimited Extension
4.	Entity-Start-Price	Tariff Quoted by the bidders in Financial Bid (Second Envelope)

Online Reverse Auction shall be conducted by REMC Ltd. on pre-specified date and time, while the bidders shall be quoting from their own offices / place of their choice. Internet connectivity shall have to be ensured by bidders themselves.

During the Reverse Auction, any requests for extension of time will not be considered by REMC Ltd. Bidders are therefore requested to make all the necessary arrangements/ alternatives whatever required so that they are able to participate in the Reverse Auction successfully. Failure of power or loss of connectivity at the premises of bidders during the Reverse Auction cannot be the cause for not participating in the Reverse Auction. REMC Ltd. shall not be responsible for such eventualities.