



# Request for Selection (RfS)

# for

Procurement of 500 MW and additional 250MW under Green Shoe Option, Energy Storage Capacity (For 8 Hours discharge with maximum 5 Hours continuous discharge) for 40 years from ISTS/InSTS Connected Storage Facility / Plant/s through competitive bidding.

RfS No.: AEML/Storage/FY26/T-01

Tender Search Code on ISN ETS: AEML-2025-TN000001

Date of RfS: 02.05.2025

Issued by:

Adani Electricity Mumbai Limited (AEML)



# Disclaimer

- 1. This RFS is not an agreement and further it is neither an offer nor an invitation by AEML to the Bidder/s or any other Person. The purpose of this RfS is to provide the interested parties with information that may be useful to them in making their bid proposals pursuant to this RfS. Though adequate care has been taken while preparing the RfS, the Bidders shall satisfy themselves that the document is complete in all respects. Each Bidder shall be responsible for conducting its own investigations and analysis, and checking the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in this RfS.
- 2. AEML reserves the right, but without being under any obligation to do so, to modify, amend or supplement the information, assessment or assumptions contained in this RfS, including any documents that are provided as attachments or annexures hereto or otherwise annul or cease the Bid at any point in time, for any reason determined in its sole discretion. No financial obligation will accrue to AEML in such an event. The Bidder(s) should regularly review the data uploaded in the Data Room (defined hereinafter), to keep themselves updated regarding clarifications, revisions, amendments, modifications and supplements with respect to the Bid.
- 3. AEML may, in its absolute discretion but without being under any obligation to do so, update, amend or supplement the information, assessment, statement or assumptions contained in the Tender document. The issue of this RfS does not in any way imply that AEML is bound to select a Bidder for the Project, and AEML reserves the right to reject all or any of the Bidders without assigning any reason, whatsoever, at its sole discretion.
- 4. No person shall be entitled under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise to claim for any loss, damage, cost or expense which may arise from or be incurred or suffered on account of anything contained in this RfS or otherwise, including the accuracy, adequacy, authenticity, correctness, completeness or reliability of the information or opinions contained in this RfS and any assessment, assumption, statement or information contained therein or deemed to form part of this RfS, and AEML and their advisors, Affiliates, directors, employees, agents and representatives do not have any responsibility or liability for any such information or opinions and therefore, any liability or responsibility is expressly disclaimed.
- 5. This RfS has been prepared in good faith, and on a best endeavour basis. Neither AEML nor their employees or advisors make any representation or warranty, express or implied, or accept any responsibility or liability, whatsoever, in respect of any statements or omissions herein, or the accuracy, completeness or reliability of information, and shall incur no liability under any law, statute,



rules or regulations as to the accuracy, adequacy, correctness, reliability or completeness of this RfS, even if any loss or damage is caused by any act or omission on their part.

- AEML and its employees and advisors also accept no liability of any nature, whether resulting from negligence or otherwise, however caused arising from reliance of any Bidder/s upon the content of the RfS.
- 7. This RfS has not been approved and may not be reviewed or approved by any statutory or regulatory authority in India, or elsewhere or by any stock exchange in India or elsewhere. This RfS may not be all inclusive and may not contain all of the information that the recipient may consider material. Each Bidder should, conduct its own investigations, diligence, and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and the information contained in this RfS and obtain independent advice from appropriate sources and, if necessary, seek professional advice. The information in this RfS is for informational purposes only and nothing contained in this RfS shall be construed as an advertisement offering or calling attention to an offer or intended offer.
- 8. Nothing contained in this RfS shall be deemed to relieve, wholly or partially, directly or indirectly, the Bidders from their compliance with any law in force, and/ or any instrument having the force of law, as may be applicable to them. The Bidders shall inform themselves, and shall observe and comply with, any applicable legal requirements.
- 9. This RfS shall be governed by and construed in accordance with the laws of India.
- 10. By procuring/receiving or accepting a copy of this RfS, the recipient accepts and acknowledges and agrees to be bound by the terms of this disclaimer notice, which forms an integral part of this RfS, and all other terms and conditions of this RfS.
- 11. AEML may at its own discretion suspend, postpone, withdraw or annul the tender process at any stage without assigning any reason thereof and the bidders by participating in the tender process agree to the same and undertake not to raise any objection in this regard.

Place: Mumbai,

Maharashtra

Date: 02/05/2025





# Bid Information Sheet

The brief details of the RfS are as under:

Α.	Name of work/ brief scope of work/Job	Selection of Storage Capacity Developer/s to provide long term ISTS/InSTS connected Energy Storage System(s) for 500 MW/4,000 MWh and additional 250MW/2000MWh under Green Shoe option (for 8 Hours discharge with maximum 5 Hours continuous discharge per day) from Pumped Hydro Storage Plant(s) or Battery Energy Storage Systems (BESS) located anywhere in India on "Build-Own-Operate-Maintain" (BOOM) through Tariff- Based Competitive Bidding for a period of 40 years.  Bidder/s shall be responsible for charging and discharging electricity up to 500 MW capable of 8 Hours discharge with maximum 5 Hours continuous discharge from PHSP(s) or Battery Energy Storage Systems . The input energy for charging shall be provided by the Procurer at Delivery Point up to the declared Cycle Loss.		
В.	RfS No. & Date:	AEML/Storage/FY26/T-01 dated 02.05. 2025		
C.	Type of Bidding System	Single Stage Two Envelop (Technical Bid & Financial Bid)		
D.	Type of RfS/ Tender	E-Tender		
E.	Completion/Contract period	As mentioned in RfS Document		
F.	Document fee/Cost of RfS Document (Non- refundable)	Rs. 10,000/- (plus 18% GST or as applicable)  To be submitted through NEFT/RTGS transfer in the account of AEML and a copy of the receipt to be submitted along with the response to RfS		
		Rs. 3 Lacs plus 18% GST or as applicable		
G.	Bid processing fee (non-refundable)	To be submitted through NEFT/RTGS transfer in the account of AEML and a copy of the receipt to be submitted along with the response to RfS		
Н.	Earnest Money Deposit (EMD)	Amount of Rs. 5,00,000/- (Indian Rupees Five Lakhs only) per Quoted Capacity (MW) by Bidder. The EMD can be submitted, along with the response to RfS, either:  a. in the form of bank guarantee; or  b. in the form of online payment, with a copy of such payment/transaction receipt being submitted.  c. In the form of Insurance Surety Bond		
I.	Performance Bank Guarantee (PBG)	As per Clause 3.28 of the RfS document		





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J.	Due date for online submission of "Technical Bid" and "Financial Bid" as per Tender	As per Scheduled as per NIT on ISN-ETS portal (All documents must be submitted in online mode only. AEML shall have right to seek physical documents as may be required. Original EMD to be submitted to AEML within 7 days from bid due date.			
K.	Last date for receipt of pre- bid queries from the Bidder/s	Scheduled as per NIT on ISN-ETS portal.			
L.	Pre-bid meeting	Scheduled as per NIT on ISN-ETS portal.			
M.	Technical bid opening	As per NIT on ISN-ETS portal			
N.	e-Reverse Auction (e- RA)	Will be informed to eligible bidders. Date and time of e RA shall be intimated through email.			
O.	Contact details of ISN-ETS Portal	M/s Electronic Tender.com (India) Pvt. Ltd. Contact Person: ISN-ETS Support Team Customer Support: +91-124-4229071,4229072 (From 10:00 Hrs to 18:00 Hrs on all working Days i.e. Monday to Friday except Govt. Hoildays) Email: support@isn-ets.com			
P. Submission of Response to RfS		Vaibhav Tandon Head- Power Procurement Adani Electricity Mumbai Limited CTS, 407/A (New), 408 Old Village, Eksar Devidas Lane off SVP road, Near Devidas lane telephone exchange, Borivali (West), Mumbai-400103. Tel: 022-50548746/8747 Mobile: +91 90990 00616 Email:tandon.vaibhav@adani.com			
Q.	Details of persons to be contacted in case of any assistance required	Harshal Bhingare and Anshul Rustagi Tel: 022-50548747/ 50548746 Mobile: 93237 23252 / 9810774815 Email:harshal.bhingare@adani.com and anshul.rustagi@adani.com			
R.	Details of AEML for payment of Cost of Bid Documents and Bid Security	Account Title: AEML Non-Energy Payment Collections Account Bank Name: DBS Bank India Limited Account Number:811210221542 Bank IFSC Code: DBSSOIN0811			
S.	GST and PAN details of AEML	GST Number: 27AADCD0086F1ZW PAN Number: AADCD0086F			
T.	Ceiling Tariff /Rate	AEML may fix the ceiling rate based on its due diligence			

Important Note: Prospective Bidders are requested to remain updated for any notices/amendments/clarifications etc. to the RFS through the website of M/s Electronic Tender.com (India) Pvt. Limited (https://www.bharat-





<u>electronictender.com</u>). No separate notifications will be issued for such notices/amendments/clarifications etc. in the print media or individually. Intimation regarding notification/amendments/clarifications etc. any associated details will only be available through the Bharat E-Portal.

- The entities intending to bid in terms of this RfS are required to go through the same carefully and note that all terms and conditions mentioned therein shall form part of the contracts executed in furtherance of the RfS. The RfS and the ancillary documents appended hereto will neither be issued manually nor be sent by post or courier; the same can be viewed and downloaded from the Bharat E-Portal
- 2. Bids must be submitted strictly in accordance with the RfS.
- 3. Bidders are required to quote strictly as per terms and conditions of the RfS documents and not to stipulate any deviations/ exceptions.
- 4. Any bidder, who meets the Qualifying Requirement and wishes to quote against this RfS, may download the complete RfS document along with its amendment(s) and clarifications if any, from ISN-ETS Portal https://www.bharat-electronictender.com and/or AEML website and submit their Bid complete in all respect as per terms & conditions of RfS Document on or before the due date of bid submission.
- 5. Clarification(s)/ Corrigendum(s), if any, shall also be available on the above referred websites.
- 6. Bidders are requested to remain updated for any notices/amendments/ clarifications etc. to the RfS document through the above-mentioned websites. No separate notifications will be issued for such notices/amendments/ clarifications etc in the print media or individually. Intimation regarding notification on the above shall be updated on and the details will be available only from https://www.bharatelectronictender.com.



# 1. Introduction

- 1.1 Adani Electricity Mumbai Limited (hereinafter called "AEML" and/or "Procurer") is integrated utility engaged in Transmission across Mumbai and Maharashtra and Distribution of electricity in suburbs of Mumbai. It is one of the largest private sector power distribution and transmission player in the country in terms of revenue of Rs.9747.95 Crores for the financial year March 31, 2024 and Net-Worth of Rs. 4588.51 Crores as on March 31, 2024. It distributes power to approximately 31.8 Lakh consumers in its licensed area of supply and met maximum system demand of 2268 MW in the current financial year till date.
- 1.2 AEML intends to avail an energy storage facility to meet its Energy Storage Obligations and electricity demand from suitable standalone Pumped Hydro Storage Plant/s (PHSP/s) or Battery Energy Storage Systems connected to nearest ISTS/InSTS substation and located anywhere in India.
- 1.3 Selection of the Bidder(s) will be done through an online Tariff Based Competitive Bidding Process (followed by an E-Reverse Auction). AEML intends to tie up storage capacity aggregating to 500 MW and additional 250 MW under Green Shoe Option (For 8 Hours discharge with maximum 5 Hours discharge per day) on a demand basis for a period of 40 years. The procurement under Green Shoe Option shall be at the discretion of AEML.
- 1.4 After conclusion of the bidding process, AEML shall enter into Energy Storage Facility Agreement (ESFA) on an Annual Fixed Charge basis with the selected Bidders for a period of 40 years based on the terms, conditions, and provisions of the RfS & ESFA. AEML intends to avail an Energy Storage Facility to meet its storage RPO, manage surplus electricity available in the grid, meet electricity demand, manage intermittency of RE power and meet ancillary requirements, etc.
- 1.5 The Contracted Capacity (as per clause 2.12) shall be provided by the developer on a Build Own Operate Maintain (BOOM) basis. The developer shall be responsible for financing, development, design, engineering, procurement, construction, commissioning, operation, and maintenance of the storage capacity in accordance with the provisions of the RfS and the ESFA.
- 1.6 AEML will make arrangement for the power required for charging the ESS Pumped Hydro Storage project or Battery Energy Storage Systems at Delivery point up to the declared Cycle Loss/ Conversion Loss; and AEML shall utilize the energy storage facility, on a "On-Demand" basis, suited to its requirements during the peak and off- peak hours to meets its power requirement. The deviation charges for charging and discharging shall be borne by the developer, if any, will be dealt as per applicable regulation.
- 1.7 The project size will be a minimum of 50 MW capacities.
- 1.8 Already commissioned projects, projects under construction or projects which are not yet commissioned but have surplus capacity available will be considered provided full capacity of these projects is not already accepted under any other Central or State Schemes. Enhancement and augmentation of already commissioned Projects, irrespective of their capacities will not be





considered as eligible projects under this scheme.

Note: The projects that have already been commissioned must maintain a minimum lifespan of 40 years from COD). It shall be noted that it shall be Bidder's responsibility to get all the required approvals necessary to ensure compliance with this requirement.

- 1.9 Guidelines for Implementation of the RfS: This RfS document has been prepared by AEML in line with the guidelines dated April 10, 2023 issued by Ministry of Power (MoP) to promote development of Pump Storage Projects (PSP) and Guideline dated 6<sup>th</sup> February 2025 and Guidelines for "Procurement and Utilization of Battery Energy Storage Systems as part of Generation, Transmission Distribution assets, along with Ancillary Services", issued by Ministry of Power vide Gazette Notification dated 10.03.2022 and subsequent amendments and clarifications. AEML has issued this RfS to procure Energy Storage Facilities from the developer of Energy Storage Solutions (ESS).
- 1.10 The bidders will be short-listed by the process of e-bidding (Single Stage Two Envelope Bidding Process. Envelope-I: Technical Bid and Envelope-II: Financial Bid) followed by a reverse auction process for selection of bidders. E-bidding is a new methodology for conducting Public Procurement in a transparent and secure manner. For conducting electronic tendering, AEML is using the portal https://www.bharat-electronictender.com (i.e. ETS Portal) of M/s ISN Electronic Tender Services Ltd. The portal is also referred to as Electronic Tender System® (ETS).
- 1.11 The bidder shall submit bid proposal along with non-refundable Document Fees, non- refundable Bid Processing Fees and Earnest Money Deposit (EMD) complete in all respect as per the Bid Information Sheet. Bid proposals received without the prescribed Document Fees, Bid Processing Fees and Earnest Money Deposit (EMD) will be rejected. In the event of any date indicated is a declared Holiday, the next working day shall become operative for the respective purpose mentioned herein.
- 1.12 RfS documents which include Eligibility Criteria, Technical Specifications, various Conditions of Contract, Formats etc. can be downloaded from ISN-ETS Portal. It is mandatory to download official copy of RfS Document from Electronic Tender System (ISN- ETS) Portal to participate in the Tender. Any amendment(s)/corrigendum(s)/ clarification(s) with respect to this RfS shall be uploaded on ISN-ETS website. The Bidder should regularly check for any Amendment(s)/ Corrigendum(s)/ Clarification(s) on the above mentioned ISN-ETS website. In case of any discrepancy, the information available on ISN-ETS website shall prevail.
- **1.13** AEML reserves the right to cancel/withdraw/defer this invitation for bids without assigning any reason and shall bear no liability whatsoever consequent upon such a decision.
- **1.14** AEML shall exercise the Green-Shoe Option to allocate additional capacity upto 250 MW to the successful bidder if discovered tariff is found economical





to AEML. In order to avail the Green-Shoe Option, the successful bidder need to match the lowest discovered tariff (L1 tariff) of this tender corresponding to the Green-Shoe quantity. It would be voluntary for Successful Bidder to opt for green-shoe option. For the avoidance of doubt, capacity allocation under 'Green Shoe' shall only be for the successful bidders i.e., bidders winning e-RA. The "Green-Shoe Option" shall be indicated in the Letter of Award (LoA) to be issued to the successful bidder post completion of entire tendering activities. The successful bidder shall submit his acceptance for availing the "Green-Shoe Option" maximum within 07 (Seven) days from the date of issuance of LoA. Post acceptance of capacity under "Green-Shoe Option", the successful bidder shall submit Performance Bank Guarantee related to the capacity won under "Green-Shoe Option" (in addition to the capacity won previously) in line with the provisions of RfS documents including subsequent amendment and clarification and other compliances as per RFS and ESFA.





# 2. Definitions

- **2.1** "Act" or "Electricity Act, 2003" shall mean the Electricity Act, 2003 and shall include any modifications, amendments and substitution from time to time;
- 2.2 "Affiliate" shall mean a Company that, directly or indirectly,
  - i. controls, or
  - ii. is controlled by,
  - iii. is under the common control with the Bidder or is a Member in a Bidding Consortium developing the Project.

The expression 'control' shall mean the ownership, directly or indirectly, of 50% (fifty percent) or more of the voting shares of such company or right to appoint majority directors.

- 2.3 "Annual Fixed Charge (AFC)" shall mean Annual cost of storage payable to the Developer/s at the Delivery Point for a period of 40 years. The Annual Fixed Charge payable to the Developer/s shall be expressed in INR/MW/Annum.
- 2.4 "AIF" shall have the meaning as ascribed to the term "alternative investment fund" under Regulation 2(1)(b) of the Securities and Exchange Board of India (Alternative Investment Funds) Regulations, 2012 (as amended).
- 2.5 "BATTERY ENERGY STORAGE SYSTEMS" or "BESS" shall mean the system(s)/projects utilizing methods and technologies such as electrochemical batteries (Lead Acid, Li-ion, solid state batteries, flow batteries, etc.), providing a facility that can store chemical energy and deliver the stored energy in the form of electricity, including but not limited to ancillary facilities (grid support, for example). Such systems may be colocated with RE Generating Stations, or may be operated on stand-alone basis
- 2.6 "Bidder" or "Bidding Company" shall mean a Company, public sector enterprise or undertaking, foreign company, AIF, Foreign Investment Fund or a Bidding Consortium submitting the Bid. Any reference to the Bidder includes Bidding Company / Bidding Consortium/ Member in a Bidding Consortium including its successors, executors and permitted assigns and Lead Member of the Bidding Consortium jointly and severally, as the context may require.;
- **2.7** "Bidding Consortium" or "Consortium" shall refer to a group of companies that has collectively submitted the response in accordance with the provisions of this RfS;
- **2.8** "Bidding Document/Tender": This RfS, Energy Storage Facility Agreement (ESFA), including annexures, amendments / corrigenda thereof
- 2.9 "Chartered Accountant" shall mean a person practicing in India or a firm whereof all the partners are practicing in India as Chartered Accountants within the meaning of the Chartered Accountants Act, 1949. For bidders incorporated in countries other than India, "Chartered Accountant" shall mean a person, or a firm practicing in the respective country and designated/registered under the corresponding Statutes/laws of the respective country.





- **2.10** "Company" shall mean a body corporate incorporated in India under the Companies Act, 1956 or the Companies Act, 2013 as applicable.
- **2.11** "Control" The control shall mean the ownership, directly or indirectly, of more than 50% (fifty percent) of the voting shares of such Company or right to appoint majority Directors.
- **2.12** "Commercial Operation Date (COD)" shall mean the date on which the commissioning certificate is issued upon successful commissioning of the full Contracted Capacity or the last part capacity of the Project as the case maybe.
- 2.13 "Contracted Capacity" Capacity of the Pumped Hydro Storage System / Battery Energy Storage System (Excluding auxiliary consumption) in MW contracted with Procurer for supply by the Bidder at the Delivery Point from the Project.
- **2.14** "CTU or Central Transmission Utility" shall mean the Central Transmission Utility as defined in sub-section (10) of Section 2 of the Electricity Act 2003.
- **2.15** "Conversion Loss/ Cycle Loss": Cycle Loss /Conversion Loss = 100% Conversion Efficiency
- **2.16** Conversion Efficiency: Conversion Efficiency measured at the Delivery Point, and in reference to a complete cycle (full charge and full discharge) is ratio of output energy to input energy at Delivery Point
- 2.17 "Declared Availability: "Declared Availability" (MW) is the capability of the Project to operate in both pumping/ Charging and generation / Discharge mode and will be declared by the ESSD at / before 6 AM on day-ahead basis, for each 15-minute time block for the next day. For example, the Declared Machine Availability for all 96 no. 15-minute time blocks of 1st September 2024 will be submitted by 6 AM of 31st Aug 2024
- 2.18 "Delivery Point": for intra-state PHESS or BESS the Delivery Point shall be the point at STU/MSETCL periphery, where the power from the Project is injected into the identified STU Substation (including the dedicated transmission line connecting the Project(s) with the Maharashtra STU substation system) i.e at InSTS periphery and for ISTS connected PHESS or BESS, Delivery Point shall be point at interface point atCTU substation i.e Regional Periphery.
- **2.19** "Data Room" shall mean the secure virtual data room set up and maintained by AEML, or any person on its behalf, created for accessing Confidential Information in relation to the RfS and the bidding process hereunder, and which is to be operated in compliance with the rules set out in this RfS.
- 2.20 "ESSD" shall mean "Energy Storage System Developer" and shall refer to the Selected Bidder or Successful Bidder or Special Purpose Vehicle formed by Successful Bidder to provide the storage capacity from pumped hydro storage plant project or Battery Energy Storage Systems as per terms and conditions of this RfS.
- 2.21 "ESFA" shall mean "Energy Storage Facility Agreement"
- 2.22 "Financial Closure" shall mean arrangements of necessary funds by the Project Developer either by way of commitments of funds by the company from its internal resources and / or tie up of funds through a bank / financial institution by way of sanction of a loan and fulfilling all requirements mentioned in clause 3.32 of RfS.





# 2.23 "Group Company" of a Bidding Company shall mean:

- a) a Company which, directly or indirectly, holds 10% (ten percent) or more of the paid up share capital of the Bidding Company or;
- b) a Company in which the Bidding Company, directly or indirectly, holds 10% (ten percent) or more of the paid-up share capital or;
- c) a Company in which the Bidding Company, directly or indirectly, has the power to direct or cause to be directed the management and policies of such Company whether through the ownership of securities or agreement or any other arrangement or otherwise or;
- d) a Company which, directly or indirectly, has the power to direct or cause to be directed the management and policies of the Bidding Company whether through the ownership of securities or agreement or any other arrangement or otherwise or;
- e) a Company which is under common control with the Bidding Company, and control means ownership by one Company of at least 10% (ten percent) of the paid-up share capital of the other Company or power to direct or cause to be directed the management and policies of such Company whether through the ownership of securities or agreement or any other arrangement or otherwise.

Provided that a financial institution, Private Equity Funds, scheduled bank, foreign institutional investor, non-banking financial Company, and any mutual fund shall not be deemed to be Group Company, and its shareholding and the power to direct or cause to be directed the management and policies of a Company shall not be considered for the purposes of this definition unless it is the Project Company or a Member of the Consortium offering the Contracted Capacity.

- 2.24 "Guidelines" shall mean Guidelines dated 10.4.2023 issued by Ministry of Power to promote development of Pump Storage Projects (PSP) or "Guidelines for Procurement and Utilization of Battery Energy Storage Systems as part of Generation, Transmission and Distribution assets, along with Ancillary Services" issued by Ministry of Power vide Gazette Resolution dated 10.03.2022, including subsequent amendments and clarification thereof, if any, issued until the last date of bid submission of this RfS.
- 2.25 "Inter-connection Point /Metering Point" "Inter-Connection Point" shall mean the point at 220 KV or above where the power from the Project is connected to nearest ISTS substation/InSTS substation. Metering shall be done at this interconnection point where the power is injected into. Providing meters and associated equipment at projects pooling stations shall be in the scope of Developer. Developer shall follow and be bound by the Central Electricity Authority (Installation & Operation of Meters) regulation, 2006 and Amendment Regulation, 2010 and Technical Standard for Connectivity of the Grid (Amendment) Regulation, 2013, the Grid Code, as amended from time to time. The total cost of metering, recording & transferring / communicating the data from its pooling stations to 400/220 kV Grid Sub-station (GSS) of CTU/STU would be borne by the Developer.





- 2.26 ISTS: ISTS means "Inter-State Transmission System"
- **2.27** InSTS: InSTS means "Intra-State Transmission System"/ Maharashtra State Electricity Transmission Company Limited (MSETCL) or STU.
- **2.28** "Joint Control" shall mean a situation where a company has multiple promoters (but none of the shareholders has more than 50% of voting rights and paid up share capital).
- **2.29** "Lead Member of the Bidding Consortium" or "Lead Member": There shall be only one Lead Member, having the shareholding more than 50% in the Bidding Consortium and cannot be changed till 1 (one) year of the Commercial Operation Date (COD) of the Contracted Capacity.
- **2.30** "Letter of Award" or "LOA" shall mean the letter issued by AEML to the Selected Bidder for award of the Contracted Capacity.
- **2.31** "Member in a Bidding Consortium" or "Member" shall mean each Company in a Bidding Consortium. In case of a Technology Partner being a member in the Consortium, it has to be a Company.
- **2.32** "Month" shall mean a period of thirty (30) days from (and excluding) the date of the event, where specified, else a calendar month;
- 2.33 "Parent" shall mean a Company, which holds not less than 51% equity either directly or indirectly in the Project Company or a Member in a Consortium providing Contracted Capacity;
- **2.34** "Paid-up share capital" shall mean Paid-up share capital as defined in Section-2 of the Companies Act, 2013.
- 2.35 "Project" shall mean the Pumped Hydro Storage Plant (s) (PHSP)or Battery Energy Storage System provided by the ESSD/Developer for storing of energy supplied by AEML and supply of that stored energy "on Demand" basis to AEML, having single point of injection into the grid at Interconnection Point, or in case of sharing of internal power evacuation infrastructure up to ISTS/InSTS, for which separate scheduling and energy accounting is possible through suitable metering scheme acceptable to RLDC/CTU/MSETCL. The Project shall also comprise auxiliaries and associated facilities, bay(s) for transmission system in their switchyard, transmission line up to the injection point and all the other assets, buildings/structures, equipment, plant and machinery (pertaining to the ESS/PHSP), facilities and related assets required for the efficient and economic operation of the power supply facility, whether completed or at any stage of development and construction or intended to be developed and constructed for the purpose of supply/drawl of energy to/from AEML.
- **2.36** "Project Company" shall mean the Company incorporated by the Bidder as per The Companies Act, 1956 or the Companies Act, 2013 as applicable.
- **2.37** "Project Commissioning" the Project will be considered as commissioned if all equipment as per rated Contracted Capacity has been installed and energy has flown into the grid.
- **2.38** "Project Financing Arrangements" shall mean arrangement of necessary funds by the Project Developer either by way of commitment of funds by the company from internal resources and/or tie up of funds through a bank/ financial institution by way of sanction of a loan.





- 2.39 "Project/Energy Storage Developer", "Developer" shall mean Bidding Company or a Bidding Consortium submitting the Bid. Any reference to the Bidder includes Bidding Company/Bidding Consortium/ Consortium, Member of a Bidding Consortium including its successors, executors and permitted assigns and Lead Member of the Bidding Consortium jointly and severally, as the context may require";
- **2.40** "Quoted Capacity" Total capacity for which the bidder has submitted the bid under this RfS
- **2.41** "RfS" or "RfS Document" shall mean the bidding document comprising this 'Request for Selection' and the Energy Storage Facility Agreement issued by AEML including all attachments, clarifications, and amendments thereof.
- 2.42 "Scheduled Commissioning Date" shall be 36 months for at least 50% capacity and for full COD in 48 months for Pumped Hydro Storage Plant (s) from the Effective date of ESFA and For Battery Energy Storage System Schedule Commissioning Date shall be 24 from the Effective date of ESFA
- **2.43** "Selected Bidder or Successful Bidder" shall mean the Bidder selected pursuant to this RfS to provide Contracted Capacity and supply electrical output as per the terms of ESFA;
- **2.44** "Ultimate Parent" shall mean a company, which owns not less than fifty one percent (51%) of paid-up share capital either directly or indirectly in the Parent and Affiliates.





# 3. Instructions to Bidders

- **3.1** AEML intends to tie up storage capacity and use it on a "Demand Basis" to meet its requirements as and when envisaged.
- 3.2 The Successful Bidder(s) will be free to avail fiscal incentives available to them like Accelerated Depreciation, Concessional Customs and Excise Duties, Tax Holidays etc. as available for such Projects. The same will not have any bearing on comparison of bids for selection. As equal opportunity is being provided to all Bidders at the time of tendering itself, it is up to the Bidders to avail various tax and other benefits. No claim shall arise on AEML for any liability if Bidders are not able to avail fiscal incentives and this will not have any bearing on the applicable tariff. AEML does not, however, give a representation on the availability of fiscal incentive and submission of bid by the Bidder shall be independent of such availability or nonavailability of the fiscal incentives. RfS documents are available for download, free of cost from the website of ETS at https://www.bharatelectronictender.com. Interested bidders must procure the official copy of RfS & other documents after getting registered with ETS (Refer Annexure-7.4). If only free copy of RfS documents is downloaded from ETS portal or RfS documents are downloaded without confirmation or without generating official copy serial number, then the bidders will not be able to submit the bids. Transfer of RfS documents downloaded by one intending bidder to another is not permitted.

## 3.3 Scope of Work

Under this RfS, the Selected Bidder shall be required to provide a pumped hydro project or Battery Energy Storage System based Energy Storage System (ESS), with the primary objective of making the energy storage facility available to AEML for charging/discharging of the ESS as per requirement of AEML. Setting up of the ESS and interconnection of the ESS with the ISTS/InSTS network will be under the scope of the Selected Bidder.

# 3.4 Total Capacity Offered

The successful Bidder/s shall be required to provide energy storage capacity quoted by him from PHSP/s or Battery Energy Storage System(BESS) and required to sign ESFA with AEML. The capacity offered under this Tender shall be capable of 8 Hours discharge with maximum 5 hours continuous discharge.

**Minimum capacity**: The PHSP/s or Battery Energy Storage System (BESS) unit will be of minimum 50 MW capacity at a single location.

**Total Capacity:** The total capacity to be allocated to the Bidder/s shall be 500 MW and an additional 250 MW under Green Shoe Option.

If AEML receives cumulative bid capacity of more than 500 MW from Technically Qualified Bidders, then it has the option to decide eligible award capacity of up to 500 MW, in which case, total capacity to be allocated to





Bidder/s shall be up to 500 MW

### 3.5 Contracted Capacity of Project

Capacity (as per clause 2.12) of the Pumped hydro storage system or Battery Energy Storage System (BESS) in MW (i.e. 500 MW) contracted with Procurer for supply by the Bidder to Procurer at the Delivery Point from the Project.

However, Contracted Capacity can be less than or equal to the total capacity of a Project and maybe offered from the different Projects located in India from where ESSD intends to provide such capacity. The Project Developers can quote capacities at Delivery Point for a minimum of 50 MW.

# 3.6 Cost of Documents and Processing Fees

Prospective Bidders interested to participate in the bidding process are required to submit their offer on-line on the website https://www.bharat-electronictender.com along with a non-refundable processing fee. The processing fee is to be submitted as per details mentioned in the Bid Information Sheet before last date and time of submission of bids.

A bidding Company/Consortium will be eligible to participate in the bidding process only on submission of RfS along with the Processing Fee. The bidder is required to pay the Processing Fee including applicable GST, which is presently applicable @ 18%.

Bids submitted without cost of the RfS document and/or Bid Processing Fee and/or Bank Guarantee against Earnest Money Deposit (EMD) (including partial submission of any one of the respective amounts), may be liable for rejection by AEML.

#### 3.7 Number of Response to RfS by a Company

Bidding Company, including its Parent, Affiliate or Ultimate Parent or any Group Company shall submit one single application in the prescribed format detailing project for which the bidder is submitting the application. Statement for the same is to be submitted as per Format for Disclosure (Format - 6.9)

# 3.8 Bid Deadline

Last Date and time for receipt of bids comprising both Eligibility Criteria & and Financial Bid is as per Scheduled on ETS Portal.

#### 3.9 Qualification Requirements

#### i. General Eligibility Criteria

Bidders participating in the RfS will be required to meet the following eligibility criteria (as applicable). The Bidder must fall under either of the following categories:

- A Company under the Companies Act, 2013.
- A foreign company under the respective nation's laws.





- Alternative Investment Funds (AIF) as registered under SEBI. "AIF" shall be defined by SEBI.
- A Consortium comprising the above entities.

The above would be subject to the relevant Acts, Rules, Guidelines, Orders and Policy documents of the Government of India as amended from time to time.

a. The consortium shortlisted and selected based on this RfS must necessarily form a Project Company and get it registered under the Companies Act, 2013 prior to signing of ESFA, keeping the original shareholding of the Bidding Consortium unchanged. In case applications for multiple Projects have been made by a Consortium, separate Project Companies can be formed for each Project. For the avoidance of doubt, it is hereby clarified that the shareholding pattern of the Project Company shall be the identical to the shareholding pattern of the Consortium as indicated in the Consortium Agreement.

In case of foreign company participating on standalone basis and its, selection as successful Bidder, it has to form/ utilize already formed a "Special Purpose Vehicle" (SPV) i.e. an Indian Company registered under the Companies Act, 2013 as its subsidiary Company, with at least 51% shareholding in the SPV, directly or indirectly, before signing of ESFA. In case a foreign company is selected as the successful Bidder, it shall comply with all the laws and provisions related to Foreign Direct Investment in India.

In case the foreign company participating as a member of consortium, Clause 3.9(i) of the RfS shall be applicable.

- **b.** The Bid do not restrict any Group entities of AEML including AEML to participate in the bid, provided the entities meet the eligibility criteria specified in this bid.
- c. Limited Liability Partnership (LLPs) are not eligible for participation.
- d. A Bidder which has been selected as Successful Bidder based on this RfS can also execute the Project through a Special Purpose Vehicle (SPV) i.e. a Project Company especially incorporated/ acquired/ already existing as a subsidiary Company of the successful bidder for setting up of the Project, with at least 51% shareholding in the SPV, directly or indirectly, which has to be or is already registered under the Indian Companies Act, 2013, before signing of ESFA. Multiple SPVs may also be utilized for executing more than one project.
- e. Any consortium, if selected as Successful Bidder shall incorporate a Project company with equity participation by the Members in line with consortium agreement (submitted along with the response to RfS) before signing of ESFA with AEML. The Project Company incorporated shall have the same shareholding pattern as that indicated in the Consortium Agreement given at the time of





submission of response to RfS. This shall not change till the signing of ESFA and the Controlling Shareholding (held by the Lead Member holding not less than 51% of the voting rights and paid-up share capital) shall not change from submission deadline of response to RfS up to first Anniversary of the COD of the Contracted Capacity. Transfer of controlling shareholding within the same group of companies will however be allowed prior to COD with the permission of AEML, subject to the condition that the management control remains within the same group of companies.

f. The Bidder or any of its Affiliates should not be a wilful defaulter to any lender, and that there is no major litigation pending or threatened against the Bidder or any of its Affiliates which are of a nature that could cast a doubt on the ability or the suitability of the Bidder to undertake the Project. The Bidder shall submit an undertaking to this effect.

The Bidder is required to furnish evidence of meeting the above criteria.

## ii. Technical Eligibility Criteria

- a. Under this RfS, it is proposed to promote only commercially established and operational technologies to minimize the technology risk and to achieve timely commissioning of the Contracted Capacity. The Bidder may indicate regarding the selection of technology and its details at the time of submission of bids in the prescribed Format 6.8 of the RfS. The technology proposed at the time of submission of response to RfS can be changed at the time of Financial Closure however, it is mandatory to inform AEML in advance of any changes.
- **b.** Projects shall also comply with the performance criteria as detailed in Clause 3.17 of the RfS and technical and regulatory requirements mentioned at Annexure 7.1 and Annexure 7.2
- c. The Bidder/s shall provide proof and credential as per Format 6.14: Format for certificate from Statutory Auditor / Chartered Accountant for Technical Criteria that demonstrates previous experience of successfully commissioning/operating Thermal or Hydro generation projects for capacity equivalent to that quoted by the Bidder under this Tender(Applicable only in case of Pumped Hydro Storage System)

Or

d. Bidder/s who demonstrates previous experience of successfully commissioning/operating of RE (renewable energy based) projects for cumulative capacity equivalent to 1.5 times the Quoted Capacity is also eligible Bidder/s. ( Applicable only in case of Pumped Hydro Storage System )

Provided that the Commissioning Certificate issued by the





competent statutory authority/ government authority, as per applicable regulations, is required to be submitted by the Bidder/s.

Or

e. Bidder/s who have completed EPC/ Item rate Contracts in infrastructure projects viz. Power, Hydroelectric, water body projects, dams, metro, road, reservoirs, tunnels etc with total Project cost equivalent to or more than the amount corresponding to the amount calculated at the rate of Rs 2 Crores/MW for the Quoted Capacity (Applicable only in case of Pumped Hydro Storage System)

The Bidder/s participating as a Single Bidder or as a consortium may seek qualification on the basis of technical capability of its Affiliate(s) for the purpose of meeting the qualification requirements as per Clauses 3.9(ii) (c) above

# iii. Financial Eligibility Criteria

#### a. Net-Worth

The Net Worth of the Bidder should be equal to or greater than Rs. 150 Lakhs per MW (Rs. 1,50,00,000/MW) of the cumulative capacity quoted (in MW), as on the last date of the previous Financial Year, i.e. FY 2024-25 or as on the day at least 7 days prior to the bid submission deadline. For example for a 100 MW Contracted Capacity, the minimum Net Worth requirement to be demonstrated shall be Rs. 150 lakh/MW x 100 MW which is Rs. 150 Crores.

In the case of the Bidder being a SEBI registered AIF, the cumulative value of Assets Under Management (AUM) should be equal to or greater than INR 150 Lakhs per MW (Rs. 1,50,00,000/MW) of the cumulative Quoted Capacity (in MW) In this context, AUM shall mean the amount as certified by the Statutory Auditor of the AIF.

The Net Worth/ AUM to be considered for the above purpose will be the cumulative Net Worth /AUM of the Bidding Company or Consortium together with the Net Worth/ AUM of those Affiliates of the Bidder(s) that undertake to contribute the required equity funding and performance bank guarantees/POI in case the Bidder(s) fail to do so in accordance with the RfS. In case of AIFs being the Bidders, they cannot use the Net Worth/AUM of their Affiliates to meet the above criteria.

Net Worth to be considered for this clause shall be the total Net Worth as calculated in accordance with the Companies Act, 2013 and any further amendments thereto.





# b. Liquidity

To ascertain that the Bidder has sufficient means to manage the fund requirements for the Contracted Capacity, the Bidder shall be required to demonstrate at least one of the following parameters:

A minimum annual turnover of INR 100 Lakh/MW (Rs. 1,00,00,000/MW) of the cumulative Quoted Capacity (in MW) during the previous financial year, 2024-25 or as on the day at least 7 days prior to the bid submission deadline. It is hereby clarified that "Other Income" as indicated in the annual accounts of the Bidder shall not be considered for arriving at the annual turnover.

For e.g. for a 100 MW Quoted Capacity, the minimum annual turnover requirement to be demonstrated shall be Rs. 100 lakh/MW  $\times$  100 MW which is Rs. 100 Crores.

Internal resource generation capability, in the form of Profit Before Depreciation Interest and Taxes (PBDIT) for a minimum amount of INR 25 Lakh/MW (Rs. 25,00,000/MW) of the Quoted Capacity (in 'MW), as on the last date of previous financial year, 2024-25, or as on the day at least 7 days prior to the bid submission deadline.

In-principle sanction letter from the lending institutions/ banks of the Bidder, committing a Line of Credit for a minimum amount of INR 12.50 Lakh/MW (Rs. 12,50,000/MW) of the Quoted Capacity (in MW), towards meeting the working capital requirement of the project quoted under this RfS. Such letter can also be obtained by the Affiliate(s) of the Bidder.

Except for AIFs, the Bidder may seek qualification on the basis of financial capability of its Affiliate(s) for the purpose of meeting the qualification requirements as per Clauses 3.9(iii) a and 3.9(iii) b above

In case of the Bidder being a Bidding Consortium, any Member (except an AIF) may seek qualification on the basis of financial capability of its Affiliate(s). In such cases, the Bidder shall be required to submit Board Resolutions from the respective Affiliate(s), undertaking to contribute the required equity funding and Performance Bank Guarantees (PBG) in case the Bidder(s) fail to do so in accordance with the RfS.

For the limited purpose of meeting the technical and financial eligibility criteria, bidder may use credentials of those affiliates who do not control more than 50% of the bidding company, subject to the following:

- The qualification criteria parameters will be met





proportionately to the equity contribution of the entity whose credentials are being used to meet the requirement. For example, in case of Net Worth requirement being Rs 100 crore and the strength of an Affiliate is used which owns 30% of the total shareholding in the bidder, the said Affiliate will be able to meet up to Rs.30 Crores of the Net-Worth, for this purpose only unconsolidated audited accounts shall be used. Further, the same has to be certified by CA on a date which falls not before 7 days prior to the bid due date.

 In case the strength of an Affiliate is being used for meeting the eligibility criteria, shareholding pattern of the respective Affiliate will be locked -in upto COD of the project.

For the purposes of meeting financial requirements, only latest unconsolidated audited annual accounts shall be used. However, audited consolidated annual accounts of the Bidder may be used for the purpose of financial requirements provided the Bidder has at least twenty six percent (26%) equity in each Company whose accounts are merged in the audited consolidated account.

A Company/ Consortium would be required to submit annual audited accounts for the last financial year, 2024-25, or as on the day at least 7 days prior to the bid submission deadline, along with net worth and annual turnover from a practicing Chartered Accountant/Statutory Auditor to demonstrate fulfilment of the criteria. In case of foreign companies, the Bidders shall be required to submit the annual audited accounts for the last respective financial year as per the general norm in the country where the Bidder or its Affiliate(s) is/are located, or provisional accounts as on the day at least 7 days prior to the bid submission deadline.

Note: In case of foreign Bidders, in the event the Bidder is unable to furnish the audited annual accounts for the previous financial year as per the prevalent norm in the respective country, the Bidder shall submit the annual audited accounts of the last financial year for which the audited accounts are available. This, however, would be acceptable, subject to the condition that the last date of response to this RfS falls on or within the deadline for completion of audit of annual accounts of companies, as stipulated by the laws/rules of the respective country, and the Bidder shall submit the corresponding documentary evidence against the same. In case the annual accounts or provisional accounts as on the day at least 7 days prior to the bid submission deadline, are submitted in a language other than English, a certified English translation from an approved translator shall be required to be submitted by the Bidder.





For meeting the above financial eligibility criteria, if the data is provided by the

Bidder in a foreign currency, equivalent Indian Rupees of Net Worth and other financial parameters will be calculated by the Bidder using Reserve Bank of India's reference rates prevailing on the date of closing of the accounts for the respective financial year.

In case of any currency for which RBI reference rate is not available, Bidders shall convert such currency into USD as per the exchange rates certified by their banker prevailing on the relevant date and used for such conversion.

In case the response to RfS is submitted by a Consortium, then the financial requirement (both the Net-Worth and Liquidity requirements) to be met by each Member of the Consortium shall be computed in proportion to the equity commitment made by each of them in the Project Company. For example, if two companies A and B form a Consortium with equity participation in 75:25 ratio and submit their bid for a capacity of 100 MW, then, total Net-Worth to be met by the Consortium is Rs. 150 Lakh/MW x 100 MW = Rs. 150 Crores. Minimum requirement of Net-Worth to be met by Lead Member A would be minimum Rs. 112.50 Crores and to be met by Consortium Member B would be Rs. 37.50 Crores. Similar methodology shall be followed for computation of liquidity requirement.

Bidders shall furnish a certificate from a practicing and certified Chartered Accountant, certifying the Net-Worth per MW based on the total capacity for the previous financial year, 2024-25 or as on the day at least 7 days prior to the bid submission deadline.

#### 3.10 Connectivity with the Grid

- a. The point of delivery of power during generation/discharge mode and the point of drawl of charging energy shall be at the Delivery Point.
- b. The Bidder/s is allowed to connect the ESS at CTU/STU.
  - i. The Bidder/s shall identify the nearest CTU/STU Point for connectivity. The responsibility of getting CTU/STU connectivity and arrangement of connectivity to nearest ISTS/InSTS substation shall entirely be with the Bidder/s and shall be at the cost of the Bidder/s. In this regard, the Bidder/s shall be required to follow the detailed Connectivity Procedure & Regulation as issued by CERC (as amended from time to time).
  - ii. The Bidder/s shall be required to apply for connectivity at the identified ISTS/InSTS substations within 30 days of Signing of ESFA. The responsibility of getting the ISTS/InSTS connectivity, Long-Term Access (LTA) and General Network Access (GNA) shall entirely





be on and at the cost of the Bidder/s.

- iii. All charges including connectivity charges, GNA Charges, LTA charges, scheduling/RLDC charges and losses upto the Delivery Point shall be borne by the Bidder/s without any liability to reimburse by Procurer/s.
- iv. The maintenance of Transmission system upto the Delivery Point shall be responsibility of the Bidder/s.
- All expenses including connectivity charges, wheeling charges and losses between the Plant Ex-bus and the Delivery Point shall be to the account of Successful Bidder/s without any reimbursement by AEML/Procurer.
- c. Reactive power charges as per CERC/SERC regulations as applicable, shall be payable by the Bidder/s as per provisions of ESFA.
- d. Metering arrangement of each project shall have to be adhered to in line with relevant clauses of the ESFA.
- e. Procurer shall be responsible for all transmission charges as applicable under the respective regulations beyond Delivery Point for discharge mode and up to Delivery Point for charging mode.

# 3.11 Cycle Loss (CL) /Conversion loss (CL) & annual availability:

Round Trip Loss, also known as conversion loss (CL), refers to the efficiency of the energy conversion process in a Pumped Storage Hydroelectric System or Battery Energy Storage System (BESS). It is calculated as the percentage of the energy input to the system that is lost during the storage and retrieval of energy. Specifically, it is determined by comparing the energy output of the system during the generation/discharge phase to the energy input during the pumping/charging phase

The CL of the energy storage projects selected through this RfS, shall not be more than 25%. CL shall remain same during the term of the contract. The minimum annual availability of the project shall be 90%. Planned maintenance shutdown, if any, is to be informed to AEML at least 1 month prior to such planned maintenance shutdown. Developer should take Planned Maintenance Shutdown in lean demand period of AEML and in consultation with Maharashtra SLDC.

# 3.12 Short-listing of Bidders for Opening of Financial Bids

AEML shall evaluate only those responses to RfS, which are submitted online on the earmarked website by the due date and time. The responses will be evaluated based on the Qualification Requirement and all the responses meeting the Qualification Requirements shall be considered for opening of their Financial Bid (first round tariff bid).

To ensure competitiveness, the minimum number of qualified bidders should be two. If the number of qualified bidders is less than two, even after three attempts of bidding, and the Procurer still wants to continue with the





bidding process, the same may be done with the consent of the Appropriate Commission.

### 3.13 Selection of Developers

# i. Bidding Component

Selection of bidders shall be through a competitive bidding process, based on the lowest quoted Total Storage Cost discovered (expressed in INR/MW/annum) during E-Reverse Auction. Bidder shall quote the following.

- Component A: Annual Fixed Charges (AFC) and
- Component B: Cycle Loss (CL) /Conversion Loss (CL) [ It cannot be changed in E-RA].

The Bidder/s shall quote total Storage Cost (expressed in INR/MW/annum), the AFC (expressed in INR/MW/annum) and declare the Cycle Loss/ Conversion Loss (expressed in %) of the Projects at the time of submission of response to Tender which is constant during the entire term of the ESFA.

### a) For intra state Developer:

Total Storage Cost, which is combination of AFC & Cycle Loss/Conversion Loss, shall be arrived at and denominated up to two decimal places as per the below formula:

Total Storage Cost = Component A+ (Component A x Component B)

For illustration If a bidder declares a cycle loss / Conversion Loss of 15% for contracted capacity of 500MW with an annual fixed charge of INR 50,00,000/MW, then Total storage cost computed as per above formula shall be INR 57,50,000/MW/annum.

#### b) For interstate state Developer:

All India Transmission Charges declared by NLDC for the month in which bid will be submitted and weekly Transmission losses are considered for calculation of total storage cost for Evaluation Purpose Only.

Illustration is given in Table 1 below,

Tab	Table 1-Bid Evaluation for Inter State PSP/BESS Project (for illustration purpose)		
1	Contracted Capacity (MW)	500	
2	Hours of Operation in Pumping mode per Day	10	
3	Hours of Operation in Generation mode per Day	8	
4	AFC Quoted by Bidders (Rs/MW/Year)	5000000	
5	Annual AFC calculated = (4*1)	2500000000	
6	Cycle loss Quoted by Bidders (%)	25%	
	Capacity Required in Pumping /Charging Mode (MW) considering		
7	declared Cycle loss MW	667	





8	All India Transmission loss Declared By NLDC for the month in which of Bid Submission Date occurred is to be considered (% Monthly Avg)	3.50%
9	Power to be scheduled by Procurer considering Transmission Loss 3.5%	691
10	Extra Power required for pumping /Charging due to T/L considering 10 Hrs pumping MWh	79430
11	Cost Power required for Pumping /Charging in Rs per kwh	4.52
12	Burden due to Extra pumping/Charging power = (10*11)	359023834
13	Bidders Quote Considering Declared Cycle loss / Conversion Loss considered for evaluation = $(4+(4*6)$	6250000
14	Storage Cost considering Cycle Loss (Rs/Per Year)	3125000000
15	All India Transmission Charge Declared By NLDC for the month in which of Bid Submission Date occurred is to be considered (Rs/Unit)	0.52
16	Possible Generation per year (KWh) considering 90% availability and 8 hr/day Generation	1314000000
17	Transmission Charges considered for evaluation (Rs/year) =(15*16)	683280000
18	Total storage cost considering All India Transmission Charges (Rs/Year) =(14+17)	3808280000
19	Rate to be considered for Evaluation considering Transmission Charges (Rs/MW/Year)=(18/1)	7616560
20	Discharge received at Maharashtra periphery considering TL of 3.5% (MW)	482.50
21	Power loss due to transmission loss in discharge mode considering 8 Hrs Discharge (MWh/Year)	45990
22	Burden-Power loss due to transmission loss at discharging cycles (Rs) =(11*21)	207874800
23	Total Burden considering Transmission losses (Rs/Year) =(12+22)	566898634
24	Burden to be Considered for evaluation (Rs/MW/Year) =(23/1)	1133797
25	Final Rate to be considered for Evaluation (Rs/MW/Year) =19+24	8750357

Table-2 Calculation of Actual AFC payable to Interstate Bidder after ERA			
1	Contracted Capacity in MW	500	
2	Cycle Loss /Conversion LossComponent (Rs/MW/Year) = (Sr No 14 - Sr No 5 from Table 1)	625000000	
3	Transmission Charges considered for evaluation (Rs/year) = (Sr No 15*Sr No16 of Table 1)	683280000	
4	Total Burden considering Transmission losses (Rs/Year) = (Sr No 12 + Sr No 22 of Table 1)	566898634	
5	IPO Rate to be displayed to bidder (Rs/MW/Year) (A)	8750357	
6	Final Rate Quoted by Bidder in ERA (RS/MW/Year) (B)	7918344	
7	Total Storage Cost = (Sr No 6* Sr No 1 of Table 2)	3959171895	
8	Total Annual Storage Cost Excluding Transmission Charges and Transmission loss component and Cycle loss component in Rs = (Sr No7 Sr No 2- Sr No 3- Sr No 4)	2083993261	
9	Final Payable AFC to Bidder (RS/MW/Year)= (Sr No 8/ Sr No 1)	4167987	

A single Cycle Loss (%) /Conversion Loss(%) & Annual Fixed Charge (AFC) and Total Storage Cost for supply of Pumped hydro storage capacity / Battery





Energy Storage System (BESS) till the Delivery Point for 40 years shall be quoted by the Bidder for its response to Tender, irrespective of the number of Projects quoted for and the individual Project location.

The selection of Bidder/s shall be based on Total Storage Cost which shall be the combination of AFC (expressed in INR/MW/annum) and Cycle Loss (CL)/ Conversion Loss (expressed in %) discovered through E-Reverse Auction process as per this Tender.

The AFC quoted by the Bidder/s shall be exclusive of GST and inclusive of all statutory taxes, duties, levies, cess, etc., if applicable as on the last date of bid submission.

Kindly note that after E-Reverse Auction for interstate project, AFC (expressed in INR/MW/annum) shall be calculated excluding Transmission Charges component and Transmission loss component and Cycle loss component / Conversion Loss component as per Evaluation Format uploaded.

Note: Energy storage Annual Availability shall be taken 90% as the minimum availability to be ensured for a year.

The bidders will have to submit techno commercial bids as per Annexures. This will be the "First Round Bid" of the Bidder after which the shortlisted bidders shall be invited for Reverse Bid Auction.

#### ii. Methodology for Selection of Developers:

All the bidders will be required to submit online bids (e-bids) on the electronic platform of ETS. The bidders will be shortlisted by 'Single Stage - Two Envelope' bidding process followed by reverse auction among shortlisted bidders.

#### iii. Reverse Auction

At-least one week prior to reverse auction, an advance intimation regarding the date and time of the reverse auction will be sent by email to all bidders whose technical bids have been opened. However, from this advance intimation it shall not be construed by the bidders that they have been short-listed for Reverse Auction.

Further at-least two hours before the schedule start time of reverse auction, a system generated email for invitation for Reverse Auction will be sent to all those bidders who have been short-listed.

On E-Reverse Auction overview page, the bidders are advised in their own interest to view their start price (which shall be the Total Storage Cost/evaluated bid price displayed in Bidder's window as 'My Financial Bid Price'/ such other reference on the bidding platform) and the





capacity of Contracted Capacity for which they have been considered qualified (which will be displayed under Quantity). In case there is any discrepancy in the Start Price of any bidder, the same shall be immediately intimated to AEML before start of Reverse Auction otherwise the Start Price will be considered final and binding on that bidder.

The bidders may note that the person who has been authorized to sign and submit the bid at the time of submission of Technical and Financial bid may only be authorized to participate in the Reverse Auction process on behalf of the bidder as any price submitted by the bidder during the Reverse Auction will be considered final and binding on that bidder as if it had been submitted initially in the Financial bid without requiring any further authentication from the bidder.

### Ranking and Short-listing of bidders for Reverse Auction:

In this step evaluations of Technically Qualified Bids shall be done based on the "First Round Tariff i.e Total Storage Cost/evaluated bid price ", quoted by the Bidder in the Electronic Form of Financial Bid. After this step, the shortlisted bidders shall be invited for the Reverse Auction. All technically qualified bidders will be ranked according to their Total Storage Cost/evaluated bid price, with highest ranking (Rank 1) to that bidder who has quoted the lowest Total Storage Cost/ evaluated bid price and so on. If the Total Storage Cost/ evaluated bid price is same for two or more bidders, then all the bidders with same Total Storage Cost/ evaluated bid price shall be considered as follows:

- a) In case both the Bidders have quoted the same Total Storage Cost, the Bidder submitting the lower number of Project locations shall be preferred over the Bidder submitting higher number of Project locations. Capacity more
- b) In case both the Bidders have quoted equal number of Project locations, the Bidder with higher net worth will get preference.
- c) In case both the Bidders have same Net Worth, AEML shall draw lots to break the tie, which shall be conducted, with prior notice, in the presence of the Bidders, who choose to attend the same.

The Bidder including its Parent, Affiliate or Ultimate Parent or any Group Company will have to submit a single evaluated bid price (single application) quoting a single evaluated bid price for all the Projects applied for. The evaluated bid price has to be quoted in whole numbers only.

On completion of Techno-Commercial bid evaluation, if it is found that only one or two Bidder(s) is/ are eligible for the next stage, opening of the financial bid of the Bidder(s) will be at the discretion of AEML. Thereafter, AEML will take appropriate action as deemed fit.





Ranking of bidders after Financial Bid Evaluation: Following illustrates an example of ranking of bidders after financial bid opening and evaluation

Bidder	Submitted Financials Bid (Total Storage Cost/	Ranking
	Evaluated Price in	
	Rs/MW/Year)	
B1	Rs. 20,00,000	L1
B2	Rs. 25,00,000	L2
B3	Rs. 30,00,000	L3
B4	Rs. 35,00,000	L4
B5	Rs. 40,00,000	L5
B6	Rs. 45,00,000	L6
B7	Rs. 50,00,000	L7

### Reverse Auction (Step III)

The reverse auction for the total tendered capacity shall be conducted on the portal https://www.bharat-electronictender.com, on the day as intimated by AEML to the eligible bidders.

### Assuming

- T = Total Technically Qualified Bidders, and
- ST = Total capacity offered by Technically qualified bidders
- Sk = Cumulative capacity till the 'k'th serial number bidder (not the 'k'th rank bidder) after ranking is done in ascending order from L1 onwards. Here k shall mean that it is total number of bidders
- SE = Eligible capacity for award:

In case  $ST \le 500$  MW, SE will be limited to ST.

In case ST > 500 MW, SE will be as per discretion of AEML, with minimum eligible capacity being 500 MW and maximum eligible capacity being 500 MW.

AEML will finalize SE before commencing online reverse auction process.

#### Online Reverse Auction:

The 'Opening Price' of each bidder i.e. Start Price of Reverse Auction will be the "Evaluated Bid Price / Total Storage Cost" of the respective bidder. The bidders shall beat the lowest Total Storage Cost/evaluated bid price (L-1 bidder price). During the process of Reverse Auction, at any instant, system will calculate the L-1 bidder amongst all the bidders based on their quoted price. The bid decrement shall be Rs. 5,000 (Rupees Five thousand only) or in multiple of Rs. 5,000 (Rupees Five thousand only).

After completion of the online Reverse Auction, the Closing Price (CP) shall be available for further selection process.





Bidders shall be able to view the following on their screen along with the necessary fields during Online Reverse Auction:

- Best Bid in the Auction (Current L1 Evaluated Bid Price/Total Storage Cost)
- Start Price (Evaluated Bid Price of the respective bidders)
- Current Bid of the bidder
- Bid Decrement

The initial auction period will be of 30 minutes with a provision of auto extension by 08 (eight) minutes from the scheduled/extended closing time. Such auto extension shall be affected if by way of reduction in Total Storage Cost, a Bidder causes a change in its zonal placement at that instant. The 'zones' are defined as below:

**Green Zone**: This zone consists of Bidders who may be allocated their full Quoted Capacity, subject to provisions of clause 3.14, if the ereverse auction is closed at that instant.

**Yellow Zone**: This zone consists of the Bidders who may be allocated a part of their full Quoted Capacity, subject to provisions of clause 3.14, if the auction is closed at that instant.

**Red Zone**: This zone consists of the Bidders who will not be awarded their Quoted Capacity, subject to provisions of clause 3.14, if the auction is closed at that instant.

**Blue Zone**: This zone consists of the Bidders who may or may not be allocated their full quoted Project capacity or a part of their full quoted Project capacity if the auction is closed at that instant. In this Zone bidders with same Quoted Price submitted at same point of time will be appearing. This decision of Awardee in such a case will be done as per clause 3.14 (iv)

#### 3.14 Selection of Successful Bidders:

After conclusion of the e-RA process, the bidders will be listed in the increasing order of the tariffs discovered at the end of e-RA. The bidders who fall within the range of (and including) the lowest tariff (L1 tariff) + 5% of the L1 tariff-hereinafter referred to as "the range" will be declared as Successful Bidders under the RfS, subject to the following conditions:

- In case the cumulative capacity shortlisted as per the range exceeds SE, capacity eligible for award as per Clause 3.13.iii, the list of Successful Bidders shall be limited by SE.
- ii. In a borderline case, i.e., the scenario wherein more than one bidder is eligible to be declared as Successful Bidder at the highest tariff (the tariff at the end of the range), and the cumulative capacity exceeds SE, time stamping of bidders shall be used to limit





allocation of cumulative capacity up to SE, In such cases, those bidders who are at the same tariff, but they are ranked lower than the ones which fall within the cumulative capacity limit of SE, will not be eligible to be declared as Successful Bidders.

In other words, in every possible scenario, the total capacity to be awarded under the RfS shall be limited to SE.

- iii. <u>Time stamping</u>- In case of a tie among two or more Bidders (i.e., their last quoted tariff being the same), they will be considered in the chronological order of their last quoted tariff during the e-RA with preference to be given to that Bidder who has quoted his last tariff during the e-RA, earlier than others.
- iv. In the above case, if the time of quote also becomes exactly same among the Bidders at a tie, then the ranking among these Bidders shall be done as follows:
  - a. Step 1: Lowest rank will be given to the Bidder who has quoted the lowest in Financial Bid (Electronic Form) and so on. If there is also a tie among any of these bidders, then the following step (Step 2) will be followed.
  - b. Step 2: Ranking will be done based on draw of lots.

# 3.15 Allotment of Contracted Capacity:

- The allocation of cumulative Contracted Capacity shall be closed at SE (Eligible capacity for award). However, in no case, shall the capacity of a single project selected under this RfS, be less than 50 MW. In case the last Successful Bidder, if the balance Contracted Capacity is less than the total capacity mentioned by the Bidder, but greater than 50 MW, then the Project with highest preference (as mentioned in the Covering letter) shall be awarded to the Bidder, subject to maximum cumulative capacity not exceeding SE, being awarded under RfS.
- In case the partial capacity offered to a bidder/ the last successful bidder is lower than 50% of the total capacity quoted by such Bidder, the bidder shall have an option to refuse such offered partial capacity. Such refusal shall be intimated to AEML within 7 days of completion of e-RA and intimation of such capacity by AEML, failing which the awarded capacity be deemed to be accepted by the said Bidder.
- In case the partial capacity offered to the last Successful Bidder is greater than or equal to 50% of the total Quoted Capacity by such Bidder, it shall be mandatory for the last Bidder to accept the partial capacity offered against its Quoted Capacity, subject to the total cumulative capacity awarded under the RfS not exceeding Se. In case the last Successful Bidder refuses to accept such partial capacity offered by AEML, the Bank Guarantee(s) against EMD submitted by such bidder shall be enchased by AEML.
- At the end of the selection process, a Letter of Award (LOA) will be issued to successful Bidder as per the methodology described in Clause No 3.13 of RFS.





#### - Note:

- AEML reserves the right to verify the documents furnished by the bidders at the time of submission of RfS including availability of the Net Worth and other Financial Criteria to the extent claimed in the RfS with the original documents and bank statements and the shareholding of the Project Company along with a copy of complete documentary evidence supported with originals at any stage from evaluation up to the expiry of ESFA.
- Before signing the ESFA, AEML will ask the successful Bidder to furnish the Memorandum & Articles of Association of Project Company/Project Developer (highlighting the relevant provision of Power/Energy/ Renewable Energy/Energy storage Plant development) in case the same was not available in the Memorandum & Articles of Association of the Bidder at the time of submission of Bid. If at any stage, it is found that the documents furnished by the bidders during RfS are misleading or misrepresented in any way then the agency shall be blacklisted/debarred by AEML for a period of two years from participating in future tenders.

### 3.16 Energy Storage Facility Agreement (ESFA)

ESFA shall be signed between AEML and successful bidder. A copy of ESFA to be executed between AEML and the Selected Bidder(s) is enclosed at Annexure - 7.3

The ESFA shall be signed within 3 months of the date of issue of Letter of Award, or any other date as indicated by AEML. The ESFA shall be for a period of 40 years from the Scheduled Commissioning Date of the Contracted Capacity. After issuance of LoA and prior to signing of ESFA, AEML shall approach MERC for adoption of tariff. It is anticipated that MERC will issue order for tariff adoption within 90 days from issuance of LoA. If adoption of tariff by MERC gets delayed, deadline for signing of ESFA will get extended for each day of delay. It is clarified that signing of ESFA is subject to the adoption of tariff by MERC.

The Performance Bank Guarantee as per Clause 3.28 shall be submitted by the developer prior to signing of signing of ESFA. AEML will verify the shareholding of the Project Company along with a copy of complete documentary evidence. If at this stage it is found that the documents furnished by the developer are false/misleading or misrepresented in any way, then the provisions contained in this RfS will be applicable.

Successful bidders will have to submit the required documents to AEML within 15 days from the issuance of LoA or before signing of ESFA, whichever is earlier. In case of delay in submission of documents beyond the 15 days as mentioned above, AEML shall not be liable for delay in





### verification of documents and subsequent delay in signing of ESFA.

#### 3.17 Performance criteria:

## Round Trip AC-AC Efficiency: -

The ESSD shall demonstrate a minimum roundtrip efficiency/ conversion efficiency of 75% for each charging- discharging cycle. The ESSD shall also ensure that yearly Conversion Loss / Cycle loss as declared during Bid (Format 6.8.1). Daily/Monthly/Yearly Efficiency of ESS system shall be demonstrated by ESSD and suitably automatically logged in configured performance monitoring system of ESS facility. Incoming and outgoing energy at delivery point shall be measured with ABT class meters. The efficiency shall be measured as follow,

### Efficiency (%) = (Gout/Gin) x 100

Where Gin and Gout are the total cumulative incoming and outgoing energy measured during one complete charge-discharge cycle.

Yearly Efficiency (%) = Average of all Efficiency (%) over period of one year.

# 3.18 MW and MWh Capacity of ESS facility Demonstration:

ESSD shall demonstrate the required MW & MWh Capacity of ESS facility at the delivery point to the grid on monthly basis. It shall be the responsibility of the ESSD to make periodic replacements/replenishments of system capacities, if and when required, up to the Term of the Contract to maintain required dispatchable energy at metering/ delivery point. Monthly/Yearly MW/MWH capacity of ESS system should be suitably automatically logged in configured performance monitoring system of ESS facility.

The developer will be free to replenish the storage capacity from time to time without affecting availability to AEML during the term of ESFA at their cost and expense to meet the performance criteria. However, AEML will be obligated to off-take capacity only within the range as specified in the ESFA and at the charges applicable as per the existing agreements. Any excess supply will be dealt as per provisions of the ESFA.

#### 3.19 ESS Annual Availability:

The ESSD shall maintain a minimum of 90% availability on an annual basis. Availability of the Contracted Capacity shall mean the ability of the ESSD to execute a function i.e. charging or discharging, when called upon to do so as per the schedule, subject to the minimum system ratings specified herein.

The Annual availability shall commence from the COD of the Contracted Capacity and shall be calculated as below:

ESS Annual Availability = Average of the ESS Daily availability over the year.





"Availability (MW)" is the capability of the Project to operate in both pumping/ charging and generation / discharge mode and will be declared by the Developer at / before 6 AM on day-ahead basis, for each 15-minute time block for the next day. For example, the Declared Machine Availability for all 96 no. 15-minute time blocks of 1st September 2024 will be submitted by 6 AM of 31st Aug 2024.

#### Calculation Illustration

Particulars	Toggle	Calculation
No of Time Blocks (15 Mins) in a hour	Α	4
No of Hours in a day	В	24
Total Time Blocks (15 Mins) in a day	C=AxB	96
No of Days in a month (30 days)	D	30
Total Time Blocks (15 Mins) in a Month (30 days)	E=CxD	2880
No of Time Blocks (15 Mins) declared Available in a Month	G	2880
Contracted Capacity (MW)	Н	200
Sum of all time block Declared Availability (MW) per hour	I=GxH/4	144000
Quoted Capacity or capacity awarded to bidder	J	200
No of hours	K	24
No of days	L	30
Contracted Capacity (MW) x 24 x No of days in the Month	M=J*K*L	144000
Availability	I/M	100%

# 3.20 Liquidated Damages (LD):

# a. LD applicable due to shortfall of Yearly Round Trip Efficiency:

In case annual measured efficiency of ESS (Efficiency M) (%) is less than annual declared efficiency (Efficiency D) (%) in a particular year, bidder shall be liable to pay LD for loss in dispatchable energy on account of fall in efficiency which shall be calculated as follows,

# LD = 1.5 x Quoted Price INR/MW/year x Quoted MW x (Efficiency\_D - Efficiency\_M)

# **Illustrative Example**

Description	Toggle	Units	Price
Quoted Price	Α	Rs/MW	20,00,000
Total Awarded Capacity (MW)	В	MW	200
Efficiency D	С	%	75.0%
Efficiency M	D	%	74.0%
Total Revenue (A*B)	Е	Rs	40,00,00,000
Efficiency Difference (1/C-1/D)	F	%	1%
LD Calculation (E*F*1.5)	G	Rs.	60,00,000





# b. LD applicable due to shortfall of ESS Annual Availability: -

Subsequent to date of start of ESS facility, in case the annual Availability demonstrated by the ESSD is less than the 90% as specified above, such shortfall in performance shall make the ESSD liable to pay the liquidated damages to AEML. Liquidated damages on account of shortfall in meeting the performance criteria will be computed as follows:

LD Availability = Quoted Price in INR/MW/Year x Quoted MW x (A - B) / 100

#### Where

- A Minimum allowed ESS Annual Functional Availability (90%).
- B Actual Annual System Availability, as calculated as per above. The above equation applicable only if B is less than 90%.

# **Illustrative Example**

Description	Toggle	Units	Price
Quoted Price	Α	Rs/MW	20,000,00
Total Awarded Capacity (MW)	В	MW	200
Min Availability	С	%	90.0%
Actual Availability	D	%	85.0%
Total Revenue (A*B)	E	Rs	40,00,00,000
Availability Difference (C-D)	F	%	5.00%
LD Calculation (E*F)	G	Rs.	2,00,000,00

# 3.21 Submission of Response to RfS by the Bidder:

A. Offline Submission of documents at AEML Office: The bidder must submit the original of the following document offline: Bank Guarantee towards EMD as mentioned in the Bid Information Sheet to the address mentioned below:

Head (Power procurement),

Adani Electricity Mumbai Limited,

CTS, 407/A (New), 408 Old Village, Eksar Devidas Lane off SVP road,Near Devidas lane telephone exchange, Borivali (West) Mumbai-400103

No documents shall be accepted in person, on or before the date of bid submission.

Bank Guarantee against EMD needs to be submitted in both online and offline modes. The bidders will be required to submit





the bank guarantee, either in person or through post, at the office of AEML until the date as on 5 working days after the closing date of bid submission. The 5-day duration will be counted from the date of bid submission.

For e.g., if the bid submission deadline is 18:00 hrs on 01.03.2024, the above deadline will expire at 18:00 hrs on 06.03.2024. In case the above deadline being a holiday, the next working day in AEML will be the deadline for submission of Bank Guarantees.

Note: In all cases, the Bank Guarantee against EMD (if applicable), shall be issued on or before the bid submission deadline. These instruments issued after the expiry of the deadline will be summarily rejected.

**B.** Online submission of documents on ETS Portal: The response to RfS shall be submitted electronically in the method specified as per on https://www.bharat- electronictender.com which should contain the following:

**First Envelope (Technical Bid):** - Bidders shall submit eligibility bid containing the scanned copy of following documents in sequence as mentioned below with index and page number duly mentioned on each page and in index:

- a. Covering Letter as per Format 6.1;
- b. In case of a Bidding Consortium, a Power of Attorney in favour of the Lead Member issued by all the other Members of the Consortium shall be provided as per Format 6.2.
- c. In the event any Member of the Bidding Consortium (other than Lead Member) being a foreign entity, it may submit Board Resolutions in place of Power of Attorney for the purpose of fulfilling the requirements under this Clause. Provided that such Board Resolutions shall be supported by an unqualified opinion issued by the legal counsel of such foreign entity stating that the Board Resolutions are in compliance with the applicable laws of the respective jurisdictions of the issuing Company and the authorizations granted therein are true and valid.
  - i. Board Resolutions, as per Format 6.5 duly certified by the Company Secretary or the Director of the relevant Bidder, as applicable to the Bidder and mentioned hereunder:
  - ii. Board Resolution from the Bidding Company or the Lead Member of the Consortium, as the case may be, in favour of the person signing the response to RfS;
  - iii. Board Resolution from the Bidding Company committing one hundred percent (100%) of the equity requirement for the Project/Board Resolutions from each of the Consortium Members together in aggregate committing to one hundred percent (100%) of equity requirement for the Project (in case of Bidding





- Consortium) and authorizing a person to execute the Consortium agreement;
- iv. Board Resolutions from each of the Consortium Members and Lead member contributing such additional amount over and above the percentage limit (Specified for the Lead Member and other member in the Consortium Agreement) to the extent becoming necessary towards the total equity share in the Project Company, obligatory on the part of the Consortium pursuant to the terms and conditions contained in the Consortium Agreement and
- v. Board Resolutions from Parent and/or Affiliate (whose credentials were used in the response to RfS) of the Bidding Company/any Member of the Bidding Consortium undertaking to invest the entire amount and submit the requisite Performance Bank Guarantee as committed by Bidding Company/Member of the Bidding Consortium, in event of failure of Bidding Company/Member of the Bidding Consortium to make such investment and/or to submit the requisite Performance Bank Guarantee.
- d. In case of a Consortium, the Consortium Agreement between the Members in the Consortium along with Board resolution from each Member of the Consortium for participating in consortium.
- e. Financial Requirements as per Format 6.6 as applicable;
- f. Format for undertaking as per Format 6.7;
- g. Format for Technical Criteria as per Format 6.8;
- h. Format for Technical details as per Format 6.8.1;
- i. A disclosure statement as per Format 6.9 regarding participation of any related companies in this bidding process;
- Declaration by the Bidding Company / Lead Member of Bidding Consortium for the Proposed Technology Tie Up as per Format 6.10;
- k. Nil deviation certificate as per Format 6.11
- I. Compliance certificate as per Format 6.12
- m. Checklist for Bank Guarantee as per Format 6.13;
- n. Technical experience certificate as per Format 6.14;
- o. Consortium agreement as per Format 6.15
- p. Memorandum & Articles of Association (highlighting relevant provision of Power/Energy/Renewable Energy/Energy storage Plant development), Certificate of Incorporation (if applicable) of Bidding Company / all member companies of Bidding Consortium along with shareholders rights and obligations filed with ROC. In case of foreign bidders having documents other than English language then all these documents shall be translated in English language by approved translator and shall be notarized by the Indian Consulate in that country.
- q. Bidder shall also provide shareholding pattern of the bidding company/ consortium duly certified by a practicing Chartered Accountant/ Company Secretary as on a date within 30 days





- prior to the last date of bid submission.
- r. Certificate of Incorporation of Bidding Company/ all member companies of Bidding Consortium.
- s. Certified copies of annual audited accounts for the last financial year, i.e. FY 2024-25 and provisional accounts duly certified by a practicing Chartered Accountant (as applicable), along with certified copies of Balance Sheet, Profit & Loss Account, Schedules and Cash Flow Statement supported with bank statements as on the day at least 7 days prior to the bid submission deadline (If applicable).
- t. Submission of Pass-phrases: In line with Clause 1.10 and Annexure 7.4, the Bidder shall be required to submit the Pass-Phrase to decrypt the relevant Bid-part in sealed envelop. The Bidder shall make sure that the correct, valid and operative Pass-Phrase to decrypt the relevant Bid-part is submitted in sealed envelop after deadline of Bid submission and before the commencement of the Online Tender Opening Event (TOE) of Techno-commercial bid.
- AEML reserves the right to seek additional information from the Bidders, if found necessary, during the course of evaluation of the response to RfS.

Second Envelope (Financial Bid) (to be submitted on ETS Portal): Bidders shall fill up the First Round Tariff Bid for total Storage Cost (expressed in INR/MW/annum) up to a maximum of 2 (two) decimal places, AFC (in Rs/MW/Year) up to a maximum of 2 (two) decimal places. and Cycle Loss /Conversion Loss(expressed in % rounded off up to 2 decimal points) online in the Electronic Form-Financial Part at ETS Portal. Cycle Loss (%) shall be quoted as declared as part of format 6.8.1 and format 6.10.

Total Storage Cost (expressed in INR/MW/annum) shall be calculated by Bidder in accordance with Clause No 3.13 for Intra State and Interstate Project.

For calculation of total Storage cost for Interstate Project for Evaluation Purpose only, AEML will upload the Template which is to be used by Bidder. Kindly note that after E-Reverse Auction for interstate project, AFC (expressed in INR/MW/annum) shall be calculated excluding Transmission Charges component and Transmission loss component and Cycle loss /Conversion Loss component as per Evaluation Format uploaded.

Wherever information has been sought in specified formats, the Bidders shall fill-in the details as per the prescribed formats and shall refrain from referring to any other document for providing any information required in the prescribed format. Any document submitted in format other than that specified in this RfS document may call for rejection of bid.





AEML reserves the right to seek additional information from the Bidders, if found necessary, during the course of evaluation of the response to RfS.

#### Modification of Bid

The bidder may modify its bid prior to the deadline of bid submission. For evaluation, the last modified bid uploaded on ETS portal shall be considered as final submission.

The Bidder should note that:

- a. The bidder may be shortlisted based on the declarations made by them in relevant schedules of RfS. The documents submitted online will be verified before signing of ESFA.
- b. If the Bidder/Member in a Bidding Consortium conceals any material information or makes a wrong/misleading statement or misrepresents facts in its response to RfS, in any manner whatsoever, AEML reserves the right to reject such response to RfS and/or cancel the Letter of Award, if issued and the Bank Guarantee provided up to that stage shall be encashed. Bidder shall be solely responsible for disqualification based on their declaration in the response to RfS submitted online with ETS portal.
- c. If the event specified at 3.22.2(b) above is discovered after the Effective Date of signing of storage facility agreement, it shall be treated as "Developers Event of Default" under storage facility agreement and consequences as specified in ESFA shall apply.
- d. All documents of the response to RfS submitted online must be digitally signed by the person authorized by their respective Boards on behalf of the Bidder as per Format 6.5.
- e. The response to RfS shall be submitted as mentioned in Clause 3.22 above. No change or supplemental information to a response to RfS will be accepted after the scheduled date and time of submission of response to RfS. However, AEML reserves the right to seek additional information or clarifications from the Bidders, if found necessary, during the course of evaluation of the response to RfS.
- f. Bidders shall mention the name of the contact person and complete address of the Bidder in the covering letter.
- g. Response to RfS that are incomplete or do not substantially meet the requirements prescribed in this RfS, will be liable to rejection by AEML.
- h. Response to RfS not submitted in the specified formats will be liable to rejection.
- Bidders delaying in submission of additional information or clarifications sought by AEML will be liable to rejection.
- j. Non submission and/or submission of incomplete data/ information required under the provisions of RfS shall not be





construed as waiver on the part of AEML of the obligation of the Bidder to furnish the said data/information unless the waiver is given in writing.

- k. Only Mumbai Courts shall have exclusive jurisdiction in all matters pertaining to RfS.
- I. All the information should be submitted in English language only. In case of foreign bidders having documents other than English language then all these documents shall be translated in English language by approved translator and shall be notarized by the Indian Consulate in that country.

Bidders should submit the response to RfS online on https://www.bharat- electronictender.com as per the schedule specified at Clause 3.4 above. No offline or late bids will be allowed.

#### Method of Submission

Detail instructions to be followed by the bidders for online submission of response to RfS is as stated at Annexure – 7.4.

#### 3.22 Validity of the Response to RfS

The response to RfS shall remain valid up to One Hundred Eighty (180) days from the bid deadline ("Bid Validity"). AEML reserves the right to reject any response to RfS which does not meet the aforementioned validity requirement. In exceptional circumstances, AEML may solicit the Bidder's consent to an extension of the initial bid validity period. The request and responses thereto shall be made in writing by email or post or by telefax followed by post confirmation. A Bidder may refuse the request to extend the period of bid validity. A Bidder granting the request will not be required nor permitted to modify its bid.

#### 3.23 Preparation cost

The Bidder shall be responsible for all the costs associated with preparation and submission of the response to RfS, attending training program and participation in discussions and attending pre-bid meeting(s), etc. AEML shall not be responsible, in any way, for such costs, regardless of the conduct or outcome of the bid process.

# 3.24 Enquiries/Clarifications

Clarifications/Doubts, if any, on RfS document may be addressed to the Contact Person at the email address mentioned in Bid Information Sheet on or before the date. AEML will make all efforts to respond to the same and compiled list of such questionnaire and AEML's response will be uploaded on the website https://www.bharat- electronictender.com. Bidders are required to remain updated with the website. No separate reply/intimation will be given elsewhere. Verbal clarifications & information given by AEML or its employees(s) or its representative(s) shall not be in any





way binding on AEML.

#### 3.25 Amendment to RfS Documents

At any time prior to the deadline for submission of bids, AEML may, for any reason, whether at its own initiative, or in response to a clarification requested by a prospective Bidder, amend the RfS documents. The amendment will be uploaded on the website https://www.bharatelectronictender.com. Bidders are required to remain updated with the website. No separate intimation will be given elsewhere. The amendment will be binding on Bidders and it will be assumed that the information contained therein will have been taken into account by the Bidder in its bid.

#### 3.26 Clarification on Bids

During bid evaluation, AEML may, at its discretion, ask the Bidder for a clarification of its bid. The request for clarification and the response shall be in writing, and no change in the substance of the bid shall be sought, offered or permitted.

## 3.27 Right to reject a Bid:

AEML reserves the right to reject all or any of the response to RfS or cancel the tender or annul the bidding process at any stage without assigning any reasons whatsoever and without thereby incurring any liability to the affected Bidder or bidders or any obligation to inform the affected Bidder or bidders of the grounds for the AEML's action. In the event of the tender being cancelled at any stage, the processing fee (excluding GST, if amount credited to AEML's account), without any interests, and EMD submitted by the Bidders shall be returned to the respective Bidders.

#### 3.28 Performance Bank Guarantee:

A Performance Bank Guarantee (PBG) of Rs.10 Lakh/MW for each project as per Format 6.4, is to be submitted by the successful bidder to AEML within 30 days from the date of issue of Letter of Award or before signing of ESFA, whichever is earlier. The PBG should be initially valid for a period of 12 (Twelve) months beyond the Scheduled Commissioning Date. If any extension of Scheduled Commissioning Date is granted to the project, the PBG shall also be extended in such a way that it remains valid for 12 (Twelve) months beyond the extended Scheduled Commissioning Date. PBG shall be submitted for each project separately.

On receipt and after successful verification of the total Performance Bank Guarantee in the acceptable form, the BG submitted towards EMD shall be returned by AEML to the successful Bidder.

The Bank Guarantees must be executed on non-judicial stamp paper of appropriate value as per Stamp Act relevant to the place of execution. All expenditure towards execution of Bank Guarantees such as stamp duty etc. shall be borne by the developer.





3.29 The Bank Guarantees towards EMD and PBG must be executed on non-judicial stamp paper of appropriate value as per Maharashtra Stamp Act, 1958. On issuance/renewal of Bank Guarantee, Stamp Duty is to be paid as per Maharashtra Stamp Act, 1958. As per Maharashtra Stamp Act in the event of Stamp Duty being payable in the state of Maharashtra on any document executed outside the State of Maharashtra, remaining stamp duty will be payable in the state of Maharashtra as per section 18 of Maharashtra Stamp Act 1958.

Note: In case any extension is given to the Project, the corresponding extension needs to be made in the validity of PBG.

Bank Guarantees issued by foreign branch of a Bank is to be endorsed by the Indian Branch of the same bank or State Bank of India.

In order to facilitate the Bidders to submit the Bank Guarantee as per the prescribed format and in line with the requirements, check-list at Appendix-A has been attached. Bidders are advised to take note of the above checklist while submitting the Bank Guarantees. Bidders have to submit the above check list duly filled in along with Bank Guarantee.

Confirmation of BG towards PBG through Structured Financial Messaging System (SFMS)/SWIFT

While issuing the physical BG, the Bidder's Bank shall also send electronic message to AEML' Beneficiary Bank whose details are provided in Bid Information Sheet through secure SFMS (in case of BGs issued from within India) or SWIFT (in case of BGs issued from outside India). While submitting the Bank Guarantee, bidders shall also enclose copy of electronic message sent to the above beneficiary bank.

## 3.30 Bank Guarantee against Earnest Money Deposit (EMD)

EMD of Rs. 5 Lakh/MW in the form of Bank Guarantee (valid for a period of 120 days beyond the Bid Validity period) as per Format 6.3. Scanned copy of Bank Guarantee towards EMD is to be submitted along with response to RfS in First Envelope (Eligibility Bid). However, the Bank Guarantee towards EMD (in original) in a sealed envelope is to be submitted to AEML's Office at Mumbai along with physical submission of other bid documents. If a bidder extends the period of bid validity pursuant to clause 3.22 of RfS, the validity of EMD shall also be extended so that it remains valid for a period of 120 days beyond the Bid Validity.

The Bidder shall furnish the Bank Guarantees towards EMD from any of the Scheduled Commercial Banks as listed on the website of Reserve Bank of India (RBI) and amended as on the date of issuance of bank guarantee. Bank Guarantee issued by foreign branch of a Scheduled Commercial Bank is to be endorsed by the Indian branch of the same bank or State Bank of India (SBI). The EMD shall be valid as per the timelines stipulated above.





However, shortfall in the EMD validity, if any, up to a period of seven (7) days shall be acceptable. Further, an additional shortfall only in the following cases shall be acceptable: If bidder has submitted the EMD with validity as per original bid submission date or as per any revised submission date and if the deadline for submission of bids has been extended further, the Bid Guarantee shall be acceptable provided, the EMD is valid for more than two months from the actual date of bid submission and the Bidder submits the EMO extension for the requisite period within seven days from the date of actual bid submission, if required.

#### 1. Forfeiture of EMD:

The EMD shall be forfeited in following cases:

- a) If the bidder/his representatives commit any fraud while competing for this contract.
- b) If the bidder withdraws or varies the bid during the validity of the bid;
- c) In case, AEML offers to execute the ESFA with the Selected Bidder and if the Selected Bidder does not submit the requisite documents as per Clause 3.14 or does not execute the ESFA, within the stipulated time period.
- d) If the bidder fails to furnish required Performance Bank Guarantee in accordance with Clause 3.28; and
- e) if the lowest evaluated L-1 bidder does not accept the offered capacity in terms of clause 3.14 and 3.15

#### 2. Return of EMD

- a) After the bidding process is over, AEML shall release the Bank Guarantees towards EMD of the unsuccessful Bidders within 15 days after the completion of e-Reverse Auction,
- b) Bank Guarantee of the Successful Bidders will be released after receipt of PBG and its successful verification by AEML,

In case the successful bidder has submitted the Performance Bank Guarantee and AEML has returned the Bank Guarantee towards EMD prior to the signing of ESFA pursuant to clause 3.28/3.30.2 and any of the condition of forfeiture of EMD as specified at 3.30.1 (a to e) occurs then the Bank Guarantee equivalent to the amount of the EMD shall be encashed by AEML from the Performance Bank Guarantee towards forfeiture of EMD.

#### 3.31 Minimum Paid up Share Capital to be held by the Promoter.

The Bidder shall provide complete information in their bid in reference to this RfS about its promoters and upon issuance of LoA, the Developer shall indicate its shareholding in the company indicating the controlling shareholding before signing of ESFA with AEML.

No change in controlling shareholding of the Bidding Company or Bidding Consortium shall be permitted from the date of submission of response to RfS till the execution of the ESFA. However, in case the Project is being set up by a listed Company, this condition will not be applicable.





Following shall not be considered as change in shareholding as mentioned above:

- Infusion of Fresh equity capital amongst the existing shareholders/promoters at the time of Bid Submission to meet equity requirements.
- Conversion of CCDs, CCPs etc. already issued to existing shareholders.
- Death, marriage, Divorce, minor attaining major (any legal heir who was minor at the time of signing of ESFA), insolvent, insane of existing shareholders.
- Transfer of shares within the members of Immediate Promoter Group only.
- Transfer of shares to IEPF.
- Issue of Bonus Shares.

## In case of Contracted Capacity being executed through SPVs:

The Selected Bidder executing the project, if being a single company, shall ensure that its shareholding in the SPV/Project Company executing the ESFA, shall not fall below 51% at any time prior to COD of the Contracted Capacity. In the event the selected Bidder is a consortium, then the combined shareholding of the consortium members in the SPV/Project Company executing the ESFA, shall not fall below 51% at any time prior to COD. However, in case the Project is being set up by a listed Company, this condition will not be applicable.

In case of the selected Bidder itself executing the ESFA, it shall ensure that its promoters shall not cede control (Control shall mean the ownership, directly or indirectly, of more than 50% of the voting shares of such Company or right to appoint majority Directors), until COD. However, in case the Project is being set up by a listed Company, this condition will not be applicable.

In the case of companies having multiple promoters (but none of the shareholders having more than 50% of voting rights and paid-up share capital), it shall be considered as a company under joint control. In such cases, the shareholding pattern in the company as submitted at the time of bidding, shall be maintained upto the COD.

Any change in the shareholding after COD can be undertaken under intimation to AEML. Transfer of controlling shareholding of the company developing the project within the same group of companies will however, be allowed after Project commissioning with the permission of AEML, subject to the condition that, the management control remains within the same group of companies.

In the event of Change in Shareholding/Substitution of Promoters triggered by the Financial Institutions leading to Signing of fresh EFSA with a new entity, an amount of INR 10 Lakh per project +GST (as applicable) per transaction as facilitation fee (non-refundable) shall be deposited by developer to AEML.





# 3.32 Financial Closure or Project Financing Arrangements and Land Arrangements:

The Project Developer shall report Project Financing Arrangements for the projects within 12 (Twelve) months from the Effective date of ESFA.

At the stage of financial closure, developer shall furnish the CA Certificate indicating the total cost of Project(s). Developers shall also report 100% tie- up of Financing Arrangements for the Projects. In this regard, the ESSD shall submit a certificate/necessary document from all financing agencies regarding the tie-up of 100% of the funds for the Project, including arrangements of funds in the form of Equity. Checklist of documents to be submitted at this stage is provided at Annexure-7.5 of the RfS.

In case of delay in achieving above condition as may be applicable, AEML shall encash Performance Bank Guarantees and shall remove the project from the list of the selected projects, unless the delay is on account of factors not owing to any action or inaction on the part of the ESSD, or caused due to Force Majeure as per ESFA. An extension can however be considered, on the sole request of ESSD, on payment of a penalty of Rs.1,000/- per day per MW. This extension will not have any impact on the scheduled Commissioning Date of the Contracted Capacity. The penalty paid by the project developer shall be returned without any interest on achievement of successful commissioning up to the rated Contracted Capacity within the Scheduled Commissioning Date. However, if the entire capacity of the project is not commissioned within the Scheduled Commissioning Date, then penalty amount shall not be refunded.

The developer will have to submit the required documents to AEML at least 14 days prior to the scheduled Financial Closure date. In case of delay in submission of documents mentioned above, AEML shall not be liable for delay in verification of documents and subsequent delay in Financial Closure.

## **Land/project Arrangements:**

The developer shall submit documents/Lease Agreement to AEML to establish possession/right to use:

- i. Required land for Power house and associated equipment's/facilities up to the scheduled Financial Closure date
- ii. Required land for Reservoir (upper & lower) on or before SCD.

Wherever leasing of private land is involved, the lease should allow transfer of land lease rights to the lenders or Buying Utility, in case of default of the ESSD. ESSD shall submit a sworn affidavit from its authorized signatory, listing the details of the land and certifying that total land required for the Project is under clear possession of the Developer.

In case of delay in achieving the above condition as may be applicable, provisions of above shall apply, unless the delay is on account of delay in





transmission line or Force Majeure as per ESFA.

The developer will have to submit the required documents to AEML at least 14 days prior to the scheduled Financial Closure date. In case of delay in submission of documents mentioned above, AEML shall not be liable for delay in verification of documents and subsequent delay in Financial Closure. Commissioning of the Project will not be allowed until the demonstration of land/project possession/ownership by the developer in terms of the above and Clause 3.31 below.

#### 3.33 Part Commissioning:

Part commissioning of the Contracted Capacity shall be accepted by AEML subject to the condition that the Minimum Capacity for acceptance of first part commissioning and subsequent part(s) shall be 50 MW, without prejudice to the imposition of liquidated damages, in terms of ESFA on the part which is not commissioned. The Scheduled Commissioning Date shall not be altered due to part-commissioning. Irrespective of dates of part commissioning or full commissioning, the ESFA will remain in force for a period of 40 (Forty) years from COD for full Contracted capacity.

In cases of early full commissioning, till Scheduled Commissioning Date, AEML may utilize the storage facility at 100% (hundred per cent) of the ESFA rate payable to the ESSD. AEML shall procure the capacity at 100% of the AFC pro-rata for the capacity made available for the duration between date of part commissioning and SCD. However, in case AEML is not willing to avail ESS facility for the period of full or part commissioning, then ESSD will be allowed to sell power in exchange or through bilateral contacts with permission of AEML. The Developer should share the profit of part commissioned capacity in the proportion of 50:50 (Procurer: Developer) where supply power for charging of ESS shall be provided by procurer.

Further, in case of early part or full commissioning before the SCOD/SCD, if Procurer does not accept part or full commissioned capacity of the Pumped Hydro Energy Storage System (PHESS facility) / Battery Energy Storage System (BESS), Procurer will not provide any input energy to Developer and Procurer will not pay Fixed Charges for this period. In this case developer shall be allowed to sell the power in exchange or through bilateral contracts and the Developer should share the profit with Procurer in the proportion of 80:20 (Developer: Procurer).

Commissioning Schedule and Penalty for Delay in Commissioning:

- i. The Schedule Commissioning Date (SCD) for commissioning of the full capacity of the Project shall be 48 (Forty-Eight) months for Pumped Hydro Storage Plant (s) from the Effective date of ESFA and For Battery Energy Storage System Schedule Commissioning Date shall be 24 from the Effective date of ESFA
- ii. The maximum time-period allowed for commissioning of the full





Contracted Capacity with applicable liquidated damages, shall be limited to the date as on 6 months from the SCD or the extended SCD (if applicable)

In case of delay in commissioning of the Contracted Capacity beyond the SCD, as part of the liquidated damages, the total PBG amount for the Contracted Capacity shall be encashed on perday-basis and proportionate to the balance capacity not commissioned. For example, in case of a Contracted Capacity of 190 MW capacity, if commissioning of 100 MW capacity is delayed by 18 days beyond the SCD, then the liquidated damages shall be: PBG amount x (100/190) x (18/180). For calculations of the liquidated damages, 'month' shall be considered consisting of 30 day.

In case the Commissioning of the Contracted Capacity is delayed beyond the date as per Clause 3.33.ii above, the ESFA capacity shall stand reduced/ amended to the Commissioned Capacity. Capacity commissioned and the ESFA for the balance capacity will stand terminated and shall be reduced from the selected Contracted Capacity.

# 3.34 Delay in Commissioning on Account of Delay in CTU/STU connectivity operationalization:

- a) The Bidder/s shall apply due diligence while identifying the ISTS/InsTS substations and applying for connectivity, with reference to bay availability and/or timelines of commissioning of planned ISTS/InSTS infrastructure. AEML will not assume any responsibility in this above-mentioned process of ascertaining availability at the ISTS/InSTS substations and grant of connectivity.
- b) Subsequent to grant of connectivity, in case there is a delay in grant/operationalization of connectivity by the CTU/STU and/or there is a delay in readiness of the ISTS/InSTS substation at the Delivery Point, including readiness of the power evacuation and transmission infrastructure of the ISTS/InSTS network until Scheduled COD of the Project, and it is established that:
- c) The Developer has complied with the complete application formalities with CTU/STU.
- d) The Developer has adhered to the applicable procedures in this regard as notified by the CTU/PGCIL/CERC/CEA, and
- e) The delay in grant of connectivity by the CTU/STU and/or delay in readiness of the ISTS/InSTS substation at the Delivery Point, including readiness of the power evacuation and transmission infrastructure of the ISTS/InSTS network, is a factor attributable





to the CTU/STU and is beyond the control of the Developer/s.

The above shall be treated as delays beyond the control of the Developer/s and Scheduled COD for such Projects shall be revised. Decision on requisite extension on account of the above factor shall be taken by AEML on case-to-case basis.

## 3.35 Commercial Operation Date (COD)

Commercial Operation Date shall be the date on which the commissioning certificate is issued upon successful commissioning of the full Contracted Capacity or the last part capacity of the Project as the case may be.

In case of delay not attributable to ESSD, after proper verification of the necessary documentary evidence leading to delay in COD; AEML shall extend the schedule commissioning date, without any financial implications on the ESSD, by equivalent period of delay from the given timelines in this RfS.

#### 3.36 Corrupt or Fraudulent Practices:

AEML requires that Bidders, Developers, etc. observe the highest standard of ethics during the development and operation of Energy storage Project(s). In pursuance of this:

"Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the bidding process or in the development and operation of Energy storage Project(s); and

**"Fraudulent practice"** means a misrepresentation of facts in order to influence the bidding process or in the development and operation of energy storage Project(s) to the detriment of AEML, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive AEML of the benefits of free and open competition;

AEML will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the tender in question and the bid security of the bidder shall be forfeited; will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for or in executing the development and operation of Energy storage Project(s).

The Bidder along with its Affiliate/Group Company/associate/collaborators/sub-contractors/sub-vendors/consultants/ service providers shall immediately apprise AEML about any fraud or suspected fraud as soon as it comes to their notice. If it is established that the bidder/his representatives have committed any fraud while competing for this tender then the bid security of the bidder shall be forfeited.





## 3.37 Contacting AEML

Except for when AEML has sought some clarification or additional information in writing from the bidder, no Bidder or his representative shall contact AEML on any matter relating to its bid, from the time of the opening of bids to the time the LOA is issued/ESFA is signed.

Any effort by a Bidder to influence AEML's decision during the evaluation process before LOA is issued to successful bidder(s) may result in rejection of the Bidder's bid.

3.38 Participation by Parent, Affiliate or Ultimate Parent or any Group Company with which the bidding company/member of bidding consortium have direct, or indirect relationship cannot bid separately in the same selection process in which the bidding company/member of bidding consortium is participating. In case it is found at any stage that this condition is violated, the response to RfS of all such parties will be rejected and if LOA has been issued or SSA has been signed, the same of all such agencies will be cancelled and the Bank Guarantees of all such agencies will be encashed.





## 4. Evaluation Criteria

The evaluation process comprises of the following three steps:

- Step I -Responsiveness check
- Step II Bid evaluation
- Step III- Reverse Auction Step

## Responsiveness check

The electronic response to RfS submitted by the Bidder shall be scrutinized to establish "Responsiveness". Each Bidder's response to RfS shall be checked for compliance with the submission requirements set forth in this RfS.

Any of the following conditions shall cause the Bid to be "Non-responsive"

- Response to RfS not submitted by the due date and time,
- Response to RfS submitted by a Bidding Consortium not including the requisite Consortium Agreement signed by all members
- Response to RIB having Conflict of Interest
- Non-submission or incomplete submission of any or all of the requisite documents mentioned at Clause 3.21.
- In addition to above, any relevant document required as per RfS not submitted in prescribed format

The determination of a bid's responsiveness shall be based on the contents of the bid itself without recourse to extrinsic evidence. However, AEML may waive any minor informality, non-conformity or irregularity in a bid that does not constitute a material deviation and that does not prejudice or affect the relative ranking of any bidder. Non-responsive bids will be liable for rejection by AEML.

## Step II - Bid evaluation

Bid evaluation will be carried out considering the information furnished by Bidders as prescribed under Section 6 - Formats. This step would involve evaluation of the response to RfS of the Bidding Company/Bidding Consortium as per the provisions specified in Section 3 of this RfS. First the evaluation of Technical bid will be done. Then the financial bid of all the qualified bidders will be opened.

After that Reverse Auction shall be conducted online for which all short-listed bidders as per methodology mentioned in Section-3 shall be invited to participate.

#### Bid Evaluation Criteria:

Bidder shall quote the following:

Component A: Annual Fixed Charges (AFC) -(expressed in INR/MW/annum)





and

- Component B: Cycle Loss (CL)/ Conversion Loss in %
- Total Storage Cost (expressed in INR/MW/annum)

The Bidder/s shall quote AFC (expressed in INR/MW/annum) and declare the Cycle Loss/ Conversion Loss(expressed in %) of the Projects at the time of submission of response to Tender which is constant during the entire term of the EFSA

The Total Storage Cost is computed as per the Evaluation Methodology described for both Intra State Projects and Inter State Projects below:

# a) For intra state Developer:

Total Storage Cost, which is combination of AFC & Cycle Loss/Conversion Loss, shall be arrived at and denominated up to two decimal places as per the below formula:

Total Storage Cost = Component A+ (Component A x Component B)

For illustration If a bidder declares a cycle loss/ Conversion Loss of 15% for contracted capacity of 500MW with an annual fixed charge of INR 50,00,000/MW, then Total storage cost computed as per above formula shall be INR 57,50,000/MW/annum.

# b) For interstate state Developer:

All India Transmission Charges declared by NLDC for the month in which bid will be submitted and weekly Transmission losses are considered for calculation of total storage cost for Evaluation Purpose Only.

Illustration is given in Table 1 below,

Table 1	Table 1-Bid Evaluation for Inter State PSP/BESS Project ( for illustration purpose)				
1	Contracted Capacity (MW)	500			
2	Hours of Operation in Pumping/charging mode per Day	10			
3	Hours of Operation in Generation/discharge mode per Day	8			
4	AFC Quoted by Bidders (Rs/MW/Year)	5000000			
5	Annual AFC calculated = (4*1)	2500000000			
6	Cycle loss Quoted by Bidders (%)	25%			
7	Capacity Required in Pumping/charging Mode (MW) considering declared Cycle loss MW	667			
	All India Transmission loss Declared By NLDC for the month				
8	in which of Bid Submission Date occurred is to be considered (% Monthly Avg)	3.50%			
9	Power to be scheduled by Procurer considering Transmission Loss 3.5%	691			
10	Extra Power required for pumping/charging due to T/L considering 10 Hrs pumping MWh	79430			





11	Cost Power required for Pumpipe/charging in Power lawh	4.52
	Cost Power required for Pumping/charging in Rs per kwh	
12	Burden due to Extra pumping/ charging power = (10*11)	359023834
13	Bidders Quote Considering Declared Cycle loss/ Conversion Loss considered for evaluation =(4+(4*6)	6250000
	Storage Cost considering Cycle Loss / Conversion	
14	Loss(Rs/Per Year)	3125000000
	All India Transmission Charge Declared By NLDC for the	
	month in which of Bid Submission Date occurred is to be	
15	considered (Rs/Unit)	0.52
	Possible Generation per year (KWh) considering 90%	
16	availability and 8 hr/day Generation	1314000000
	Transmission Charges considered for evaluation (Rs/year)	
17	=(15*16)	683280000
	Total storage cost considering All India Transmission Charges	
18	(Rs/Year) =(14+17)	3808280000
	Rate to be considered for Evaluation considering	
19	Transmission Charges (Rs/MW/Year)=(18/1)	7616560
20	Discharge received at Maharashtra periphery considering TL	493.50
20	of 3.5% (MW)	482.50
21	Power loss due to transmission loss in discharge mode	45000
21	considering 8 Hrs Discharge (MWh/Year)	45990
22	Burden-Power loss due to transmission loss at discharging	207874800
	cycles (Rs) =(11*21)	207874800
23	Total Burden considering Transmission losses (Rs/Year)	566898634
	=(12+22)	
24	Burden to be Considered for evaluation (Rs/MW/Year) =(23/1)	1133797
	Final Rate to be considered for Evaluation (Rs/MW/Year)	
25	=19+24	8750357

Table-2 Calculation of Actual AFC payable to Interstate Bidder after ERA					
1	Contracted Capacity in MW	500			
2	Cycle Loss Component (Rs/MW/Year) = (Sr No 14 - Sr No 5 from Table 1)	625000000			
3	Transmission Charges considered for evaluation (Rs/year) = (Sr No 15*Sr No16 of Table 1)	683280000			
4	Total Burden considering Transmission losses (Rs/Year) = (Sr No 12 + Sr No 22 of Table 1)	566898634			
5	IPO Rate to be displayed to bidder (Rs/MW/Year) (A)	8750357			
6	Final Rate Quoted by Bidder in ERA (RS/MW/Year) (B)	7918344			
7	Total Storage Cost = (Sr No 6* Sr No 1 of Table 2)	3959171895			
	Total Annual Storage Cost Excluding Transmission Charges and Transmission loss component and Cycle loss component in Rs =				
8	(Sr No7 Sr No 2- Sr No 3- Sr No 4)	2083993261			
	Final Payable AFC to Bidder (RS/MW/Year)=				
9	(Sr No 8/ Sr No 1)	4167987			

A single Cycle Loss/ Conversion Loss& Annual Fixed Charge (AFC) and Total Storage Cost for supply of Pumped hydro storage capacity/ Battery Energy Storage System (BESS) till the Delivery Point for 40 years shall be quoted by the Bidder





for its response to Tender, irrespective of the number of Projects quoted for and the individual Project location.

The selection of Bidder/s shall be based on Total Storage Cost which shall be the combination of AFC (expressed in INR/MW/annum) and Cycle Loss (CL) /Conversion Loss(expressed in %) discovered through E-Reverse Auction process as per this Tender.

The AFC quoted by the Bidder/s shall be exclusive of GST and inclusive of all statutory taxes, duties, levies, cess, etc., if applicable as on the last date of bid submission.

Kindly note that after E-Reverse Auction for interstate project, AFC (expressed in INR/MW/annum) shall be calculated excluding Transmission Charges component and Transmission loss component and Cycle loss component / Conversion Lossas per Evaluation Format uploaded.

Note - Energy storage availability shall be taken 90% as the minimum availability to be ensured for a year.

## Step III - Reverse Auction

The reverse auction shall be conducted on the website https://www.bharatelectronictender.com as per detailed methodology mentioned in Section-3. At the end of selection process, a Letter of Award (LOA) will be issued to all the selected Bidders.





## 5. Other Provisions

#### Role of ESS Developer (Developer, ESSD)

ESSD shall undertake the following activities to achieve the objectives of speedy establishment and implementation of ESS facility at any location within India:

- Develop, plan, execute, implement, finance, operate and maintain the ESS facility.
- Identify potential site and to acquire/possess land for ESS project and ensure connectivity to STU/CTU
- Obtain statutory & non statutory approvals/ clearances/ No objection certificates and to make area development plan as required for the project;
- Frame out transparent plot allotment policy and specify procedures pursuant to the relevant State policies and their amendments thereof;
- Submit the Right to Use/Lease agreement and obtain possession of encumbrance and encroachment free land used for the project at time of Financial Closure to the AEML.
- Get approval for Connectivity with the CTU/STU;
- ESSD shall submit to AEML the project equipment details/design parameters and basic engineering drawings like Layout, key SLD. Also, the Grid compliance report with associated licensed software and project related software MIS/data as per CEA Connectivity technical standard/State Grid Code with details as submitted to STU/SLDC.

ESSD shall be overall responsible to complete all the activities related to Project Development at its own risk and cost.





## 6. Formats for Bid Submission & Attachments

List of Formats, Appendices and Annexures

- Covering Letter (Format 6.1)
- Power of Attorney in favour of Lead Member (Format 6.2)
- Earnest Money Deposit (EMD) (Format 6.3)
- Performance Bank Guarantee to be submitted with AEML (Format 6.4)
- Board Resolutions (Format 6.5)
- Financial Requirement (Format 6.6)
- Undertaking (Format 6.7)
- Technical Criteria (Format 6.8)
- Technical details (Format-6.8.1)
- Disclosure statement (Format 6.9)
- Declaration by the Bidding Company / Lead Member of Bidding Consortium for the Proposed Technology Tie Up (Format 6.10);
- Nil Deviation certificate (Format 6.11)
- Financial Bid (to be fill up online on ETS Portal)
- Certificate for compliance (Format 6.12)
- Checklist for Bank Guarantee (Format 6.13);
- Technical experience certificate (Format 6.14);
- Consortium Agreement (Format 6.15);
- Copy of ESFA (Annexure-7.3)
- Special Instructions to Bidders for e-Tendering (Annexure-7.4)
- Financial Closure (Annexure-7.5)





# 6.1. Format of Covering Letter

(The covering letter should be on the Letter Head of the Bidding Company/ Lead Member of the Bidding Consortium)

Date:

From:

(Insert Name and Address of Bidding Company/ Lead Member of the Bidding Consortium] Tel.#:

Fax#:

E-mail address:

Tο

Mr. Vaibhav Tandon Head- Power Procurement Adani Electricity Mumbai Limited CTS, 407/A (New), 408 Old Village, Eksar Devidas Lane off SVP road, Near Devidas lane telephone exchange, Borivali (West), Mumbai-400103.

Tel: 022-50548771/8747 Mobile: +91 90990 00616 Email:tandon.vaibhav@adani.com

Sub: Response to RfS No. XXXXXXXXXXXXXXXXXXXXXXX for selection of developer for procurement of 500 MW and additional 250MW under Green Shoe Option, Energy Storage Capacity (For 8 Hours discharge with maximum 5 Hours continuous discharge) for 40 years from CTU/STU connected Pumped Hydro Storage Plant/s/ Battery Energy Storage System (BESS).

Dear Sir.

We, the undersigned [insert name of the 'Bidder1 having read, examined and understood in detail the RfS including Qualification Requirements in particular and ESFA for supply of power through energy storage solution for 40 years to AEML, hereby submit our response to RfS. We confirm that neither we nor any of our Parent Company/ Affiliate/ Group Company has submitted response to RfS other than this response to RfS, directly or indirectly, in response to the aforesaid RfS.

We are submitting application for providing energy storage capacity;

• We give our unconditional acceptance to the RfS No. and EFSA attached thereto, issued by AEML. In token of our acceptance to the RfS & ESFA, the same have been digitally signed by us and submitted with the response to RfS. We confirm and undertake that the ESFA shall be executed as per the provisions of the RfS and provisions of ESFA shall be binding on us. Further, we confirm that the Project(s) shall be commissioned within the schedule stipulated in the RfS i.e. within 48 months for Pumped Hydro Storage Plant (s) from the Effective date of ESFA and For Battery Energy Storage System Schedule Commissioning Date shall be 24 from the Effective date of ESFA ...



- We hereby declare that in the event of our selection, and we are not able to submit Bank Guarantee of the requisite value towards PBG, on issuance of LoA by AEML for selected Project and/or we are not able to sign ESFA with AEML within the timeline as stipulated in the RfS for the selected Projects, AEML shall have the right to take necessary action as per RfS.
- We have submitted our response to RfS strictly as per Section- 6 (Formats)
  of this RfS, without any deviations, conditions and without mentioning any
  assumptions or notes in the said Formats. We hereby withdraw any
  deviation, conditions whether mentioned explicitly or not in our response
  to this RfS without any cost to AEML.

#### Acceptance

We hereby unconditionally and irrevocably agree and accept that the decision made by the AEML in respect of any matter regarding or arising out of the RfS shall be binding on us. We hereby expressly waive any and all claims in respect of this process.

#### Familiarity with Relevant Indian Laws & Regulations

We confirm that we have studied the provisions of the relevant Indian laws and regulations as required to enable us to submit this response to RfS and execute the ESFA and development of Grid Connected energy storage projects or supply of power through energy storage projects in the event of our selection as Successful Bidder.

- We are enclosing herewith our response to the RfS with formats duly digitally signed as desired by you in the RfS for your consideration.
- It is confirmed that our response to the RfS is consistent with all the requirements of submission as stated in the RfS and subsequent communications from the AEML.
- The information submitted in our response to the RfS is correct to the best of our knowledge and understanding. We would be solely responsible for any errors or omissions in our response to the RfS.
- We confirm that all the terms and conditions of our Bid are valid for a
  period of upto and including one hundred and eighty (180) days from the
  last date of bid submission unless extended by us on your request and it
  shall remain binding upon us and may be accepted by you at any time
  before the expiration of that period.
- We hereby understand and confirm that AEML reserves its right to verify
  the documents furnished by us at the time of submission of RfS including
  availability of the Net Worth to the extent claimed in the RfS with the
  original documents and bank statements and the shareholding of the
  Project Company along with a copy of complete documentary evidence
  supported with originals at any stage from evaluation upto the expiry of
  ESFA.
- We understand and confirm that if the aforesaid documents furnished by





us are found to be misleading or misrepresenting in any way, AEML shall be free to take appropriate action as per format 6.3.

 We, hereby, declare that only the persons or firms interested in this bid as named here and that no other persons or firms other than those mentioned herein have any interest in this bid or in the ESFA to be entered. We confirm that this bid is made without any connection with any other person, firm or party likewise submitting a bid. We further confirm that this bid is submitted in good faith and without collusion or fraud.

#### Contact Person

Details of the contact person are furnished as under:

Name: [●]

Designation: [●]

Company: [●]

Address:[●]

Phone Nos:[●]

Mobile Nos:[●]

Fax Nos: [●]

Email Address [•]

- We confirm that we have understood that we shall approach concerned authorities/ departments directly for allotment of land, timelines for availability, possession and connectivity for the Project(s) allotted to us, if any and that AEML shall not in any way, directly or indirectly, be responsible and liable for these matters. We also confirm that we shall be overall responsible to complete all the activities related to Project Development at our own risk and cost.
- We have neither made any statement nor provided any information in this Bid, the best of our knowledge is materially inaccurate or misleading. Further, all the confirmations, declarations and representations made in our Bid are true and accurate. In case this is found to be incorrect after our selection as Successful Bidder, we agree that the same would be treated as a Seller's event of default under ESFA, and consequent provisions of ESFA shall apply.
- If a Project Company/SPV is formed to sign the ESFA and execute the Project after we are selected as successful bidder, all terms and conditions of RfS document including ESFA shall apply to Project Company also wherever applicable.

Dated the  $[\bullet]$  day of  $[\bullet]$ , 2025

Thanking you,

Yours faithfully,

(Name, Designation and Signature of Person Authorized by the board as per Clause 3.21(D)





# 6.2. Format for Power of Attorney

(to be provided by each of the other members of the Consortium in Favour of the Lead Member)

## **POWER OF ATTORNEY**

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution.)

KNOW ALL MEN BY THESE PRESENTS THAT [Name of the
Consortium member company] having its registered office at, a
nd [Name of the Consortium member company] having its
registered office at , (Insert names and registered offices of all Members of
the Consortium) the Members of Consortium have formed a Bidding Consortium
named [Insert name of the Consortium if finalized] (hereinafter called the
'Consortium'} vide Consortium Agreement dated (copy enclosed) and having
agreed to appoint [Name & Address of the Lead Member Company] as the
Lead Member of the said Consortium do hereby constitute, nominate and
appoint M/sa company incorporated under the laws of
and having its Registered /Head Office at
as our duly constituted lawful Attorney (hereinafter called as Lead Member) to
exercise all or any of the powers for and on behalf of the Consortium in regard
to submission of the response to RfS and to participate in subsequent bidding
process (in the event of short-listing as a qualified bidder). We also authorize
the said Lead Member to undertake the following acts:

- To submit on behalf of Consortium Members response to RfS and if required, to participate in subsequent bidding process.
- To do any other acts or submit any information and documents related to the above response to RfS, if required

It is expressly understood that in the event of the Consortium being selected as Successful Bidder, this Power of Attorney shall remain valid, binding and irrevocable until the Bidding Consortium achieves execution of ESFA.

We as the Member of the Consortium agree and undertake to ratify and confirm all whatsoever the said Attorney/Lead Member has done on behalf of the Consortium Members pursuant to this Power of Attorney and the same shall bind us and deemed to have been done by us.

IN WITNESS WHEREOF ......  $\{$ Name of member consortium Company $\}$ , as the Member

of the Consortium have executed these presents on this day of under the Common Seal of our company.



Date:



For and on behalf of Consortium Member M/s ......(Signature of person authorized by the Board}

(Name, Designation Place, Date:) Accepted (Signature, Name, Designation and Address of the person authorized by the board of the Lead Member) Attested (Signature of the executant) (Signature & stamp of Notary of the place of execution) Place:

Note: - Lead Member in the Consortium shall have the controlling shareholding of more than 50% in the bidding Consortium.





# 6.3. Format for BG for Earnest Money Deposit

(To be on non-judicial stamp paper of appropriate value as per Stamp Act)

In consideration of the [Insert name of the Bidder] (hereinafter referred to as 'Bidder') submitting the response to RfS inter alia for selection of developers for CTU/STU connected Energy Storage Solutions of the capacity of .......MW. (i.e.......MWh), for supply of power there from on long-term basis, in response to the RfS no...... dated....... issued by AEML and AEML considering such response to the RfS of [Insert the name of the Bidder] as per the terms of the RfS, the [insert name & address of the Bank] (hereinafter called as Guarantor Bank) hereby agrees unequivocally, irrevocably and unconditionally to pay to AEML having Registered Office at Adani Corporate House, Shantigram, Near Vaishno Devi Circle, S.G Highway, Khodiyar, Ahmedabad 382421 forthwith on demand in writing from AEML or any Officer authorized by it in this behalf, any amount upto and not exceeding Rupees [Insert amount not less than that derived on the basis of Rs. 5 Lakh per MW of capacity proposed] only, on behalf of [Insert name of the Bidder].

This guarantee shall be valid and binding on this Guarantor Bank upto and including [Insert date of validity in accordance with clause 3.30 of this RfS] and shall not be terminable by notice or any change in the constitution of the Guarantor Bank or the term of contract or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, or agreed with or without our knowledge or consent, by or between parties to the respective Agreement.

Our liability under this Guarantee is restricted to Rs. ....(Rs. only). Our Guarantee shall remain in force until [insert date of validity in accordance with clause 3.30 of this RfS. AEML shall be entitled to invoke this Guarantee till......[insert date of validity in accordance with clause 3.31 of this RfS]

The Guarantor Bank hereby agrees and acknowledges that the AEML shall have a right to invoke this BANK GUARANTEE in part or in full, as it may deem fit.

The Guarantor Bank hereby expressly agrees that It shall not require any proof in addition to the written demand by AEML, made in any format, raised at the above-mentioned address of the Guarantor Bank, in order to make the said payment to AEML.

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection by [Insert name of the Bidder] and/or any other person.

The Guarantor Bank shall not require AEML to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against AEML in respect of any payment made hereunder





This BANK GUARANTEE shall be interpreted in accordance with the laws of India and the courts at Mumbai shall have exclusive jurisdiction.

The Guarantor Bank represents that this BANK GUARANTEE has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.

This BANK GUARANTEE shall not be affected in any manner by reason of merger, amalgamation, restructuring or any other change in the constitution of the Guarantor Bank.

This BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly AEML shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against the Bidder, to make any claim against or any demand on the Bidder or to give any notice to the Bidder or to enforce any security held by AEML or to exercise, levy or enforce any distress, diligence or other process against the Bidder.

The Guarantor Bank acknowledges that this BANK GUARANTEE is not personal to AEML and may be assigned, in whole or in part, (whether absolutely or by way of security) by AEML to any entity to whom AEML is entitled to assign its rights and obligations under the ESFA.

Notwithstanding anything contained hereinabove, our liability under this Guarantee is restricted to Rs. \_\_(Rs. \_\_\_only) and it shall remain in force until [Date to be inserted on the basis of Clause 3.30 of this RfS]. We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if AEML serves upon us a written claim or demand.

This bank guarantee shall be effective only when the bank guarantee issuance message is transmitted by the issuing Bank through SFMS to AEML Bank account and a confirmation in this regard is received by AEML.

Signature

Name

Power of Attorney No:

For

[Insert the name of the Bank]

Banker's stamp and full address

Dated this day of, 2025

Notes: The Stamp Paper should either in the name of the executing Bank or the party on whose behalf the BG has been issued.





## 6.4. Format for Performance Bank Guarantee

In consideration of the -----[Insert name of the Bidder] (hereinafter referred to as selected 'developer of energy storage project) having its registered office at .....submitting the response to RfS inter alia for selection of the CTU/STU connected energy storage solutions........ MW / .... MWH for supply of power on demand basis, in response to the RfS no. .......dated....issued by AEML (hereinafter referred to as AEML) having Registered Office at Adani Corporate House, Shantigram, Near Vaishno Devi Circle, S.G Highway, Khodiyar, Ahmedabad 382421 and AEML considering such response to the RfS of linsert the name of the selected Developer] which expression shall unless repugnant to the context or meaning thereof include its executers, administrators, successors and assignees) and selecting the energy storage project of the developer and issuing Letter of Award No\_dated to (Insert Name of selected Developer) as per terms of RfS and the same having been accepted by the selected developer resulting in an Energy Storage Facility Agreement (ESFA) to be entered into with [selected Developer or a Project Company, {a Special Purpose Vehicle (SPV) formed for this purpose }, if applicable ]. As per the terms of the RfS, the..... [insert name & address of Bank] (hereinafter referred to as the 'Guarantor Bank') hereby agrees unequivocally, irrevocably and unconditionally to pay to AEML at Mumbai forthwith on demand in writing from AEML or any Officer authorised by it in this behalf, any amount upto and not exceeding Rupees ..... [Total Value] only, on behalf of ----- [Insert name of the selected Developer/Project Company].

This bank guarantee shall be valid and binding on this Guarantor Bank up to and including and shall not be terminable by notice or any change in the constitution of the Guarantor Bank or the term of contract or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternation made, given or agreed with or without our knowledge or consent, by or between parties to the respective agreement.

Our liability under this Bank Guarantee is restricted to Rs....... only). Our Bank Guarantee shall remain in force until AEML shall be entitled to invoke this Bank Guarantee till ......

The Guarantor Bank hereby agrees and acknowledges that the AEML shall have a right to invoke this BANK GUARANTE in part or in full, as it may deem fit.

The Guarantor Bank hereby expressly agrees that it shall not require any proof in addition to the written demand by AEML, made in any format, raised at the abovementioned address of the Guarantor Bank, in order to make the said payment to AEML.

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection by [Insert name of the selected Developer / Project Company as applicable] and/or any other person. The Guarantor Bank shall not require AEML to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against AEML in respect of any payment made hereunder.

This BANK GUARANTEE shall be interpreted in accordance with the laws of India and the courts at Mumbai shall have exclusive jurisdiction.





The Guarantor Bank represents that this BANK GUARANTEE has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.

This BANK GUARANTEE shall not be affected in any manner by reason of merger, amalgamation, restructuring or any other change in the constitution of the Guarantor Bank.

This BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly AEML shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against the selected Developer/Project Company, to make any claim against or any demand on the selected Developer/Project Company or to give any notice to the selected Developer/Project Company or to enforce any security held by AEML or to exercise, levy or enforce any distress, diligence or other process against the selected Developer/Project Company.

The Guarantor Bank acknowledges that this BANK GUARANTEE is not personal to AEML and may be assigned, in whole or in part, (whether absolutely or by way of security) by AEML to any entity to whom AEML is entitled to assign its rights and obligations under the ESFA.

Notwithstanding anything contained hereinabove, our liability under this Bank Guarantee is restricted to Rs. (Rs. only) and it shall remain in force until...... We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if AEML serves upon us a written claim or demand.

This bank guarantee shall be effective only when the bank guarantee issuance message is transmitted by the issuing Bank through SFMS to AEML Bank Account and a confirmation in this regard is received by AEML.

Signature
Name
Power of Attorney No For[Insert Name of the Bank] Bankers Stamp & Full
Address Dated this day
of 20
Witness
Signature
Name &
Address
Notes:

The Stamp Paper should either in the name of the executing Bank or the party on whose behalf the BG has been issued.





# FORMAT FOR INSURANCE SURETY BOND TOWARDS EARNEST MONEY DEPOSIT (EMD)

(To be stamped in accordance with Stamp Act, the Non-Judicial Stamp Paper of Appropriate Value)

Reference:
Insurance Surety Bond No.:
Date:
In consideration of the [Insert name of the Bidder] (hereinafter referred to as
'Bidder') submitting the response to RfS inter alia for [Insert subject of the RfS] of
the cumulative capacity of MW [Insert cumulative Bid capacity/ Contracted Capacity
proposed] for supply of power there from on long term basis, in response to the RfS No.
datedissued by Adani Electricity Mumbai Limited (hereinafter referred to
as AEML) and AEML considering such response to the RfS of [Insert the name of the
Bidder] as per the terms of the RfS, the [Insert name & address of Insurance
Company registered under Insurance Act 1938 or as amended from time to time and
approved by the Insurance Regulatory Development Authority of India (IRDAI)] hereby
agrees unequivocally, irrevocably and unconditionally to pay to AEML at [Insert
Name of the Place from the address of AEML] forthwith without demur on demand in writing
from AEML or any Officer authorized by it in this behalf, any amount upto and not exceeding
Rupees[Insert amount not less than that derived on the basis of
RsLakhs per MW of Bid capacity / Contracted Capacity proposed], only, on
behalf of M/s[Insert name of the Bidder] within 07 working days from the
date of receipt of written demand by AEML.
This guarantee shall be valid and binding on [Insert name of Insurance Company] up to
and including [insert date of validity in accordance with Clause No of this RfS] and
shall not be terminable by notice or any change in the constitution of [Insert name of
Insurance Company] or the term of contract or by any other reasons whatsoever and our
liability hereunder shall not be impaired or discharged by any extension of time or variations
or alternations made, given, or agreed with or without our knowledge or consent, by or
between parties to the respective agreement.
Our liability under this Guarantee is restricted to INR (Indian Rupees only).
Our
Guarantee shall remain in force until [insert date of validity in accordance with
Clause No of this RfS]. AEML shall be entitled to invoke this Guarantee till
[insert date of validity in accordance with Clause Noof this RfS].
The Guarantor Insurance Company hereby agrees and acknowledges that the AEML shall
have a right to invoke this Insurance Surety Bond in part or in full, as it may deem fit.
The Guarantor Insurance Company hereby expressly agrees that it shall not require any
proof in addition to the written demand by AEML, made in any format, raised at the above-
mentioned address of the Guarantor Insurance Company, in order to make the said
payment to AEML.
The Guarantor Insurance Company shall make payment hereunder on first demand without
restriction or conditions and notwithstanding any objection by [Insert name of the
Bidder] and/ or any other person. The Guarantor Insurance Company shall not require
AEML to justify the invocation of this Insurance Surety Bond, nor shall the Guarantor
Insurance Company have any recourse against AEML in respect of any payment made





#### hereunder.

This Insurance Surety Bond shall be interpreted in accordance with the laws of India and the courts at New Delhi shall have exclusive jurisdiction.

The Guarantor Insurance Company represents that this Insurance Surety Bond has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor Insurance Company in the manner provided herein. This Insurance Surety Bond shall not be affected in any manner by reason of merger, amalgamation, restructuring or any other change in the constitution of the Guarantor Insurance Company.

This Insurance Surety Bond shall be a primary obligation of the Insurance Company and accordingly AEML shall not be obliged before enforcing this Insurance Surety Bond to take any action in any court or arbitral proceedings against the Bidder, to make any claim against or any demand on the Bidder or to give any notice to the Bidder or to enforce any security held by AEML or to exercise, levy or enforce any distress, diligence or other process against the Bidder.

Notwithstanding anything contained hereinabove, our liability under this Insurance Surety Bond is restricted to INR...... (Indian Rupees....... Only) and it shall remain in

พร. We are liable to pay the guaranteed amount or any part thereof under this Insurance Surety Bond only if AEML serves upon us a written claim or demand.
Signature:
Name:
Power of Attorney No.:
For
[Insert Name and Address of the Insurance Company]
Contact Details of the Insurance Company:
E-mail ID of the Insurance Company:
Insurance Company's Stamp and Full Address.

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





#### 6.5. Format for Board Resolutions

The Board, after discussion, at the duly convened Meeting on [Insert date], with the consent of all the Directors present and in compliance of the provisions of the Companies Act, 1956/ Companies Act, 2013 (delete the other which is not applicable), passed the following Resolution:

- e RESOLVED THAT Mr./Ms......, be and is hereby authorized to do on our behalf, all such acts, deeds and things necessary in connection with or incidental to our response to RfS for the Project, 'selection of developer for procurement of power through grid connected energy storage solutions of 500 MW with continuous discharge of upto 4000 MWh per day (additional capacity of 250 MW / upto 2000MWh per day under Green Shoe Option) at any location in India', including signing and submission of all documents and providing information/response to RfS to AEML, representing us in all matters before AEML, and generally dealing with AEML in all matters in connection with our bid including participation in Reverse Auction for the said Project. (To be provided by the Bidding Company or the Lead Member of the Consortium)
- FURTHER RESOLVED THAT pursuant to the provisions of the Companies Act, 1956/Companies Act, 2013 (delete the other which is not applicable) and compliance thereof and as permitted under the Memorandum and Articles of Association of the company, approval of the Board be and is hereby accorded to invest total equity in the Project. (To be provided by the Bidding Company)

[Note: In the event the Bidder is a Bidding Consortium, in place of the above resolution at SL No. 2, the following resolutions are to be provided by the each Member of the Bidding Consortium including Lead Member such that total equity commitment is 100%]

FURTHER RESOLVED THAT pursuant to the provisions of the Companies Act, 1956/Companies Act, 2013 (delete the other which is not applicable) and compliance thereof and as permitted under the Memorandum and Articles of Association of the company, approval of the Board be and is hereby accorded to invest 1......%) equity (Insert the % equity commitment as specified in Consortium Agreement] in the Project. (To be provided by each Member of the Bidding Consortium including Lead Member such that total equity commitment is 100%)

FURTHER RESOLVED THAT approval of the Board be and is hereby accorded to participate in consortium with ------[Insert the name of other Members in the Consortium] and Mr/Ms......, be and is hereby authorized to execute the Consortium Agreement. (To.be provided by the each Member of the Bidding Consortium including Lead Member) And

FURTHER RESOLVED THAT approval of the Board be and is hereby accorded to contribute such additional amount over and above the percentage limit (specified for the Lead Member and other member in the Consortium Agreement) to the extent becoming necessary towards the total equity share





in the Project Company, obligatory on the part of the Consortium pursuant to the terms and conditions contained in the Consortium Agreement to be executed by the Consortium as per the provisions of the RfS. [To be passed by the Lead Member and other members of the Bidding Consortium]

FURTHER RESOLVED THAT approval of the Board be and is hereby accorded to M/s...... [Insert name of Bidding Company/Consortium Member(s)] to use our financial capability for meeting the Qualification Requirements for 'selection of developer for procurement of 500 MW and additional 250MW under Green Shoe Option, Energy Storage Capacity (For 8 Hours discharge with maximum 5 Hours continuous discharge per day) for 40 years from CTU/STU connected Pumped Hydro Storage Plant/s / Battery Energy Storage System (BESS) and confirm that all the equity investment obligations of M/s ......(Insert Name of Bidding Company/ Consortium Member(s)] for development of selected project(s), shall be deemed to be our equity investment obligations and in the event of any default the same shall be met by us. The Board also confirms and undertake that incase M/s [Insert name of Bidding Company/ Consortium Member(s)] fails to submit the requisite Performance Bank Guarantee in terms of Request for Selection Document, the same shall be submitted by us on its behalf. [To be passed by the entity(s) whose financial credentials have been used i.e. Parent and/or its affiliate.]

## Certified true copy

(Signature, Name and stamp of Company Secretary / Director) Notes:

- This certified true copy should be submitted on the letterhead of the Company, signed by the Company Secretary / Director.
- The contents of the format may be suitably re-worded indicating the identity of the entity passing the resolution.
- This format may be modified only to the limited extent required to comply with the local regulations and laws applicable to a foreign entity submitting this resolution. For example, reference to Companies Act 1956/ Companies Act, 2013 (delete the other which is not applicable) may be suitably modified to refer to the laws applicable to the entity submitting the resolution. However, in such case, the foreign entity shall submit an unqualified opinion issued by the legal counsel of such foreign entity, stating that the Board resolutions are in compliance with the applicable laws of the respective jurisdictions of the issuing company and the authorizations granted therein are true and valid.
- In case a Sub-Committee/Management Committee has been authorised by the Board of a Company for making the Resolution(s) mentioned here in above, these Resolution(s) can be passed by that Sub Committee and the same may be submitted along with Board Resolution in which the Sub Committee has been authorised By Board to pass such Resolution(s).
- In case of a Consortium the respective Boards of all Consortium Members should pass the aforesaid Resolution before execution of Consortium





# Agreement

Adani Electricity Mumbai Ltd. adanielectricity.com | O /Adanielectricity





# 6.6. Format for Financial Requirement - Net Worth

[On the letter Head of Bidder]

To,

Mr. Vaibhav Tandon
Head- Power Procurement
Adani Electricity Mumbai Limited
CTS, 407/A (New), 408 Old Village,
Eksar Devidas Lane off SVP road,
Near Devidas lane telephone exchange,
Borivali (West), Mumbai-400103.
Tel: 022-50548771/8747

Mobile: +91 90990 00616

Email:tandon.vaibhav@adani.com

Dear Sir,

Sub: Response to RfS No. ...... for selection of developer for procurement of 500 MW and additional 250MW under Green Shoe Option ,Energy Storage Capacity (For 8 Hours discharge with maximum 5 Hours continuous discharge) for 40 years from CTU/STU connected Pumped Hydro Storage Plant/s / Battery Energy Storage System (BESS)

## For meeting Qualification Requirement as per clause 3.9

We certify that the Bidding Company/Member in a Bidding Consortium [Name of Bidding Company or Bidding Consortium] has a minimum Net Worth of Rs. crores (Rupees) as on the last date of previous Financial Year, FY 2024-25 (or Calendar Year 2024), if available or as on the day not more than seven (07) days prior to the due date of bid submission (choose one).

\*Bidders to note that financial parameters of FY 2024-25 (or Calendar Year 2024 as the case may be) shall be considered only if audited annual financial statements of the bidding company/ consortium members/affiliates for the financial Year 2024-25 (or Calendar Year 2024 as the case may be) are not available as on due date of bid submission.

This Net Worth has been calculated in accordance with the instructions provided in Clause 3.9 of the RfS.

# Exhibit (i): Applicable in case of Bidding Company

@ For the above calculations, we have considered the Net Worth by Bidding Company and/or its Parent/Affiliates as per following details:





Name of Bidding Company	Name of Company/ Parent/ Affiliate whose Net Worth is to be considered	with Bidding Company*	Indicate Financial Year or the day not more than seven (07) days prior to the due date of bid submission	Net Worth (in Rs. Crore) of the Member Company
(1)	(2)	(3)	(4)	(5)
Company-1				
	Total			

Exchange Rates considered:  USD to INR: 1 USD = INR						
Other Currency (Bidder to specify the other currency) 1						
=INRCertificate from the Banker in respect of the Exchange rate is enclosed at Appendix  @ In cases where the Bidding Company is giving its own net worth only, the bidder has to fill its own company name in column (2), "Self' in column (3)  The column for "Relationship with Bidding Company" is to be filled only in case the financial capability of Parent/Affiliate has been used for meeting Qualification Requirements. Further, documentary evidence to establish the relationship, duly certified by the company secretary/chartered accountant is required to be attached with the format.  Exhibit (ii): Applicable in case of Bidding Consortium  (To be filled by each Member in a Bidding Consortium separately) Name of Member: [Insert name of the Member]  @Net Worth Requirement to be met by Member in Proportion to the Equity						
has to fill its own company name in column (2), "Self' in column (3)  The column for "Relationship with Bidding Company" is to be filled only in case the financial capability of Parent/Affiliate has been used for meeting Qualification Requirements. Further, documentary evidence to establish the relationship, duly certified by the company secretary/chartered accountant is required to be attached with the format.  Exhibit (ii): Applicable in case of Bidding Consortium  (To be filled by each Member in a Bidding Consortium separately) Name of Member: [Insert name of the Member]  @Net Worth Requirement to be met by Member in Proportion to the Equity						
financial capability of Parent/Affiliate has been used for meeting Qualification Requirements. Further, documentary evidence to establish the relationship, duly certified by the company secretary/chartered accountant is required to be attached with the format.  Exhibit (ii): Applicable in case of Bidding Consortium  (To be filled by each Member in a Bidding Consortium separately) Name of Member: [Insert name of the Member]  @Net Worth Requirement to be met by Member in Proportion to the Equity						
(To be filled by each Member in a Bidding Consortium separately) Name of Member: [Insert name of the Member]  @Net Worth Requirement to be met by Member in Proportion to the Equity						
[Insert name of the Member]  @Net Worth Requirement to be met by Member in Proportion to the Equity						
For the above calculations, we have considered Net Worth by Member in Bidding Consortium and/ or Parent/ Affiliate as per following details:						
Name of Consortium Affiliate(s) whose Member Company Comsidered Relationship with Bidding Company* (If any) Net Worth (in Rs. Cr) Commitment (in Rs. Cr) Relationship with Bidding Consortium Committed Worth (in Rs. Cr) Relationship with Bidding Consortium Committed Worth (in Rs. Cr)						
Company-1						
The state of the s						
Total						
Exchange Rates considered						
USD to INR: I USD = INR Other Currency (Bidder to specify the other currency) 1 = INR						





Certificate from the Banker in respect of the Exchange rate is enclosed at Appendix---

@ In cases where the Consortium member is giving its own net worth only, the Consortium member has to fill its company name in column (2), "Self" in column (3)).

The column for "Relationship with Bidding Company" is to be filled only in case the financial capability of Parent/Affiliate has been used for meeting Qualification Requirements. Further, documentary evidence to establish the relationship, duly certified by the company secretary/chartered accountant is required to be attached with the format.

For the Qualification Requirements, if data is provided by the Bidder Company in foreign currency, equivalent rupees of Net Worth will be calculated as per clause 3.8 (C)

(Signature & Name of the person Authorised by the board)

(Signature and Stamp of Statutory Auditor or Chartered Accountant)

For meeting Qualification Requirement as per clause 3.9

#### Annual Turnover:

We certify that the \*Bidding Company/ \*Member in the Bidding Consortium [Name of Bidding Company or Bidding Consortium has an Annual Turnover of Rs..... (Rupees\_\_\_,during Financial Year \*2024-25, if available, or seven days prior to bid submission (\*Strike out if not applicable).

## Exhibit (i): Applicable in case of Bidding Company

For the above calculations, we have considered the Annual Turnover by the Bidding Company and/or its Parent / Affiliates as per following details:

Name of Bidding Company	Name of Company/Parent/ Affiliate whose Turnover is to be considered	Relationship withBidding Company*	Annual Turnover (in Rs. Crore) of theMember Companyduring Financial Year 2024-25 or seven days prior to bid submission.		
(1)	(2)	(3)	(4)		
Company 1					
	Total				

@ In cases where the Bidding Company is giving its own Turnover, the bidder has





to fill its own company name in column (2), "Self' in column (3) and Annual Turnover in column (4). In the column for "Relationship with Bidding Company" is to be filled only in case the financial capability of Parent/Affiliate has been used for meeting Qualification Requirements. Further, documentary evidence to establish the relationship, duly certified by the company secretary/chartered accountant is required to be attached with the format.

#### Exhibit (ii): Applicable in case of Bidding Consortium

(To be filled by each Member in a Bidding Consortium separately) Name of Member: [Insert name of the Member]

Annual Turnover to be met by Member in Proportion to the Equity Commitment: Rs. -----Crore (Equity Commitment (%) \* Rs. [ ] Crore)

For the above calculations, we have considered Annual Turnover by Member in Bidding Consortium and/ or Parent/ Affiliate as per following details:

Name of Consortium Member Company	Name of Company/Par ent/Affiliate/ Consortium Member whose Turnover is to be considered	Relationship With Bidding Company *(Ifany)	Annual Turnover (in Rs. Crore) of the Consortium Member Company during Financial Year *2024-25, if available, or 7 days prior to bid submission (*Strike out if not applicable)	Equity Commit ment (in %age) in Bidding Consortium	Committed Annual Turnover (in RsCrore)
Company 1					
Total					

@In cases where the Consortium member is giving its own Turnover only, the Consortium member has to fill its company name in column (2), "Self' in column (3) and Annual Turnover in column (4). "The column for "Relationship with Bidding Company" is to be filled only in case the financial capability of Parent/Affiliate has been used for meeting Qualification Requirements. Further, documentary evidence to establish the relationship, duly certified by the company secretary/chartered accountant is required to be attached with the format.

## (C) For meeting Qualification Requirement as per clause 3.9 PBDIT:

We certify that the Bidding company/Member in the bidding consortium \_\_\_\_\_\_ (Name of the Bidding Company or Bidding Consortium) has a profit before depreciation interest and taxes (PBDIT) of Rs \_\_\_\_\_\_ (Rupees in words) as on the last date of the Financial Year 2024-25, if available, or 7 days prior to bid submission.





#### Exhibit (i): Applicable in case of Bidding Company

For the calculations above, we have considered the PBDIT by the Bidding Company and/or its Parent/Affiliates as per the details below:

Name of the Bidding Company	Name of the Company/ Parent/ Affiliate whose PDBIT is to be considered	Relationship with Bidding Company	PBDIT (in Rs. Crore) of the member company during the Financial Year 2024- 25, if available, or Seven days prior to bid submission
Company 1			
Company 2			
	Total		

In case where the Bidding Company is giving its own PBDIT, the bidder has to fill its own company name in Column 2, 'Self' in Column 3 and PBDIT in column 4. "The column for "Relationship with Bidding Company" is to be filled only in case the financial capability of Parent/Affiliate has been used for meeting Qualification Requirements. Further, documentary evidence to establish the relationship, duly certified by the company secretary/chartered accountant is required to be attached with the format.

#### Exhibit (ii): Applicable in case of Bidding Consortium

(To be filled by each Member in a Bidding Consortium separately)

Name of Member: [Insert name of the Member]

PBDIT requirement to be met by Member in Proportion to the Equity Commitment: Rs.-----Crore (Equity Commitment (%)\*Rs.[] Crore)

For the above calculations, we have considered PBDIT by Member in Bidding Consortium and/or Parent/Affiliate as per following details:

Name	of	Name	of	Relatio	nship	PDBIT (in Rs		Equit	у	Committed
Consortium		Company/		with	Bidding	Crore) of the		comm	nitment	PBDIT (in Rs
Member		Parent/		Compa	iny	Consortium		(in	%)	Crore)
									in	
Company		Affiliate/				Member		Biddir	ng	
		Consortium				Company		Conso	ortium	
		Member				During				
		whose PBDIT	_			financial year				
		is to	be			2024-25,	if			
		Considered				available, or 7				
						days prior to				
						Bid				
						Submission				





Company 1			
Company 2			
	Total		

In case where the consortium member is giving its own PBDIT, the Consortium Member has to fill its company name in Column 2, 'Self' in Column 3 and PBDIT in Column 4.

The column for Relationship with Bidding company is to be filled only in case the financial capability of Parent/Affiliate has been used for meeting Qualification requirements. Further, documentary evidence to establish the relationship duly certified by the company secretary/chartered accountant is required to be attached with the format.

(Signature & Name of the person (Signature and stamp of Statutory Authorised by the Board)

Auditor or Chartered Accountant)

#### Note:

- Bidders are advised in their own interest to furnish the detailed computation sheet by statutory auditor or Chartered Accountant for determination of Net Worth/Turnover/PBDIT along with supporting documents as per the requirements of RfS without which no claim shall be considered.
- 2 For the Qualification Requirements, if data is provided by the Bidder Company in foreign currency, provisions of conversion to equivalent Indian Rupees shall be as per clause 3.9.





# 6.7. Format for Undertaking from the Bidder in Accordance with clause no. 3.9. I(f) of RfS

Ref. Date:

To,

Mr. Vaibhav Tandon Head- Power Procurement Adani Electricity Mumbai Limited CTS, 407/A (New), 408 Old Village, Eksar Devidas Lane off SVP road, Near Devidas lane telephone exchange, Borivali (West), Mumbai-400103. Tel: 022-50548771/8747

Mobile: +91 90990 00616

Email:tandon.vaibhav@adani.com

Dear Sir,

We hereby undertake to certify in line with clause 3.9.I(f) of RfS that we or any of our Affiliates are not a wilful defaulter to any lender, and that there is no major litigation pending or threatened against us or our Affiliates which are of a nature that could cast a doubt on the ability or the suitability of the Bidder to undertake the Project.

(Signature & Name of the person Authorized By the Board) Name of the Bidder





#### 6.8. Format for Technical Criteria

To,

Mr. Vaibhav Tandon
Head- Power Procurement
Adani Electricity Mumbai Limited
CTS, 407/A (New), 408 Old Village,
Eksar Devidas Lane off SVP road,
Near Devidas lane telephone exchange,
Borivali (West), Mumbai-400103.
Tel: 022-50548771/8747

Tel: 022-50548771/8747 Mobile: +91 90990 00616

Email:tandon.vaibhav@adani.com

Sub: Response to Response to RfS No. ...... for selection of developer for procurement of 500 MW and additional 250MW under Green Shoe Option, Energy Storage Capacity (For 8 Hours discharge with maximum 5 Hours continuous discharge) for 40 years from CTU/STU connected Pumped Hydro Storage Plant/s/Battery Energy Storage System (BESS)

Dear Sir,

We undertake that we shall use only commercially established and operational technologies. We shall strictly comply with the technical parameters detailed in 7-Annexures

(Signature & Name of the person Authorised by the Board)

Dated





#### 6.8.1. Declaration of Technical Details

#### (To be duly seal and signed by Authorized Person by Board)

Request for Selection document for selection of Developers for CTU/STU connected Energy Storage Facility of 4000 MWh with 500 MW capacity (Anywhere in India) and additional 2000 MWh with 250 MW capacity under Green Shoe Option.

#### **RFS DOCUMENT NO.:**

Declaration of Year wise Conversion Loss / Cycle Loss by Energy Storage System Developer (ESSD)

Dear Sir / Madam,

We hereby furnish the following details regarding the Energy Storage Facility:

We shall maintain the Offered Contracted Capacity same throughout 40 years of contract term through suitable O&M practices.

- 1 Offered Capacity: ......... MW and MWh.
- 2 Conversion Loss / cycle Loss (upto delivery point; Fixed for entire term of ESFA i.e. 40 years from signing of ESFA): \_\_\_\_\_%
- 3 Project Land and Grid Connectivity Details (Proposed).

SI. No.	Description		Proj ect 1	Proje ct 2 'n'	Projec t k
		Location			
		Total Area in Hectare			
		Latitude & Longitude			
1	Land details:	Leased Land in Hectare			
		PrivateLand in Hectare Complete Land transfer (Mutation)			
		Name of Substation			
2	Proposed Connectivity Substation (CTU/STU)	Voltage rating & capacity of each interconnecting substation			
	Details of Transmission System from Pumped	Length of O/H Transmission Lines			
	Hydro plant or / Battery Energy Storage	Voltage level of transmission lines			
3	lubto interconnection i	Transmission circuit and conductor configuration			





#### 6.9. Format for Disclosure

[On the letter head of Bidding Company/Each Member in a Bidding Consortium]

#### Disclosure

We hereby declare that we or our Parent or Affiliate or Ultimate Parent or any Group Company with which we have direct or indirect relationship are not separately participating in this selection process.

We further declare that the above statement is true & correct. We are aware that if at any stage it is found to be incorrect, our response to RfS will be rejected and if LOA has been issued or ESFA has been signed, the same will be cancelled and all the Bank Guarantees will be encashed and Recoveries will be effected for the payments done.

We understand that in case of us being selected under this RfS, any of the above certificates is found false, AEML shall take appropriate action as deemed necessary.

(Name, Designa	ation, Seal and Signa	ture of person Auth	orized by the Board)
Date: -			





# 6.10. Format for Declaration by the Energy Storage Project Developer for the proposed technology tie-up

#### Declaration

1	Name of Bidding Company/ Lead Member of Bidding Consortium	
2	Project proposed	
3	Capacity proposed (in MW/MWH)	
4	Hours of Discharge/day	
5	Location of the Project	
6	Technology Proposed to be adopted for the Project (Pumped Hydro / Battery Energy Storage System(BESS)	
7	Conversion Loss/ Cycle Loss inclusive of all losses upto delivery point	
8	Plant availability	

We confirm that Conversion loss/Cycle Loss of the Energy storage Project with proposed technology selected above shall not be more than 25%.

(Seal and Signature & Name of the person Authorized by the Board) Date: -

Other Details to be provided by Bidders in case of Battery Energy Storage Systems ( To be submitted for each Project) :

Sr No	Particulars	
1	Name of Bidding Company/ Lead Member of	
	Bidding Consortium	
2	Location(s) of BESS Project(s)	
3	Contracted Capacity proposed	MW/MWh
4	Technology Proposed to be adopted for the	(Brief about the technology
	Project	proposed)

We confirm that Conversion loss of the Energy storage Project with proposed technology selected above shall not be more than 25%.

(Seal and Signature & Name of the person Authorized by the Board) Date:





## 6.11. Certificate of Compliance to All Provisions of RfS ÆSFA Document / "NIL" Deviation Certificate

[To be submitted offline in a separate sealed envelope along with other documents]

Bidder's Name and Address:

To,

Mr. Vaibhav Tandon Head- Power Procurement Adani Electricity Mumbai Limited CTS, 407/A (New), 408 Old Village, Eksar Devidas Lane off SVP road, Near Devidas lane telephone exchange, Borivali (West), Mumbai-400103. Tel: 022-50548771/8747

Tel: 022-50548771/8747 Mobile: +91 90990 00616

Email:tandon.vaibhav@adani.com

Dear Sirs,

With reference to our Bid dated for "Request for Selection (RfS) for Procurement of 500 MW and additional 250MW under Green Shoe Option, Energy Storage Capacity (For 8 Hours discharge with maximum 5 Hours discharge) for 40 years from ISTS/InSTS Connected Pumped Hydro Storage Plant/s / Battery Energy Storage System through competitive bidding", RfS No.\_\_\_\_\_\_,

we hereby confirm that we have read the provisions of RfS document, ESFA along with its subsequent Amendment(s)/ Clarification(s)/Addenda/Errata and further confirm that our Bids (i.e. both Eligibility Bid and Financial Bid) are strictly in conformity with the provisions of the RfS Document, ESFA including Amendments/Clarifications/Errata/Revisions thereof and we have not taken any deviation to any of the provisions of the aforesaid RfS document, ESFA. Further, we agree that the entire work for development of energy storage Project(s) shall be performed as per the provisions of RfS document, ESFA including Technical Requirements as per Annexure-7.1 and 7.2 of RFS.

We confirm that any deviation/variation/additional. conditions to the provisions of RfS Document, ESFA read in conjunction with its Amendment(s)/Clarification(s)/Addenda/Errata found anywhere in our Eligibility Bid and Financial Bid, implicit or explicit, save those pertaining to rebates offered, stands unconditionally withdrawn, without any cost implication whatsoever to the AEML, failing which AEML may take action as per clause 3.27 of RfS and relevant provisions of ESFA.

We hereby confirm that our Eligibility Bid does not contain any Financial/Price content entry. However, if anything is contained, we shall be solely responsible for any implication.

Further, we confirm that our Financial Bid does not contain any matter in respect of Technical and / or Commercial aspects other than the details specifically sought in the





#### Financial Bid.

	Signature of Authorized signatory
Date	(Name of Authorized
Place	Signatory)
	(Designation)
	(Company Seal)





#### 6.12. Certificate of Compliance

(to be submitted by Project Company formed by Selected Bidding Company/Bidding Consortium after issuance of LOA to AEML However as token of acceptance of Format Bidder is required to submit Technical Bid)

Project Company's Name and Address:

To

Mr. Vaibhav Tandon
Head- Power Procurement
Adani Electricity Mumbai Limited
CTS, 407/A (New), 408 Old Village,
Eksar Devidas Lane off SVP road,
Near Devidas lane telephone exchange,
Borivali (West), Mumbai-400103.
Tel: 022-50548771/8747
Mobile: +91 90990 00616
Email:tandon.vaibhav@adani.com

Dear Sir,

In this bidding process M/s ------- has been selected as the successful bidder vide LOA No.----- dated.......for setting up -----MW with.... MWh of Energy storage capacity in the state of......

As per the provisions of RfS documents, M/s .......has formed a Project Company/Special Purpose Vehicle (SPV) namely M/s \_\_\_\_\_for providing.....MW energy storage capacity (hereinafter called as "Contracted Capacity"), storage facility from this Project and has accordingly entered into a Energy Storage Facility Agreement bearing ref.no......(Hereinafter referred to as "ESFA") dated...... with AEML. We hereby confirm that we have read the provisions of RfS document along with its subsequent Amendment(s) / Clarification(s) / Addenda/Errata.

Further, we agree that the entire work for development of Contracted Capacity, generation and sale of stored power from this Project shall be performed as per the provisions of RfS document including Technical Requirements as per 7-Annexures of RfS document.





Date	Signature of Authorized signatory
Place	(Name of Authorized Signatory)
	(Designation)
	(Company Seal)





### 6.13. Check List for Bank Guarantees

SI. No.	Details of checks	Yes/No
a)	Is the BG on non-judicial Stamp paper/ e-stamp paper of appropriate value, as per Stamp Act?	
b)	Whether date, purpose of purchase and name of the purchaser are indicated on the Stamp paper? (The date of purchase of stamp paper should be of any date on or before 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. The stamp papers (other than e-stamp paper should be duly signed by the stamp vendor)	
c)	In case of BGs from Banks abroad, has the BG been executed on Letter Head of the Bank endorsed by SBI, India.	
d)	Has the executing Officer of BG indicated his name, designation and Power of Attorney No./Signing Power no. on the BG?	
e)	Is each page of BG duly signed / initialed by executant 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 proforma?	
f)	Does the Bank Guarantees compare verbatim with the Proforma prescribed in the Bid Documents?	
g)	Are the factual details such as Bid Document No. / Specification No., / LOA No. (if applicable) / Amount of BG and Validity of BG correctly mentioned in the BG	
h)	Whether overwriting/ cutting if any on the BG have been properly authenticated under signature & seal of executant?	
i)	Whether the BG has been issued by a Bank in line with the provisions of Bidding documents?	
j)	In case BG has been issued by a Bank other than those specified in Bidding Document, is the BG confirmed by a Bank in India acceptable as per Bidding documents?	

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# 6.14 Format for Certificate from Statutory Auditor for Technical Criteria

(On letter head of Statutory Auditor)

Certificate from the Statutory Auditor regarding development experience

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#### TO WHOMSOEVER IT MAY CONCERN

Based on its books of accounts and other published information authenticated by it, this is to certify that (Name of the Bidder/ Group Business Entity/ Consortium member) is an equity shareholder in
The project of capacity/cost MW/INR was commissioned on (date of commissioning of the project) as per the commissioning certificate issued to the project company.
We further certify that the total cost of the project is INR [figures and words] crores and the debt and equity ratio of the project company is%:%.
(If the project is an Infrastructure Project applicable for Pumped Hydro Storage Plants)
The Project(name of the project company) has completed the project on (Date). We further certify that the project company has executed EPC/Construction work of the infrastructure projects having project cost of INR [figures and words]
This certificate is being issued to be produced before Adani Electricity Mumbai Limited (referred to as AEML), for the [Tender name] as per Tender nodated
I certify that I have verified the original documents as mentioned below and confirm that all the information provided in this certificate is true:
a) Work order/ Letter of Award issued by the procurer
b) Pumped Hydro Storage Power Procurement Agreement signed with the procurer
c) Commissioning certificate issued by the procurer mentioning the actual date of commissioning for the project for which Technical Capacity is being claimed
d) Proof mentioning the connectivity voltage level of the project for which the Technical Capacity is being claimed





e) Proof for holding more than twenty six percent (26%) of Paid-up Share Capital as on the date of COD for the entity claiming Technical Capacity

Signature and Seal of the

Statutory Auditor clearly indicating

his/her Membership number

Instructions: Details of all the projects commissioned should be furnished as per the format below, signed by the Charted Accountant.

The project wise experience is mentioned below:

Item	Particulars of the Project
Title & nature of the project	·
Entity for which the project was developed	
Location	
Estimated project cost (INR Crore)	
Project Commissioned Capacity (MW (AC and DC))	
Date of commencement of project	
Date of completion/ commissioning	
Date of commercial operation of the project	
Equity shareholding as on the date of commercial operation of the project	
Whether credit is being taken for the of for demonstrating Eligibility Criteria from Group Business Entity (Yes/No)	1
Total Units generated from the Project in kWh mentioning the period	

#### Instructions:

- 1. Bidder/s shall submit Technical Capacity as per Clause 3.9 (ii)
- 2. Provide details of only those projects that have been undertaken by the Bidder/s under its own name and/ or by an affiliate.
- 3. A separate sheet should be filled for each project commissioned.
- 4. Member Code shall indicate NA for Not Applicable in case of Single Business Entity. For member of consortium the following abbreviation are suggested viz., LM for Lead Member and OM for Other Member.





#### 6.15 FORMAT FOR CONSORTIUM AGREEMENT

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution)

Each member individually shall be referred to as the "Member" and all of the members shall be collectively referred to as the "Members" in this Agreement.

#### WHEREAS:

- (A) AEML desires a 500 MW Energy Storage Capacity and additional 250MW under Green Shoe Option (For 8 Hours discharge with maximum 5 Hours continuous discharge) in terms of the RfS through a competitive bidding process (followed by e-reverse auction).
- (B) AEML had invited responses to its RfS.
- (C) The RfS stipulates that in case the response to RfS is being submitted by a Consortium (as defined in the RfS), the Members of the Consortium have to submit a legally enforceable Consortium Agreement in a format specified by AEML wherein the Consortium Members have to commit equity investment of a specific percentage for the Project.

#### NOW THEREFORE, THIS AGREEMENT WITNESSETH AS UNDER:

In consideration of the above premises and agreements all the Members in this Consortium do hereby mutually agree as follows:

1.	We, the Members of the Consortium and parties to the Agreement d
	hereby unequivocally agree that Member-1 (), shall act a
	the Lead Member (as defined in the RfS) for self and agent for and o
	behalf of Member-2,, Member-
	and submit the response to the RfS.

2. The Lead Member is hereby authorized by the Members to bind the





Consortium and receive instructions for and on their behalf.

- 3. Notwithstanding anything to the contrary contained in this Agreement, the Lead Member shall always be liable for the equity investment obligations of all the Members
- 4. i.e. for both its own liability as well as the liability of other Members.
- 5. The Lead Member shall be liable and responsible for ensuring the individual and collective commitment of each of the Members of the Consortium in discharging all of their respective equity obligations. Each Member further undertakes to be individually liable for the performance of its part of the obligations without in any way limiting the scope of collective liability envisaged in this Agreement.
- 6. Subject to the terms of this Agreement, the share of each Member of the Consortium in the issued equity share capital of the Project is/shall be in the following proportion:

Name	Percentage
Member 1	
Member 2	
Member n	
Total	100%

- 7. We acknowledge that after the execution of the EFSA, the controlling shareholding (having not less than 51% (fifty one percent) of the voting rights and paid up share capital) in the Project developing the Project shall be maintained for a period of 1 (one) year from the Commercial Operation Date of the Project.
- 8. The Lead Member, on behalf of the Consortium, shall inter alia undertake full responsibility for liaising with lenders or through internal accruals and mobilizing debt resources for the Project, and ensuring that the Project achieves financial closure in terms of the EFSA.
- 9. In case of any breach of any equity investment commitment by any of the Members, the Lead Member shall be liable for the consequences thereof.
- 10. Except as specified in the Agreement, it is agreed that sharing of responsibilities as aforesaid and equity investment obligations thereto shall not in any way be a limitation of responsibility of the Lead Member under these presents.
- 11. It is further specifically agreed that the financial liability for equity contribution of the Lead Member shall not be limited in any way so as to restrict or limit its liabilities. The Lead Member shall be liable irrespective of its scope of work or financial commitments.
- 12. This Agreement shall be construed and interpreted in accordance with the laws of India and courts at Mumbai alone shall have the exclusive jurisdiction in all matters relating thereto and arising thereunder.





- 13. It is hereby further agreed that in case of being selected as the Successful Bidder, the Members do hereby agree that they shall furnish the Performance Bank Guarantee in favour of AEML in terms of the RfS.
- 14. It is further expressly agreed that the Agreement shall be irrevocable and shall form an integral part of the EFSA and shall remain valid until the expiration or early termination of the EFSA in terms thereof, unless expressly agreed to the contrary by AEML.
- 15. The Lead Member is authorized and shall be fully responsible for the accuracy and veracity of the representations and information submitted by the Members respectively from time to time in the response to RfS.
- 16. It is hereby expressly understood between the Members that no Member at any given point of time, may assign or delegate its rights, duties or obligations under the EFSA except with prior written consent of AEML.
- 17. This Agreement
  - has been duly executed and delivered on behalf of each Member hereto and constitutes the legal, valid, binding and enforceable obligation of each such Member;
  - (ii) sets forth the entire understanding of the Members hereto with respect to the subject matter hereof; and
  - (iii) may not be amended or modified except in writing signed by each of the Members and with prior written consent of AEML.
- 18. Any defined terms used in this Agreement but not specifically defined herein shall have the meaning ascribed to such term in the RfS and the EFSA.

IN WITNESS WHEREOF, the Members have, through their authorized representatives, executed these present on the day, month and year first mentioned above.

For	[Memb	er1]			
		_			
(Signature, Name dated)	& Designation	of the person	authorized	vide Board	Resolution
Witnesses:					





Signature	:	Signature	:
Name	:	Name	:
Address	:	Address	:
For	[Member 2]		
(Signature, N	Name & Designation of the po	erson authoriz	ed vide Board Resolution
Signature	:	Signature	:
Name	:	Name	:
Address	:	Address	:
	[Member]		
(Signature, N Resolution E	Name & Designation of the pe	erson authorize	ed vide Board
Witnesses:			
Signature	:	Signature	:
Name	:	Name	:
Address	:	Address	:
Signature an	d stamp of a Notary of the plac	ce of execution	١

Note: Technology Partner in a Consortium shall be an entity with equity participation less than 10% (ten percent).





#### 7. Annexures

- **7.1.** Technical and Regulatory Requirements to be followed for Grid connected Energy Storage Project. Bidder (ESSD) shall comply all provisions and amendments thereafter of
  - 1 Central Electricity Regulatory Commission (Connectivity and General Network Access to the inter-State Transmission System) Regulations, 2022
  - 2 CEA (Technical Standards for Connectivity to Grid) Regulation, 2007
  - 3 CEA (Technical Standards for construction of Electrical Plants and Electrical Lines) Regulation,2010
  - 4 CEA (Grid Standard) Regulation, 2010
  - 5 CEA (safety requirements for construction, operation and maintenance of Electrical Plants and Electrical Lines) Regulations, 2011
  - 6 CEA (Measures relating to Safety and Electrical Supply) Regulations, 2010
  - 7 CEA (Installation and Operation of Meters) Regulations 2006 vili. Indian Electricity Grid Code Regulation, 2023 and as amended from time to time.
  - 8 CEA (Technical standards for communication system in Power system
  - 9 operations) Regulation 2020
  - 10 CERC (Communication System for Inter State Transmission of Electricity) Regulations 2017
  - 11 MNRE guidelines/ OM/Advisory/ Clarifications
  - 12 And any other applicable standard/regulations

The energy storage solution offered by the Applicant shall confirm to the following technical specifications/requirements:

## Charge and Discharge on demand basis /based on schedule as per AEML requirement for Pumped Storage Energy Storage System.

- ESSD shall ensure the minimum Discharging level should be atleast 30% of peak contracted NEW capacity. However, charging energy shall be equal to the peak Contracted Capacity.
- Round Trip Efficiency /Conversion efficiency: >75%. Inclusive of all losses upto metering point/ Delivery Point. Metering at CTU / STU injection/ drawl point as per CEA metering regulation.
- Maximum Ramp-up Response time in operating conditions: 30 seconds.
- Maximum Ramp-down Response time in operating conditions: 30 seconds.
- Maximum Response time to reach Contract Capacity in operating condition:10 minute
- Maximum Response Time from Cold Start: 30 minutes
- Fast Transition between Operating Modes i.e Pumping (Charging) and Discharging (Generating) not more than 10 minute.
- Ability to operate and in grid forming and grid following modes.
- SCADA & metering Installation and Commissioning up to GSS shall be





done by the developer

 Developer shall indicate the proposed location of the storage solution in RfS submission.

Charge and Discharge on demand basis /based on schedule as per AEML requirement for Battery Energy Storage System.

- Round Trip Efficiency: >75%. Inclusive of all losses upto metering point/ Delivery Point. Metering at CTU / STU injection/ drawl point as per CEA metering regulation.
- BESS Developer needs to carry out inter-device interaction studies for BESS with RE generation (Wind/Solar) and STATCOMs in nearby substations.
- Following studies may be conducted (not limited to below) by BESS Developer(s) in this regard:
  - Harmonic studies considering network and BESS system along with flicker studies
  - o Transient and dynamic studies
  - o Small signal stability studies
  - Sub-Synchronous Oscillations/ Sub-Synchronous Resonance / Sub-Synchronous Torsional Interaction studies
  - Sub-synchronous control interactions studies between different converter based equipment.
- In addition, BESS system/ ESSD shall need comply to requirements/performance parameters stipulated in Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007 and its amendments.
- Communication Equipment Requirement at BESS end to be provided by ESSD.
  - ESSD will provide UGFO/Approach cable (having minimum 12 Fibers) from BESS end to the 220/400 kV Substation control room. BESSD will provide FOTE (STM-16) terminal equipment, FODP and PMU at the BESS end.
  - ESSD will provide communication equipment's as per Regulations on Communication System for transmission of electricity and other Regulations/Procedures (as amended from time to time) issued by Appropriate Commissions and Central Electricity Authority (CEA).

Hydro PSP based or Battery Energy Storage System/ Storage Solution shall comply the following as minimum at the time of Bid submission.

#### Performance Monitoring-

As part of the performance monitoring, the following shall be carried out:

• The ESSD (Energy Storage System Developer) must install necessary





equipment to continuously measure ESSD operating parameters (including but not limited to voltage, current, ambient conditions etc.) as well as energy input into and energy output from the ESS along with metering arrangement in accordance with extant regulations. They will be required to submit this real time data to AEML and POSOCO (as applicable) on- line and through a report on regular basis every month for the entire duration of contract. A separate remote monitoring facility on AEML is required where auto report generation facility is possible.

- The ESSD shall provide access to AEML or their authorized representatives for installing any additional monitoring equipment to facilitate on-line transfer of data.
- All data shall be made available as mentioned above for the entire duration of the Contract.
- The plant SCADA should be OPC version 2.0a (or a later version including OPC UA) compliant and implement appropriate OPC-DA server as per the specification of OPC Foundation. All data should be accessible through this OPC server for providing real time online data (ESSD parameters) to AEML. This time series data shall be available from the Project SCADA system to facilitate monitoring and should include among others as stated before, below parameters to facilitate daily, monthly and annual Report for performance monitoring.
- Web-based monitoring should be available, which should not be machine dependent. The web-based monitoring should provide the same screens as available in the plant. Also, it should be possible to download reports from a remote web-client in PDF or Excel format.





#### 7.2. General Technical Parameters / Regulatory Requirements

## 7.2.1 For Pumped Hydro Power Plants (PSP), PSP Characterization and Performance Parameters to be adhered to by PSP Developer.

#### A. Technical Features and performance of PSP Machine:

Features	Requirements		
Efficiency	Pump Turbine Efficiency >90.5%.		
	Motor Generators Efficiency		
	>98%		
Cycle Efficiency	>75%		
Fast Transition between	~7 to 15 minutes		
Operating Modes			
Power Factor			
Controllable Reactive Power	Yes		
Grid Oscillation Damping (PSS)	Yes		
Inertia	Yes		
Fast Transition in Turbine Power (	<60s Limited by hydraulic		
min- Full Load/ Full-Min load)	transient		
Synchronous Condenser Mode	Yes		

#### B. Codes and Standards

- Material and equipment's pertaining to construction and machine shall conform to relevant IS Codes and International Codes
- b. Field and Laboratory Testing and procedures for material shall conform to relevant IS Codes and International Codes.

#### C. Design and Safety

- These Project have simpler design with minimum requirement of river diversion works, Desilting and slit flushing arrangements, Surge Chambers and very well water conductor system.
- Location of Project shall have minimum environmental issues such as Fisheries, Environmental Flows and CAT Plan including R and R.
- c. For Prompting use of variable speed machines, a mix of variable and fixed speed machine (in the ratio 1:1, if total number of





machines are upto 4 or 1:2, if total number of machines are upto 6 or more) may be adopted in sites having High head ratios based on techno commercial consideration as this may be optimal solution technically and commercially as per discretion of Developer.

# 7.2.2 Technical and Regulatory Requirements to be followed for Battery Energy Storage System (BESS)

#### 1. Codes and Standards

The BESS shall comply with the following Codes and Standards or equivalent Indian Standards, as applicable.

Standard/ Code (or		Certification	
equivalent Indian	Description		
Standards)		Requirements	
IEC 62485-2	Safety requirements for secondary	Applicable only	
	batteries and battery installations -	for Lead Acid	
	to meet requirements on safety	and NiCd/NiMH	
	aspects associated with the	batteries	
	erection, use, inspection,		
	maintenance and disposal:		
	Applicable for Lead Acid and NiCd /		
	NiMH batteries		
UL 1642 or UL 1973,	Secondary cells and batteries	Required for Cell	
Appendix E (cell) or	containing alkaline or other non-		
IEC 62619 (cell)	acid electrolytes - Safety		
+	requirements for secondary		
IEC 63056 (cell)	lithium cells and batteries, for use		
	in industrial applications		
UL 1973 (battery) or	Batteries for Use in Stationary,		
(IEC 62619	Vehicle Auxiliary Power and Light		
(battery)	Electric Rail (LER) Applications /	'	
+ IEC 63056	Secondary cells and batteries	+ IEC 63056) for	
(battery))	containing alkaline or other non-	the Battery level	
	acid electrolytes		
	- Safety requirements for secondary		
	lithium cells and batteries, for use in		
IEC 62201 / I IN 70 7	industrial applications	Required for	
1EC 02201/ UN 38.3	Safety of primary and secondary	· •	
	lithium cells and batteries during	both Battery and Cell.	
	transport: Applicable for storage	Cell.	





1		
	systems using Lithium Ion chemistries	
IEC 61850/ DNP3	Communications networks and management systems. (BESS control system communication)	
UL 9540 or (IEC TS	Electrical energy storage (EES)	Either UL9540
62933-5-1 + IEC	systems - Part 5- 1: Safety	or (IEC 62933-5-
62933-5-2)	considerations for grid-integrated	1 +
	EES systems – General	IEC
	specification / Standard for	62933-5-2) is
	Energy Storage Systems and	required
	Equipment	for BESS system level
IEC 62933-2-1	Electrical energy storage (EES)	Tests for Class
	systems - Part 2- 1: Unit Parameters	В
	and testing methods - General	applications:
	Specification	1. Duty Cycle
		Round Trip
		Efficiency Test
		2. Equipment and
		Basic Function
		Test
		3. Available
		energy Test
		4. Insulation test

Power Conditioning Unit Standards for BESS		
IEC 62477-1	Safety requirements for power electronic converter systems and equipment - Part 1: General	
IEC 62477-2	Safety requirements for power electronic converter systems and equipment - Part 2: Power electronic converters from 1 000 V AC or 1 500 V DC up to 36 kV AC or 54 kV DC	
IEC 61000-6-2 Ed.	Electromagnetic compatibility (EMC) - Part 6-2:	
2	Generic standards - Immunity standard for industrial environments	
IEC 61000-6-4 Ed.	Electromagnetic compatibility (EMC) - Part 6-4:	
2.1	Generic standards - Emission standard for industrial	
	environments	
IEC 62116 Ed. 2	Utility-interconnected photovoltaic inverters - Test procedure of islanding prevention measures	





IEC 1:2007	60068-2-	Environmental testing - Part 2-1: Tests - Test A: Cold
IEC 2:2007	60068-2-	Environmental testing - Part 2-2: Tests - Test B: Dry heat
IEC 14:2009	60068-2-	Environmental testing - Part 2-14: Tests - Test N: Change of temperature
IEC 30:2005	60068-2-	Environmental testing - Part 2-30: Tests - Test Db: Damp heat, cyclic (12 h + 12 h cycle)

#### The Battery Energy Storage System:

- a) shall follow the relevant CEA Standards and CERC Regulations
- b) shall be responsible for complying with the "First Time Energisation" procedure available at Grid India website as per the IEGC Regulations 2023 and amendments
- c) Comply with the grid-interfacing requirements as mentioned in following standards:
  - i. IEEE Std. 2800 -2022: IEEE Standard for Interconnection and Interoperability of Inverter -Based Resources (IBRs) Interconnecting with Associated Transmission Electric Power Systems
  - ii. IEC TS 62786-1: Distributed energy resources connection with the grid Part 1: General requirements
  - iii.IEC TS 62786-3: Distributed energy Resources connection with the grid: Part 3, Additional requirements for stationary battery energy storage systems

Further, CEA Technical Standards for Connectivity to the Grid, Regulations 2007, Part-1 (General), Standards and Codes for Practice, mentions the following:

(2) The equipment including overhead lines and cables shall comply with the relevant Indian Standards, British Standard (BS), or International Electrotechnical Commission (IEC) Standard, or American National Standards Institute (ANSI) or any other equivalent International Standard:





Provided that whenever an International Standard or International Electrotechnical Commission Standard is followed, necessary corrections or modifications shall be made for nominal system frequency, nominal system voltage, ambient temperature, humidity and other conditions prevailing in India before actual adoption of the said Standard.

(3) The effects of wind, storms, floods, lightening, elevation, temperature extremes, icing, contamination, pollution and earthquakes must be considered in the design and operation of the connected facilities."

The BESS, therefore, shall be designed keeping in view the ambient temperature and weather conditions prevailing at site i.e. The BESS shall be able to deliver rated performance at the extreme temperature and weather conditions at site where it is deployed.

In this regard, the procedure notified by CEA on 8<sup>th</sup> April 2024 for assessment of the "Design Temperature for RE Plants in compliance to CEA (Technical Standards for Connectivity to the Grid) Regulations" shall be followed. Same is available at: <a href="https://cea.nic.in/whats-new/?lang=en">https://cea.nic.in/whats-new/?lang=en</a>

#### 2. System Testing and Commissioning

The BESS shall be commissioned as per commissioning criteria and procedures specified by the CEA.

#### 3. Identification and Traceability

Cells/Racks/Packs Assembly shall meet seismic requirement for the plant location of the BESS. Labelling of cells/batteries shall include manufacturer's name, cell type, name-plate rating, date of manufacture and date of expiry of parts and labour warranty.

#### 4. Other Sub-systems/Components

Other subsystems/components used in the BESS must also conform to the relevant international/national Standards for Electrical Safety for ensuring Expected Service Life and Weather Resistance.





#### 5. Fire Protection

The BESSD shall design and install a fire protection system that conforms to national and local codes. The fire protection system design and associated alarms shall take into account that the BESS will be unattended at most times. For high energy density technologies, the BESSD shall also obtain thermal runaway characterization of the battery storage systems.

#### 6. Authorized Test Centres

Batteries/ Power Conditioning Units deployed in the power plants must have valid test certificates for their qualification as per above specified IEC/ BIS Standards by one of the ILAC member signatory accredited laboratories. In case of module types/ BESS/equipment for which such Test facilities may not exist in India at present, test certificates from reputed ILAC Member body accredited Labs abroad will be acceptable.

#### 7. Warranty

BESSD shall procure performance guarantees from the OEM to ensure minimum performance levels for predefined application(s) as per the terms of the RfS. The Warranty shall clearly indicate life expectancy given discharge profiles provided for the application.

#### 8. Performance Monitoring

As part of the performance monitoring, the following shall be carried out:

- a) The BESSD must install necessary equipment to continuously measure BESS operating parameters (including but not limited to voltage, current, ambient conditions etc.) as well as energy input into and energy output from the BESS along with Metering arrangement in accordance with extant regulations. They will be required to submit this data to AEML on line and/or through a report on regular basis every month for the entire duration of contract.
- b) The BESSD shall provide access to the AEML/MNRE or their authorized representatives for installing any additional monitoring equipment to facilitate on-line





transfer of data.

- c) All data shall be made available as mentioned above for the entire duration of the Contract.
- d) The plant SCADA should be OPC version 2.0a (or a later version including OPC UA) compliant and implement appropriate OPC-DA server as per the specification of OPC Foundation. All data should be accessible through this OPC server for providing real time online data (BESS parameters) to the AEML/ MNRE. This time series data shall be available from the Project SCADA system to facilitate monitoring and should include among others as stated before, below parameters to facilitate daily, monthly and annual Report for performance monitoring.
- e) Web-based monitoring should be available, which should not be machine dependent. The web-based monitoring should provide the same screens as available in the plant. Also, it should be possible to download reports from a remote web-client in PDF or Excel format.

#### 9. Other necessary criteria

i. Central Electricity Authority, Technical Standards for Connectivity to the Grid, (Amendment) Regulations, 2013 and 2019 mention connectivity standards applicable to the wind generating stations, generating stations using inverters, wind - solar photo voltaic hybrid systems and energy storage systems. BESS, being an inverter based power system element, shall also comply to the requirements specified for other generating stations using inverters.

Some of the requirements are indicated below and following shall be added separately in the "Technical and Regulatory Requirements to be followed by Battery Energy Storage System":

a) BESS shall be capable of operating in the frequency range 47.5 to 52 Hz and be able to deliver rated output both in charging and discharging mode in the frequency range of 49.5 Hz to 50.5 Hz.



- Clause 4, B2 (2) of CEA Technical Standards for Connectivity to the Grid, Regulations (Amendment), 2013 & 2019
- Requirement This provision is required to ensure that the BESS provides rated output during charging and discharging within the critical 49.5 Hz to 50.5 Hz frequency range, thereby enhancing grid stability and preventing frequency deviations that can lead to large disturbances.
- b) Low/High Voltage Ride Through (LVRT/HVRT) BESS shall be capable of operating when voltage at the interconnection point on any or all phases dips/rises to the high or low levels. The levels applicable for wind/solar generation sources (inverter- based) may be referred as available in Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations shall be applicable to BESS.
  - Clause 4, B2 (3) & (7) of CEA Technical Standards for Connectivity to the Grid, Regulations (Amendment), 2013 & 2019
  - Requirement This provision is required to ensure that the BESS maintains continuous operation (ride through) during voltage transients at the interconnection point, by adhering to LVRT/HVRT standards applicable to inverter-based wind and solar generation, thereby preventing system instability during voltage dips or surges.
- c) Dynamic Reactive Power Support / Voltage Control -BESS shall have the feature to detect and regulate the voltage of interconnection point as per the specified capability
  - i.e. The BESS shall be capable of supplying dynamically varying reactive power support at least up to the limits specified for wind/solar generation sources (inverterbased) in the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations. The response time of the BESS shall not exceed the value specified in relevant standards or grid codes.



- Clause 4, B2 (1) of CEA Technical Standards for Connectivity to the Grid, Regulations (Amendment), 2013 & 2019
- **Requirement -** This provision is required to harness the inherent reactive power capability of BESS (IBRs) in order to support the grid voltages.
- d) Primary Frequency Control The BESS shall have provisions for Primary Frequency Control with a droop which can be set as per system requirement between the range specified for wind/solar generation sources (inverter-based) in the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations.

Further, for frequency deviations in excess of 0.3 Hz, the BESS shall have the facility to provide an immediate (within 1 second) real power primary frequency response of at least 10% of the maximum Alternating Current active power capacity.

- Clause 4, B2 (4)(ii) of CEA Technical Standards for Connectivity to the Grid, Regulations (Amendment), 2013 & 2019
- Requirement This provision is required to ensure that the BESS is capable to provide Primary and Fast Frequency Control. This capability is essential for maintaining grid frequency, by providing rapid corrective action to significant frequency deviations, and enhancing overall grid reliability and resilience.
- e) BESS shall be capable to receive active power/reactive power set point from load despatch centres i.e. SLDC/RLDC.
  - Clause 4, B2 (5) of CEA Technical Standards for Connectivity to the Grid, Regulations (Amendment), 2013 & 2019
  - **Requirement -** BESS shall also have the





capability to participate in secondary frequency control ancillary services and therefore, this clause is required.

- f) The BESS shall have the black start and intentional island control capability to extend start-up of a blackout system or to operate independently after formation of an island.
  - Clause 4.10.4 of IEC TS 62786-3: Distributed energy resources connection with the grid Part 3: Additional requirements for stationary battery energy storage system
  - Requirement This capability is crucial for restoring the supply during a blackout. The BESS would likely come up in remote RE rich pockets where extension of supply from far end hydro stations in case of a blackout would be very difficult.
- g) BESS shall operate in a manner to promote the power system reliability and improve the power quality. When power quality problems, such as voltage dip, flicker, unsatisfactory power factor, etc., occur in power system, the BESS could eliminate these problems by flexible active and reactive power output in this function.
  - Clause 4, B1 of CEA Technical Standards for Connectivity to the Grid, Regulations (Amendment), 2013 & 2019
- h) The BESS should provide reliable protection and not limited to as overvoltage/under- voltage protection, overcurrent protection, low-temperature/overtemperature protection of battery, dc insulation monitoring, etc.
  - Clause 4.9 of IEC TS 62786-1: Distributed energy resources connection with the grid – Part 1: General requirements





- Requirement This capability is crucial for restoring the supply during a blackout. The BESS would likely come up in remote RE rich pockets where extension of supply from far end hydro stations in case of a blackout would be very difficult.
- i) BESS is required to have the following basic functions:
  - Monitoring: Monitor operational parameters, equipment status and communication status, alarm and faults of main equipment and BESS system, etc.
  - Information exchange: Receive and process information with RLDC/NLDC including operation parameters, switching information, various alarms and alerts, protective action signals, control information, etc.
    - Control: Including control mode and parameter setting sharing with RLDC/NLDC
    - Clause 4.12 of IEC TS 62786-3: Distributed energy resources connection with the grid –
    - Part 3: Additional requirements for stationary battery energy storage system
    - Requirement These requirements are required to ensure that the BESS can monitor operational status, exchange critical information with SLDC/RLDC/NLDC, which is vital for real-time diagnostics, seamless grid integration, and reliable operation
- ii. BESS shall be capacity of operating in the frequency range of 47.5 Hz to 52 Hz and be able to deliver rated output in the frequency range of 49.5 Hz to 50.5 Hz.
- iii. BESS shall be capacity of operating when voltage at the interconnection point on any or all phases dips/rises to the high or low levels. The levels applicable for wind/solar inverter-based generation may be referred as available in Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations.



- iv. For grid support operations, BESS shall have provisions to provide primary frequency control. However, the activation of primary frequency response shall be as per the extant CEA/CERC regulations. The BESS should also be capable of providing reactive power support to the grid.
- v. BESS shall operate to maintain voltages as per specified voltage ranges in Grid standards. BESS shall have feature to detect the voltage of interconnection point, and regulate voltage independently. The response time of the BESS shall not exceed the value specified in relevant standards or grid codes.
- vi. The BESS should provide reliable protection and not be limited to as an overvoltage/under- voltage protection, overcurrent protection, low-temperature/over-temperature protection of battery, DC insulation monitoring, etc.
- vii. BESS is required to have the following basic functions:
  - Monitoring: Monitor operational parameters, equipment status and communication status, alarm and faults of main equipment and BESS system, etc.
  - ii) Information exchange: Receive and process information with RLDC/NLDC including operation parameters, switching information, various alarms and alerts, protective action signals, control information, etc.
  - iii) Control: Including control mode and parameter setting with RLDC/NLDC.
- viii. BESS shall have capability to operate in secondary frequency control ancillary services (AGC). The details regarding AGC signals required by not limited to, are given (the conventional power plant signal link) at the link, <a href="https://posoco.in/download/detailed-connecting-generators-under-agc/?wpdml=29546">https://posoco.in/download/detailed-connecting-generators-under-agc/?wpdml=29546</a>.

Some of the BESS signal list for implementation of AGC can be like below (list is indicative only):

- i) Maximum MW permissible (dynamic or user entry)
- ii) Minimum MW permissible (dynamic or user entry)





- iii) Ramp rate up permissible (dynamic or user entry)
- iv) Ramp rate down permissible (dynamic or user entry)
- v) Actual MW
- vi) Actual MVAR
- vii) Scheduled MW or ULSP (unit load set-point)
- viii) Minimum State of Charge SOC % permissible
- ix) Actual State of Charge SOC %
- x) Scheduled Cycle (0-100%) count per day nos.
- xi) Actual Cycle (0-100%) count per day nos.
- xii) BESS forbidden zones
- xiii) Auxiliary Consumption MW
- xiv) Scheduled MW (dynamic or user entry)
- xv) BESS Temperature (for monitoring and correlation)
- xvi) Ambient Temperature (for monitoring and correlation)
- xvii) Cycle limits (0-100%) per day (user entry)
- xviii) Circuit breaker status
- xix) Local/Remote status
- xx) Feedback/handshake signals
- xxi) Primary Response MW
- xxii) Primary Response ON/OFF status
- xxiii) Tap position
- xxiv) AGC Set Point MW from NLDC to BESS
- xxv) Voltage (kV) at grid level
- xxvi) Voltage (V) at BESS LV side
- b) Clause 4, B2 (5) of CEA Technical Standards for Connectivity to the Grid, Regulations (Amendment), 2013 & 2019
- c) The static information like detailed write-up on present operation methodology of BESS, forbidden zones, number of cycle limits, Auxiliary consumption details, capability curve, simulation models (RMS/PSCAD) along with description or any specific information about BESS shall also be furnished as and when required by RLDC/NLDC.
  - Clause 8 & 9 (Part-1, General), of CEA Technical Standards for Connectivity to the Grid, Regulations (Amendment), 2007
  - Requirement This data is crucial for grid operators to understand the BESS's performance characteristics, conduct accurate simulations, optimize operational





- strategies, and ensure the BESS is utilized effectively within the grid, thereby enhancing operational planning and grid reliability.
- d) BESS will ensure the compliance of requirements mentioned in procedure of First Time Charging (FTC) as applicable for other power system elements. The consolidated FTC procedure including the requirements for BESS is available in public domain at <a href="https://posoco.in/wp-content/uploads/2021/04/Procedure\_for\_Integration\_of-Power\_System\_Elements.pdf">https://posoco.in/wp-content/uploads/2021/04/Procedure\_for\_Integration\_of-Power\_System\_Elements.pdf</a>

#### 10. Safe Disposal of unit Batteries from the BESS

The Developer will comply with the requirements under Hazardous & other Waste (Management and Transboundary Movement) Rules, 2016, as amended from time to time, as applicable. The BESSD shall ensure that all Unit Battery modules from the plant after their 'end of life' (when they become defective/ non-operational/ non-repairable) are disposed in accordance with the "e-waste (Management and Handling) Rules, 2016" notified by the Government and as revised and amended from time to time and Battery Waste Management Rules, as and when notified by the Government of India.





### 7.3. Copy of ESFA

To be uploaded separately





## 7.4. Special Instructions to Bidders for E-Tendering and Reverse Auction

#### **GENERAL**

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

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, AEML 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-lectronictender.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 Homepage of the portal.

**INSTRUCTIONS** 

Tender Bidding

Methodology: <u>Sealed</u>

#### **Bid System**

1. Single Stage Two Envelope

#### **Auction**

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

Broad Outline of Activities from Bidder's Perspective:

- a. Procure a Class III Digital Signing Certificate (DSC).
- b. Register on Electronic Tender System® (ETS)
- c. <u>Create Marketing Authorities (MAs)</u>, <u>Users and assign roles on ETS. It is</u> mandatory to create at least one MA
- d. View Notice Inviting Tender (NIT) on ETS
- e. For this tender -- Assign Tender Search Code (TSC) to a MA
- f. <u>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.</u>
- g. Clarification to Tender Documents on ETS
  - i. Query to AEML (Optional)
  - ii. View response to queries posted by AEML





- h. Bid-Submission on ETS
- i. Post-TOE Clarification on ETS (Optional)
  - i. Respond to AEML Post-TOE queries.
- j. 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.

#### **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.inj.

#### 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:

- 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.
- 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 Facility 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/ H	elpdesk
Telephone / Mobile	Customer Support: +91-124-4229071, 4229072 (From 10:00 to 18:00 on all Working Days i.e., Monday to Friday except Government Holidays
Email-ID	support@isn-ets.com

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
- A. Envelope I (Techno-commercial-Bid)
- B. Envelope II (Financial-Bid)
- o 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 29 of the RfS, failing which the Eligibility bids will not be opened.

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

#### **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.

#### 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 Facility 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 love this World). 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 to AEML 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 thee-Tendering Server/ Portal.

#### **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 Centre

The help information provided through 'ETS User-Guidance Centre' 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 peruse the information provided under the relevant links and take appropriate action. This will prevent hiccups and minimize teething problems during the use of ETS.

#### SEVEN CRITICAL DOS 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 submission deadline on ETS (There could be last minute problems due to internet timeout, breakdown, etc.)

Note: Bid-submission in ETS can consist of submission of multiple bidcomponents, which vary depending upon the situation and requirements of the Buyer. Successful

- receipt of a bid in an e-tendering scenario takes place if all the required bid-components are successfully 'received and validated' in the system (ETS) within the scheduled date and time of closure of bidding. ETS/ Service Provider is not responsible for what happens at an end-user's end, or while a submission made by an end-user is in transit, until the submission is successfully 'received and validated' in ETS.
- 6. It is the responsibility of each bidder to remember and securely store the Pass- Phrase for each Bid-Part submitted by that bidder. In the event, the bids are not opened with the pass- phrase submitted by bidder, AEML may ask for re- submission/ clarification for correct pass-phrase. In the event of a bidder forgetting the Pass-Phrase before the expiry of deadline for Bid-Submission, facility is provided to the bidder to 'Annul Previous Submission' from the Bid-Submission Overview page and start afresh with new Pass- Phrase(s). If bidder fails to submit correct pass-phrase immediately as requested by AEML, the Tender Processing Fee and Tender Document Fee, if applicable, shall be forfeited and bid shall not be opened, and EMO shall be refunded. No request on this account shall be





- entertained by AEML.
- 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.

## ADDITIONAL Dos AND DON'TS FOR BIDDERS PARTICIPTING IN e-REVERSE AUCTION

- A. 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.
- B. For responding to any particular e-Reverse Auction, thee-Reverse Auction (i.e. its Reverse Auction Search Code or RASC) has to be assigned to an MA.
- C. It is important for each bidder to thoroughly read the 'rules and related criterion' for thee- Reverse Auction as defamed by the Buyer organization.
- D. It is important to digitally-sign your 'Final bid' after the end of e-Reverse Auction bidding event.
- E. During an e-auction, it is recommended that a bidder submits a bid well before the scheduled time of 'Date and Time of Closure of Reverse-Auction'. Submission of a bid near the closing time of an auction may result in failure due to any of the various factors at that instant, such as slow internet speed at the bidder's end, slow running of computer at bidder's end, nervousness of the bidder in the last few seconds, etc. This could lead to delay in submission of data from the bidder's computer to the server. Even if the delay is of a fraction of second after the scheduled closing time, it will result in failure of bid submission. Further, please note that a bid can be submitted even if the bidding-page has not been refreshed manually or otherwise depending on the conditions of the e-auction.

Note: Successful receipt of Bid in an e-auction scenario takes place if the bid is successfully 'received and validated' in the system (ETS) within the scheduled date and time of closure of bidding. ETS/ Service Provider is not responsible for what happens at an end-user's end, or while a submission made by an end-user is in transit, until the submission is successfully 'received and validated' in ETS.

- F. 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 affect the security settings as defined in the portal.
  - The Bidder must have 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 organisation/firm

#### **Vendors Training Program**

One day online training (10:00 to 17:00) is provided by ISN-ETS. Training is optional. In case, any bidder is interested, he may send a request to support@isn-ets.com. Vendors are requested to arrange their own Laptop, Digital Certificate and Wireless Connectivity to the Internet.

#### 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), AEML shall resort to "REVERSE AUCTION PROCEDURE". Reverse Auction shall be conducted as per methodology specified in Section-5 and other 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 completer explanations. Further these are supplementary in nature.

Bidders shall ensure online submission of their 'Bid Price' within the auction period.

- 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.
- 2. 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 on, for compliance.
- 3. Reverse auction will be conducted on scheduled date & time, as mentioned in the RfS document.
- 4. Bidders should acquaint themselves of the 'Business Rules of Reverse Auction', which is enclosed separately in the RfS document.
- 5. 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 AEML guidelines shall be initiated by AEML.
- 6. The Bidder shall not divulge either his Bids or any other exclusive details of AEML to any other party.
- 7. Period of validity of Prices received through Reverse Auction shall be same as that of the period of validity of bids offered.
- 8. Bidders should also note that:
  - a) 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 AEML, 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 AEML contact personnel indicated in the RfS document.
- e) Order finalization and post order activities such issue of LOA, signing of PPA etc. would be transacted directly between successful bidder(s) and AEML.
- 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 Annexure –7.4 of the RfS document and the contact person of AEML.
- 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) AEML 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.
- 9. For access to the Reverse Auction site, the following URL is to be used: https://www.bharat-electronictender.com.
- 10. No queries shall be entertained while Reverse Auction is progress.

#### 11. BUSINESS RULES OF REVERSE AUCTION

Reverse Auction shall be conducted as per methodology specified in Section - 5 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 fore-Reverse Auction:

S No.	Parameter					Value
1.	Date Biddir			of		be intimated Later Eligible Bidders





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 'Predefined Time- Duration' before the '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)/ evaluated tariff in case of
		Inter State Bidder

Online Reverse Auction shall be conducted by AEML 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 AEML. 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. AEML shall not be responsible for such eventualities.

Bidders are advised to get fully trained and clear all their doubts such as refreshing of Screen, capacity/ no. of projects being auctioned, auction rules etc.

AEML reserves the right to cancel/reschedule/extend the Reverse Auction process/ tender at any time, before ordering, without assigning any reason.

AEML shall not have any liability to bidders for any interruption or delay in access to the auction website irrespective of the cause. In such cases, the decision of AEML shall be binding on the bidders.

Other terms and conditions shall be as per bidder's techno-commercial offers and as per the RfS document and other correspondences, if any, till date.





#### 7.5. Check List for Financial Closure

(To be signed by the Authorized signatory of the DEVELOPER) (RfS No. dated)
Last Date for submission of documents related to Financial Closure -(12 months
from Effective Date of ESFA)

- Developer shall furnish the CA Certificate indicating the total cost of Project(s). Developers shall also report 100% tie-up of Financing Arrangements for the Contracted Capacity. In this regard, the developer shall submit a certificate/necessary document from all financing agencies regarding the tie-up of 100% of the funds indicated for the Contracted Capacity, including arrangements of funds in the form of Equity.
- 2. Undertaking by the Project Company that all Consents, clearances and permits required for setting up of ESS as per the terms of ESFA have been obtained and enclosed herewith as annexure.
- Certificate from Project Company that Technical Specifications and directives given in 7- Annexure to RfS document will be adhered to and Project Configuration as a part of Detailed Project Report to be submitted as enclosure Also submit Detailed Project Report
- 4. Copy of Agreement/MOU entered into/Purchase Order with acceptance, for the supply of Plants and Equipment.
- 5. Latest Shareholding Pattern of the Project Company.
- 6. The developer shall execute Implementation and Support Agreement and/ or Lease Deed/Right to Use Agreement (as applicable).
- 7. The ESS developer shall obtain requisite approvals from the STU/CTU/ appropriate authority as applicable, to connect the Project with the Interconnection Facilities at the Delivery Point.

The above checklist is to facilitate financial closure of projects. For any interpretation the respective provision of RfS / ESFA shall prevail.