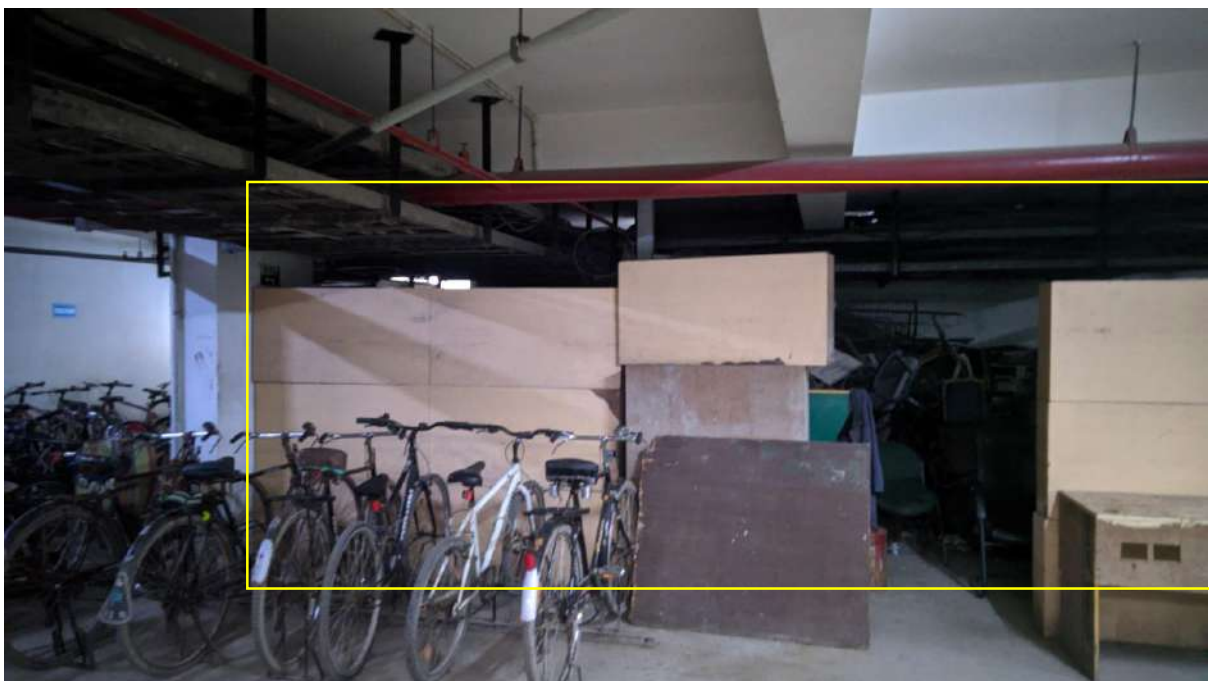




View of space for BESS installation, cable trays, debris present



Front view of space for BESS installation, cable trays, debris present inside



Side view of space for BESS installation, Entry to LT Control Room, cable trays, debris present



Inside view of LT Control Room



ಭಾರತ್ ಹೆವಿ ಎಲೆಕ್ಟ್ರಿಕಲ್ಸ್ ಲಿಮಿಟೆಡ್
भारत हेवी इलेक्ट्रिकल्स लिमिटेड

Bharat Heavy Electricals Ltd.,
(A Government of India undertaking)
Electronics Division

PB 2606 , Mysore Road Bangalore , 560026 INDIA

CE: PR: 003- Rev 02

SPECIAL COMMERCIAL CONDITIONS OF CONTRACT

Reference is brought to BHEL's Instructions to Bidders (Document Ref: CE: PR: 001- Rev 03) and General Commercial Conditions for Contract (Document Ref: CE: PR: 002- Rev 02).

These two documents along with Special Conditions of Contract annexed to this RFQ will form an integral part of the contract as and when the RFQ culminates into a Purchase Order / Contract.

RFQ No. : MGRM0000355

RFQ Date : 07/08/2020

RFQ Due Date : 18/08/2020

Customer/Project : M/s.The Energy and Resources Institute (TERI), New Delhi

Tender Description : Site survey, Design, Engineering, Manufacturing, Testing, Supply, Erection, Commissioning and 01 year Warranty followed by Five years Comprehensive AMC of 410KWH Battery Energy Storage System (BESS) for M/s.The Energy and Resources Institute (TERI),New Delhi.

Type of Bid : Two-Part Bid (Pre-Qualification Bid + Techno-commercial bid: Part-I; Price-bid: Part-II)

Purchase Executives : Clarifications with regard to the tender shall be addressed to purchase officers through e-mail IDs: mounishg@bhel.in ; kanimozhid@bhel.in

Splitting of tendered quantity to MSE vendors: The tendered quantity ~~will~~/will not be split to MSE vendor/s subject to submission of relevant documents by vendors. Refer clause-I of Instructions to Bidders for conditions applicable and for information on documents to be submitted.

Destination: For Indigenous scope of supply, items are to be directly despatched to below-mentioned 03 designated locations in NCT of Delhi allotted by M/s.The Energy and Resources Institute (TERI), New Delhi.

- i) 230 KWH BESS-Taimoor Nagar,New Friends Colony, New Delhi (CAT-A)
- ii) 120 KWH BESS-Ispatika Apartments, Dwaraka (CAT-B)
- iii) 60 KWH BESS-Vasant Kunj Institutional Area, New Delhi (CAT-C)

Separate Purchase Orders will be placed for each category mentioned above. Consignee details will be issued by BHEL along with Despatch Clearance.

Terms of Delivery:

- **Indigenous scope of supply:** FOR, customer designated location (including Packing & Forwarding charges but excluding Taxes).

Under-mentioned details shall be provided against indigenous supplies and services:

- a. GSTIN (no.) of place of supply: _____
 b. HSN (Harmonized System of Nomenclature) code: _____
 Applicable tax and Rate: _____ & _____
 c. SAC (Service Accounting Code) no.: _____
 Applicable tax and Rate: _____ & _____
 d. GSTIN (no.) of place of supply of service: _____

I. Bidders to mandatorily provide confirmation/compliance for the under-mentioned terms:

Sl. No.	Term	BHEL Clause	Bidder's Confirmation	Remarks, if any
01	Parting of license for imported raw materials	In case of projects where Basic Custom Duty is NIL and vendor is importing any raw materials / components for the enquired item, same are eligible for Zero Customs duty. As per EXIM policy, BHEL will part the import licence with the vendors to obtain import licence by themselves and custom clear the raw materials/ components by availing zero customs duty. Hence, please furnish list of raw materials / components to be imported by you with Quantity and CIF value (for which BHEL has to share import licence). The benefit due to the above shall be passed on to BHEL and confirmed in the quotation. If there are no imported raw materials/components, same shall be confirmed in the offer.	AGREE —CIF value Yes, benefit passed on to BHEL in the priced quotation. (or) We confirm that there are no imported components	
02	Declaration of Local content (Refer Clause 'A' Sl. No. 12 of Instructions to Bidders)	Bidder to furnish the following details: (a) Percentage of local content: _____ (b) Details of the Location(s) at which the local value addition is made: _____ _____		
03	Declaration to be mandatorily submitted by the Bidder, as a compliance to Rule 144(xi) of GFR, 2017 amendment dt 23.07.2020 issued by Ministry of Finance, Govt. of India.	"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfils all requirements in this regard and is eligible to be considered." (Refer Clause 'A' Sl. No. 13 of Instructions to Bidders).		

II. Bidder to note that Deviations shall not be permitted for the below mentioned terms and are deemed to be complied. In case of non-compliance/deviation, offer shall be liable for rejection:

- (1) **Site Details:** No request for deviation in site specifications will be entertained by BHEL. All the site parameters such as space availability, electrical and civil infrastructures etc. have to be properly acknowledged by the vendor during site visit. Any additional cost in making upgrades at the sites (for all three categories) will be borne by the Vendor. In case of any change in Location for Category-B, it is the responsibility of the vendor to carry out the site visit and evaluate the new site for installation of Battery Energy Storage System at its own expenses. Any additional cost, if arises, due to any change in scope of work shall be finalized on mutual agreement between BHEL & Vendor on the basis of component wise cost already submitted by the Vendor. In case the vendor fails to execute the said work within site constraints acknowledged during site visit facilitated by TERI, then BHEL will be at liberty to get the work executed from the open market without calling any tender/e-tender and without any notice to the vendor, at the risk and cost of the vendor. Any additional cost incurred by 'BHEL' in the process of executing the work from third party shall be recovered from the Vendor. If the cost of executing the work as aforesaid shall exceed the balance due to the Vendor, and the Vendor fails to make good the additional cost, 'BHEL' may recover it from the vendor's pending claims against any work in 'BHEL' or in any lawful manner.
- (2) The purchase order shall be on turn-key basis. The entire work shall be completed within **21 weeks** (including delivery of materials and installation & commissioning) from the date of signing of purchase order. However, BHEL may in case of urgency ask the vendor to complete the work earlier, with the mutual consent of the vendor.

Delivery of materials: All the materials as specified in the purchase order should be delivered at the sites of installation within **14 weeks** of issuance of Purchase order as delivery is the essence of the Contract. Transit insurance and storage insurance till the handing over of all materials will be within the scope of vendor. The vendor should provide the manufacturer's warranty certificate for all components supplied.

Delivery time for installation and commissioning: The systems will be deemed commissioned only after successful trial run of the system for three (3) days from the date of installations. Warehousing and storage of all components will be in the scope of vendor till the commissioning of all systems as per the purchase order.

- (3) **Price reduction for delayed delivery:** In the event of delay affecting the delivery within agreed period to specific project site, unless concurrence for the delay has been given by BHEL for any unexpected event on request of the vendor, a reduction in the price shall be levied @ 1% of the total order value (excluding E&C and CAMC) per week or part there of subject to a maximum of 10% of the total order value (excluding E&C and CAMC) pertaining to the affected project site.
- (4) The time and the date of installation of the system stipulated in the Purchase Order shall be also deemed to be the essence of the Contract, and installation must be completed within 21 weeks of issuing PO. If the vendor fails to install or any consignment thereof

within the period prescribed for such installation, BHEL shall be entitled at their option: As agreed under the liquidated damages clause, BHEL has the rights to recover a price sum equivalent to 1% of the Installation & Commissioning price which the vendor failed to install, subject to a maximum of 10% of the Installation & Commissioning price pertaining to the affected project site.

- (5) In case the vendor fails to execute the said work within the stipulated time, 'BHEL' will be at liberty to get the work executed from the open market without calling any tender/e-tender but with a prior notice to the vendor, at the risk and cost of the vendor (with proof of actual cost incurred). Any additional cost incurred by 'BHEL' in the process of executing the work from third party shall be recovered from the vendor. If the cost of executing the work as aforesaid shall exceed the balance due to the vendor, and the vendor fails to make good the additional cost, 'BHEL' may recover it from the vendor pending claims against any work in 'BHEL' or in any lawful manner.
- (6) The vendor will have the sole responsibility to execute order(s) placed as per time schedule, and to ensure quality parameters, specifications and other requirements provided in the tender document and purchase order terms.
- (7) In the interest of the work and the programme, purchase order executed between the vendor and 'BHEL' may be extended for a mutually agreed period, if the need arises. It shall be the sole responsibility of the vendor to get verified the quality and quantity of the supplied material at the site of delivery.
- (8) **Warranty period:** The material supplied shall be under on-site warranty for a period of minimum one year from the date of commissioning and issuance of completion certificate by TERI, as per tender conditions. Warranty certificate(s) shall be submitted at the time of issuance of completion certificate by TERI. During warranty period, as per the listed conditions of tender, the total responsibility of the BESS at all the three sites lies with vendor and all the repairs and replacements have to be made without any additional cost to TERI and BRPL (BSES Rajdhani Power Limited.) For warranty period, after system installation, the vendor shall be responsible for any defects that may occur due to faulty materials, design or workmanship. If it becomes necessary for the vendor to replace or repair any defective portion of the system, the vendor shall address all the issues within 2 working days and any replacements or renewals can be completed within 10 working days of intimation and without any extra cost to TERI/ BRPL. However, the system must be in running condition within 2 working days of intimation to the vendor. In case, the replacement is further delayed over 10 working days of intimation to the vendor, 1% of cost of the equipment to be replaced will be deducted from remaining payment or PBG as found suitable to BHEL (on case to case basis) with a limit of cumulative 10 % for the affected project site. Even then, if the vendor fails to execute the said work within aforementioned time period, 'BHEL' will be at liberty to get the work executed from the open market without calling any tender/e-tender and with a prior notice to the vendor, at the risk and cost of the vendor. Any additional cost incurred by 'BHEL' in the process of executing the work from third party shall be recovered from the vendor (provided the proof of actual cost incurred is submitted to vendor). If the cost of executing the work as aforesaid shall exceed the balance due to the vendor, and the vendor fails to make good

the additional cost, 'BHEL' may recover it from the vendor pending claims against any work in 'BHEL' or in any lawful manner.

The scope of work for on-site warranty services will further include the following:

- a) The vendor will create provision for receiving and recording all complaints, attending the complaints, stocking essential spares, provisioning trained service personnel, recording monthly logs of all activities, etc.
- b) During the 1 (one) year period, the repair works will have to be carried out at the premise except in exceptional circumstances where the equipment or any component may be required to be taken out for repair, for which specific written permission should be obtained from TERI. In such cases, standby arrangements are required to be made by vendor so that the BESS remains in functional state. All products have valid product warranty and hence on-site repair and maintenance service needs to be provided after getting replenishment of spares from respective product manufacturer.
- c) The vendor shall submit the bill along with the verification report counter-signed by TERI representative. The vendor will be responsible for complete on-site warranty of the installed systems for period of one year. It is mandatory for the vendor to have an authorized service center at Delhi-NCR before release of the purchase order. The same must be made available only after release of the purchase order.
- d) All preventive & breakdown maintenance and repair activities associated with Battery Energy Storage System.
- e) The vendor shall provide to its service station all normal tools and testing equipment needed for maintenance of the station at its own cost.
- f) If the work of the vendor is found unsatisfactory or if the vendor dishonors the purchase order or fails to perform as per purchase order terms, BHEL shall be entitled to terminate the purchase order after discussion with the vendor and BHEL's decision will be final and binding on the vendor. In that case, the payment of last invoice amount will not be done in addition to forfeiting the PBG or any other remedial measures as been deemed fit by BHEL.
- g) The vendor shall submit the bill along with the validation certificate counter-signed by TERI representative.
- h) The vendor shall keep one technically skilled person employed dedicatedly to three sites as mentioned in the tender. The technically skilled person has to remain in New Delhi and in case of absence of the person due to any unavoidable circumstances; a back-up skilled person must be employed by the vendor.

(9) Inspection:

- a) The 'TERI', 'BRPL', 'BHEL' or their representative shall have the right to anytime inspect and/or to test the goods to confirm their conformity to the purchase order.
- b) The 'TERI', 'BRPL', 'BHEL' or their duly authorized representative shall have at all reasonable times access to the vendor premises or works and shall have the power at

all reasonable time to inspect and examine the materials and workmanship of the works during its manufacturing or assembling stage.

- c) The vendor shall give the 'BHEL', 15 days prior written notice of any material being ready for testing. Such tests shall be on the vendor's accounts/ expenses except for the expenses of the inspector. 'BHEL' reserves the full rights, to waive off inspection of material.
- d) The vendor is required to get the entire lot of the ordered material inspected, before the supply of the materials.
- e) All arrangements for the inspection of materials will be done by vendor.

(10) Replacement of rejected material: Any material supplied against order placed on basis of this tender and found to be defective at any time during the project life on inspection or differing from approved samples or make or specifications will be replaced by the vendor free of cost or full refund made for the amount paid by BHEL. The vendor must replace or repair any defective portion of the system; the vendor shall make such repair within 2 working days of intimation and without any extra cost to BHEL. The vendor shall address the issues within 2 working days and any replacements or renewals/replacements can be completed within 10 working days of intimation to the vendor. In case, the replacement is further delayed over 10 working days of intimation to the vendor, 1% of cost of the equipment to be replaced will be deducted from remaining payment or PBG as found suitable to BHEL with a limit of cumulative 10 % for the affected project site. Even then, if the vendor fails to replace the equipment within aforementioned time period, BHEL will be at liberty to get the work executed from the open market without calling any tender/e-tender and with a prior notice to the vendor, at the risk and cost of the vendor. Any additional cost incurred by BHEL in the process of executing the work from third party shall be recovered from the vendor (provided the proof of actual cost incurred is submitted to vendor). If the cost of executing the work as aforesaid shall exceed the balance due to the vendor, and the vendor fails to make good the additional cost, BHEL may recover it from the vendor pending claims against any work in BHEL or in any lawful manner.

(11) Liquidated damages: If the vendor fails to perform the services within the time periods specified in the purchase order, then 'BHEL' shall without prejudice to its other remedies under the purchase order, deduct from the order price as liquidated damage a sum equivalent to 1% of the purchase order price (excluding CAMC) inclusive of taxes and levies for each week (For the purposes of calculation of delay, part of week shall be treated on Pro-rata basis) of delay until actual performance up to a maximum deduction of 10% of the purchase order price (excluding CAMC) for the affected project site. Once the maximum is reached, the 'BHEL' may consider termination of the purchase order. In the case of violation of purchase order terms by the vendor, BHEL may confiscate pending payments/ dues of the vendor assigning specific reasons and shall also have the power to debar/ blacklist the vendor in similar circumstances. BHEL may also invoke performance/security bank guarantee. 'BHEL' may also get the work executed from the open market without calling any tender/e-tender and with a prior notice to the vendor, at the risk and cost of the vendor (provided the proof of actual cost incurred is submitted to vendor). Any additional cost incurred by BHEL in the process of executing the work from

third party shall be recovered from the vendor. If the cost of executing the work as aforesaid shall exceed the balance due to the vendor, and the vendor fails to make good the additional cost, 'BHEL' may recover it from the vendor pending claims against any work in 'BHEL' or in any lawful manner.

- (12) **Road permit and entry taxes:** To be facilitated and arranged by vendor.
- (13) The vendor shall have to comply with all the rules, regulations, laws and by-laws for the time being in force and the instructions if any, of the organization, in whose premises the work has to be done. 'BHEL' shall have no liability in this regard.
- (14) **Insurance:** Transit Insurance, storage insurance and erection insurance of the materials and equipment's for setting up the BESS shall be arranged by the vendor for the total supply. The goods supplied under the purchase order shall be fully insured for 6 (six) years against loss or damage incidental to manufacture or acquisition, transportation, storage during transportation. Complete BESS has to be insured and insurance copy stating indemnification to be furnished by the vendor before release of supply payment. In case of any damage/ loss/ pilferage/ non-delivery during transit, the vendor shall lodge and settle the claim with the insurance agency. The vendor shall also arrange replacement of the damaged/ lost/ pilfered items expeditiously pending settlement with insurance agency, if any, so as not to hamper the erection and commissioning work of the BESS. The resultant loss if any due to failure of sub-vendor of the vendor to comply with the above shall be to the account of vendor. The insurance copy is required to be submitted along with the invoices.
- (15) **Labour Engagement:** The vendor shall be responsible to provide all wages and allied benefits (including PF/ESI etc.) to the labour engaged for execution of the project work. The vendor shall remain liable to the authorities concerned for compliance of the existing rules and regulations of the government for this purpose including regulations against employing child labour, etc. and shall also remain liable for any contravention thereof. The vendor shall submit the proof of PF /ESI paid to the employees along with invoices.
- (16) **Safety Codes and Regulation:** The vendor shall adhere to safe construction practices and guard against hazardous and unsafe conditions and shall comply with safety rules of the Government of India and adhere to standards mentioned in the tender specification. In addition, the vendor shall adhere to and be bound by the applicable safety codes, rules and regulation for the work to be carried out. A separate log to be maintained by vendor.
- (17) The vendor shall not, without the consent in writing of 'BHEL', transfer, assign or sublet the work under the purchase order or any substantial part thereof to any other party.
- (18) 'TERI', 'BRPL' and 'BHEL' shall have at all reasonable time access to the works being carried out by the vendor under the purchase order. All the work shall be carried out by the vendor to the satisfaction of 'TERI' and 'BRPL'.
- (19) BHEL may at any time by notice in writing to the vendor either stop the work all together or reduce or cut it down. If the work is stopped all together, the vendor will only be paid for

work done and expenses distinctly incurred by him as on preparation or the execution of the work up to the date on which such notice is received by him. Such expenses shall be assessed by 'BHEL', whose decision shall be final and binding on the vendor. If the work is reduced, the vendor will not be paid any compensation whatsoever for the loss or profit which he might have made if he had been allowed to complete all the work included in the purchase order.

(20) Risk, Accident and Damages: The vendor shall take due precaution to avoid damages to any pipelines, Railway lines, roads, canals, cables, culverts, bridges, drains, sewer, telegraph and telephone lines, water mains, dykes, poles, pillars, fences, wires, supports and embankments and other underground or over ground works, structural or constructions whatsoever and shall at his own cost and initiative forthwith restore and repair any damage thereto to the satisfaction of TERI and / or the person or authority concerned relative to the line, pipe or other works, construction of installation as the case may be.

(21) Observation of Environmental Regulations and Protection: The vendor shall ensure that its servants and agents and sub-vendors and their servants and agents shall duly comply with all environmental laws, applicable rules and regulations and the conditions of any permit, permission, consent and or no-objection granted in this behalf by any authority with respect to or concerning the work and shall independently so organize and conduct their operations as not to cause any hazard or pollution to health, life, property or environment including (but not limited to) discharge of any noxious substance or effluent into the atmosphere or into the earth or into any drain, canal, stream, river, pond, lake or other water body.

(22) Compliance with regulations: The vendor shall comply with all applicable laws or ordinances; codes approved technical standards, rules and regulations and shall procure all necessary Government permits & licenses etc. at its own cost. All compliances (State Govt /Central Govt/Local - VAT/WCT/ESI/PF/Labour law etc.) is to be met by the vendor and the same is to be produced by the vendor at the time of payment.

(23) Dismantling: At the end of the life of batteries, final dismantling, removing and recycling batteries from the site is the complete responsibility of vendor. Under Category-B, BESS is to be placed into a premises of residential society. The inter-connection of the said system will be behind-the-meter, and hence it is outside of control area of TERI/ BRPL. Thus, in view of public interest, a premature removal of BESS from the site may be required even within the contract duration. In such unforeseen circumstances, TERI/ BRPL will provide another site within licensee area of BRPL with similar operating conditions in NCT of Delhi. The shifting and re-installation of BESS will be performed by TERI/ BRPL (within a stipulated time-frame) at their own cost and risk under the supervision of vendor. The commissioning of the BESS at the new site will be performed by vendor with the support from TERI/ BRPL. The charges for vendor's services for 'shifting & re-installation supervision' and 'commissioning of the BESS at the new site' are to be paid to vendor by BHEL as per the per man-day rates prevailing at that time. The man-day rates shall include to-and-fro transportation, food and lodging. The charges shall be prior mutually discussed and finalized as and when required. At the time of shifting &

re-installation, the CAMC clauses of purchase order in particular and any clauses related to non-availability during the relocation period in general will remain suspended till the BESS is completely installed and ready to use condition in new site. Post commissioning, those clauses will be applicable as per the purchase order.

(24) Recycling: Once batteries have reached the end of its useful life (even after six years of purchase order duration), It is the complete responsibility of vendor to remove batteries from each site and recycle the batteries. Batteries should be in completely discharged condition prior to their disposal and disposed as per the brief plan presented at the time of quality assurance program. The DC connection terminals of the batteries must be insulated with electric tape to prevent accidental contacts. Incineration must be performed by an approved and permitted waste treatment facility that handles lithium ion batteries. It shall be the responsibility of vendor to;

- ensure that used batteries collected are sent to the registered recycling agencies or for disposal
- ensure that necessary arrangements are made for safe transportation from site to the premises of recyclers or for disposal
- ensure that no damage to the environment occurs during transportation;
- ensure that batteries are recycled according to relevant guidelines prevailing at the time of disposal.

(25) Demurrage Wharfage etc.: All demurrage, wharfage and other expenses incurred due to delayed clearance of the material or any other reason shall be to the account of the vendor.

(26) Indemnity: Vendor shall indemnify and at all times keep BHEL indemnified and hold TERI and BHEL harmless against any direct loss to it or any claims by any third person, for any personal injury to anybody or loss to property, movable or immovable, caused by or attributable to any act or omission of the vendor or any of his officer, employee, agent or professional etc. in connection with this purchase order. The vendor shall be responsible for the safety of the BESS systems installed at site and shall indemnify TERI, BRPL and BHEL for any direct or indirect loss due to any fire, explosion or any other safety issue arising due to operation of BESS systems.

(27) Performance Bank Guarantee (PBG): The vendor shall furnish a Bank Guarantee (PBG-1) against performance of the contract with validity for a period of 15 months from the date of dispatch (or) 12 months from the date of issuance of 'Commissioning completion' certificate, whichever is earlier. The PBG-1 shall be issued for a value equivalent to 10% of the purchase order price which will include all components of the purchase order and will exclude only taxes/duties, freight, E&C and CAMC charges. After completion of one year from the issuance of the 'Commissioning completion' certificate, a fresh Bank Guarantee (PBG-2) equivalent to 10% of the CAMC (inclusive of taxes), valid for a period of 60 months shall be submitted by the vendor within 30 days.

The PBG1 shall be released by BHEL within 15 working days from the submission of PBG2. The validity of bank guarantee shall be extended in case the project execution period gets extended due to delay in execution by the vendor or any other reasons

whatsoever. The bank guarantee shall be issued in favour of BHEL. PBG-2 will be released after successful completion of 60 months of CAMC period of BESS.

- (28) Once battery / system completes its life the vendor will be responsible for dismantling of system and remove the item from the site and handover clear site to owner of the property / site.
- (29) Periodical review will be carried out after every 3 months to take care of unforeseen situation like COVID -19. Any impact on project execution due to COVID-19 shall qualify under Force Majeure.
- (30) Installation & commissioning and services: Installation & commissioning and operation & maintenance of the system shall be done by vendor as per tender specifications.

(31) Comprehensive Annual Maintenance Contract (CAMC):

CAMC will be applicable for a period of 60 months from the date of expiry of warranty period.

Evaluation Methodology in tender: In case the quoted total CAMC value is less than 20% of the main supply value (excluding E&C), BHEL shall evaluate Bidders Price deducting differential amount from main supply price and apportioning towards CAMC charges.

The Scope of CAMC contract starts after one year of receiving signed completion certificate from TERI.

- I. The vendor shall perform standard annual maintenance and augment the system as needed to meet performance guarantee in all aspects.
- II. The vendor shall perform standard annual maintenance of BESS that would include wear, tear, overhauling, insurance, and replacement of defective cells, PCUs, spares, consumables and other parts including sensors and data acquisition equipment installed to communicate parameters to EMS and between EMS and SCADA.
- III. Monitoring of BESS performance and supply of all technical, production/operation data and information and making it available as and when required.
- IV. Responsible to carry out routine and preventive maintenance and replacement of component/equipment of BESS in case of failure and vendor shall provide all labor, material, consumables etc. for routine and preventive maintenance at regular intervals. This will also include scheduled software maintenance, HVAC cleaning, battery container cleaning, low voltage side circuit breaker maintenance, fire suppression system maintenance etc.

- V. Carryout maintenance activities as a result of sudden failure/breakdown of any particular component or equipment. Vendor shall be responsible to carry out breakdown maintenance of each and every component of BESS.
- VI. Visit to onsite on call basis to provide maintenance services within 12 hours of raising the complaint.
- VII. Emergency trouble shooting calls - within 12 Hrs including spare arrangements.
- VIII. On site repairing/component replacement - within 2 working days, however, system has to be in service utilizing the spares (if available on site/ or at nearby service center of the vendor) within 12 hours of the breakdown.
- IX. The vendor shall maintain stock of mandatory spares required for warranty and CAMC period for any emergency troubleshooting. In any case system should be in running condition within 12 hours of break-down.
- X. The vendor shall keep one technically skilled person employed dedicatedly to three sites as mentioned in the tender. The technically skilled person has to remain in New Delhi and in case of absence of the person due to any unavoidable circumstances; a back-up skilled person must be employed by vendor.
- XI. Payment of AMC charges shall be linked with uptime (availability) of BESS. BESS is more significant during peak times of BRPL, thus weightage of penalty will be higher during peak-time slots as per the latest tariff orders of BRPL, as shown below:

Time Slot	Weightage
00:00 Hours to 02:00 Hours	1
02:00 Hours to 14:00 Hours	0.5
14:00 Hours to 00:00 Hours	1

The penalty on the account of non-availability of the BESS shall be calculated as under:

System Availability Factor (SAF) %	Penalty (%)	% of Quoted AMC*
0	95	100
95	96	80
96	97	60
97	98	40
98	99	20
99	100	0

Time Slot	BESS unavailable hours in a month	Weightage
00:00 Hours to 02:00 Hours	2	1
02:00 Hours to 14:00 Hours	1	0.5
14:00 Hours to 00:00 Hours	5.5	1

$SAF = 1 - \frac{[(2 \times 1 + 1 \times 0.5 + 5.5 \times 1)]}{(\text{Number of days in the month} \times 24)}$

SAF=98.89% (considering 30 days month)

Assumed AMC charges: 1000 units

Actual charges paid: 80% of 1000 = 800 units

- XII. The penalty on account of non-availability of the BESS shall be calculated on monthly basis. The net balance (AMC contract annual price – penalty) will be released half-yearly to the vendor.
- XIII. Sub-Contracting: No sub-contracting of work in full or in part is allowed unless approved by TERI/BHEL in writing.
- XIV. The vendor shall submit category wise monitoring report to TERI, BRPL and BHEL as per specifications along with the invoice of CAMC on half yearly basis.

(32) Termination: BHEL by written notice, may terminate this Order for default, in whole or in part, if the vendor: (a) fails to make a delivery in accordance with the Order's schedule, (b) fails to comply with any of the terms of this Order, (c) fails to make progress so as to endanger performance of this Order, (d) fails to provide adequate assurances of future performance, (e) ceases to conduct its operations, or (f) has any proceeding or lawsuit under bankruptcy, liquidation, or insolvency law brought against it.

(33) Warranty: The vendor shall warrant as per standards for quality that anything to be furnished shall be new, free from all defects and faults in material, workmanship and manufacture, shall be of the highest grade and consistent with established and generally accepted standards for material of the type ordered, shall be in full conformity with the specifications, drawing or samples, if any and shall if operable, operate properly.

(34) Performance of Equipment:

- a) In addition to the warranty as already provided, the vendor shall guarantee satisfactory performance of the equipment and shall be responsible for the period or up to the date specified in specification here of after the equipment has been accepted by the 'TERI' to the extent for any defects that may develop such defects shall be removed at his own cost when called upon to do so by the 'TERI'.

During CAMC period, as per the listed conditions of tender, the total responsibility of the BESS at all the three sites lies with the vendor and all the repairs and replacements have to be made without any additional cost to TERI, BRPL and BHEL.

Also, the vendor shall be responsible for any defects that may occur due to faulty materials, design or workmanship during the CAMC period. If it becomes necessary for the vendor to replace or repair any defective portion of the system, the vendor shall

make such replacement or renewal within 2 working days of intimation and without any extra cost to TERI/ BRPL/BHEL. Initially, If the vendor fails to attend the complaint within 2 working days or two working days, every time, a reasonable penalty of 5% (five percent) of total CAMC amount may be deducted from the retention pending amount due during that period for the affected project site.

In case the vendor fails to execute the said work within a week, BHEL will be at liberty to get the work executed from the open market without calling any tender/e-tender and without any notice to the vendor, at the risk and cost of the vendor. Any additional cost incurred by BHEL in the process of executing the work from third party shall be recovered from the vendor. If the cost of executing the work as aforesaid shall exceed the balance due to the vendor, and the vendor fails to make good the additional cost, BHEL may recover it from the vendor pending claims against any work in BHEL or in any lawful manner.

- b) The vendor shall submit category wise monitoring report to BHEL, TERI and BRPL twice in a year briefly assessing the overall performance of the BESS and its associated components along-side the technical performance of battery cells/modules promised at the time of bidding for all six years of the agreement. For example, throughput consumed & throughput remaining, C – rate assessment (maximum, minimum and average), degradation curve, down-time assessment, depth of discharge assessment (maximum, minimum and average), auxiliary consumption assessment, round-trip efficiency, PCS efficiency, battery module-wise health parameters, etc.

(35) Force majeure:

- a) Notwithstanding the provisions of clauses contained in this purchase order, the vendor shall not be liable for forfeiture of its performance security, liquidated damages, termination for default, if he is unable to fulfill his obligation under this deed due to event of force majeure circumstances.
- b) For purpose of this clause, 'Force majeure' means an event beyond the control of the vendor and not involving the vendor's fault or negligence and not foreseeable. Such events may include, but are not restricted to, acts of Government either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, pandemics, quarantine restrictions, and freight embargoes.
- c) However, if a force majeure situation arises, the vendor shall immediately notify 'BHEL' in writing. Any time extension on delivery or project completion to the extent of delay due to force majeure may be granted to the vendor based on mutual discussion and agreement. The decision of the competent authority of BHEL in above conditions shall be final.

(36) Demurrage: All demurrage, and other expenses incurred due to delayed clearance of the material or any other reason shall be to the account of the vendor.

(37) Others :

- a) Technical details, such as SoC, PCS/ PCU efficiency, round trip efficiency and throughput etc., shall be supplied along-with each consignment and copy should be sent to BHEL and 'TERI' HQ for records.
- b) Internal test reports and data sheets of all components like cell/modules, PCS, sensors, transducers etc. shall be supplied along-with each consignment a copy should be sent to BHEL and 'TERI' HQ for records.
- c) The vendor in consultation with BHEL will conduct training programme for users, focusing on main features, operation and maintenance of the systems.
- d) The vendor shall continue to provide spare parts during warranty and CAMC period at their own cost to keep the systems in good operating conditions. After the expiry of CAMC period, the vendor shall continue to provide spare parts at the users cost till the product life. If the vendor fails to continue to supply spare parts and services to users, BHEL shall take appropriate action against the vendor.
- e) After successful supply/commissioning of the system and training, the system will be handed over to the person designated by TERI or, BRPL.
- f) It shall be the sole responsibility of the vendor to get verified the quality and quantity of the supplied material at the site of delivery.
- g) The supplies of battery cells/modules/pack shall be supported by an extended producer responsibility certificate as and when available, authorization from the battery manufacturer. 'Extended Producer Responsibility' (EPR) means responsibility of any producer of batteries for their products beyond manufacturing until environmentally sound management of their end-of-life products; for channelization of waste batteries to ensure environmentally sound management of such waste. Extended Producer Responsibility may comprise of implementing take back system or setting up of collection centres or both and having agreed arrangements with registered recycler either individually or collectively through a Producer Responsibility Organization recognized by producer or producers in their Extended Producer Responsibility.
- h) All batteries that have completed the useful life (battery waste) at the location installed shall be managed in an environmentally sound manner. 'Environmentally sound management of battery waste' means taking all steps required to ensure that batteries are managed in a manner which shall protect health and environment against any adverse effects, which may result from hazardous substance contained in such wastes.

(38) PAYMENTS:

The payments shall be effected as per the following terms and conditions:

- a) 60% supply payment (excluding E&C and CAMC) with taxes and freight will be paid in 45 days from the date of dispatch or 15 days from the date of submission of complete set of documentation, whichever is later.

Note: In case PBG is not furnished, only 50% payment will be released without the consent of Vendor. This 10% basic amount withheld towards PBG will be paid either against submission of supplementary invoice & Original PBG (or) against supplementary invoice without PBG after expiry of Warranty period.

Following documents need to be submitted to BHEL for processing of 60% supply payment:

1. Invoice (02 sets of original) for complete material supplied along with proof of delivery at site (sign and stamp of person who has received and verified the materials)
 2. Delivery challan(s) & E way bill
 3. Packing list and Consignee copy of Lorry Receipt (Packing List shall be detailed indicating package-wise content details along with Net weight & Gross weight of each package).
 4. Original certificate issued by BRPL confirming receipt of material at site and acceptance of the same
 5. Dispatch clearance / inspection report in original issued by the inspection authority
 6. NIL Short-Shipment Certificate
 7. Test Reports and Warranty Certificate
 8. Insurance policy (covering insurance scope defined in clause: 14 above)
 9. Performance Bank Guarantee (PBG-1)
- b) 30% supply payment (excluding E&C and CAMC) against installation and commissioning of the system, as per purchase order, will be paid in 15 days from the date of submission of supplementary invoice against proof of E&C completion certificate issued by TERI.

Payment term for E&C charges: 100% E&C charges along with tax as applicable, will be paid in 15 days from the date of submission of supplementary invoice/documents against proof of completion of E&C.

Following documents need to be submitted to BHEL for processing of Service payments:

- (i) Complete list of installation location verified by TERI/BRPL representative
- (ii) The warranty certificates for complete system (as per Purchase Order) :

- (a) Complete system warranty certificate from the vendor.

- (b) Manufacturer warranty card / letter for all components and data sheet for lithium ion/various technologies battery cells/modules, inverter and PCS.
 - (c) All reports should be stamped and signed by the authorized representative of the vendor / vendor.
 - (d) Invoice of installation and commissioning as per purchase order.
 - (e) Insurance copy of the complete system.
 - (f) Proof for the establishment of service center for the sites (photo, registration docs).
 - (g) Proof of submission of PF/ESI.
 - (h) Extended Producer will provide proof of document for EPR and share the waste battery handling report. (As per the Ministry of Environment, Climate and Forest Change released the Draft Battery Waste Management Rules, 2020. The Draft Rules seek to replace the Batteries (Management and Handling) Rules, 2001, which provide details for handling and management of batteries under the Environment (Protection) Act, 1986)
- (iii) Original certificate issued by BRPL confirming Installation, testing and commissioning of material at site and acceptance of the same by Site In charge and duly verified by EIC.
 - (iv) Commissioning and handover certificate (as prescribed), counter- signed by TERI/ BRPL.
 - (v) Minimum two (2) photographs (dated) for each premise in soft copy of the BESS Unit. Photos should be clear and of minimum postcard size. Photo should cover all the components supplied at site.
- c)** Balance 10% supply payment (excluding E&C and CAMC) will be released (after ending of one year from the date of signing of completion certificate) within in 15 days from the date of submission of supplementary invoice against proof of successful execution of Warranty obligations.
 - d)** After expiry of warranty period, Comprehensive AMC charges will be paid in 15 days from the date of submission of supplementary invoice/documents against proof of completion of CAMC on half -yearly basis; invoice certification shall be done by project In-charge.
 - (a) Detailed complaint log of all the complaints received during the period (half yearly).
 - (b) Rectification log of all complaints attended and remedial measures taken (half yearly).

- (c) Verification report signed by user and TERI representative.
- (d) If the documents are not submitted within the specified stipulated time period, (at half yearly frequency) the purchase order will deem to be completed and the vendor will not have any claim for the payment.
- (e) Complete records for complaint and rectification log should be maintained and available during any visit.
- (f) Category wise half-yearly monitoring report.

Payment terms for CAMC charges: 100% CAMC charges along with tax as applicable, will be paid in 15 days from the date of submission of supplementary invoice/documents against proof of completion of CAMC on yearly basis.

Note.3:

1. The vendor is mandatorily required to open service center to carry out on-site warranty services at site before accepting any purchase order.
2. Non-tearable Logo (TERI, BRPL, UI-Assist & BHEL) pasting has to be done on each BESS Unit.

(39) Materials –Quality & Workmanship:

- a) Immediately on award of contract, the vendor shall submit a detailed project report along with valid external ISO audit report of the company and Implementation plan report within 20 working days having planning and testing strategy with provisions for quality check performance at various stages of the project. The report shall also furnish details of method of checking and inspection and acceptance standards / values.
- b) The vendor has to provide quality assurance certificates to TERI/BRPL for required components of BESS and shall comply with appropriate codes & standards. . Failure to abide by the same may result in rejection of purchase order by TERI/BRPL/BHEL. BHEL reserves the right to request for any additional information and also reserves the right to reject the proposal of any vendor, if in the opinion of BHEL, the data in support of tender requirement is incomplete.
- c) The vendor shall comply with the purchase order terms in all respects to the satisfaction of TERI, BRPL and BHEL.
- d) For a period of 6 years, after system installation, the vendor shall be responsible for any defects that may occur due to faulty materials, design or workmanship. If it becomes necessary for the vendor to replace or repair any defective portion of the system, the vendor shall address and the issues within 2 working days and any replacements or renewals can be completed within 10 working days of intimation and without any extra cost to TERI/ BRPL/BHEL. However, the system must be in running condition within 2 working days of intimation.
- e) It is agreed by vendor that prior to expiry of this agreement which is six years from the date of installation of BESS (i.e. 1-year warranty and 5 year AMC) at three specified locations (as mentioned in tender document), the health assessment of the asset shall be

carried out to assess the performance of associated components (i.e. cells, modules, PCS etc.) during last six months of the purchase order.

f) After CAMC period, based on health assessment, the vendor shall quote a price to refurbish the system to the minimum of 50% of its original rated capacity.

(40) Validity of offer: The offer will be valid for a period of 60 days from the date of part-I bid opening and in case of Negotiation/ Counter-offer, price validity will apply afresh for a period of 25 days from the date of according final price by bidder (or) up to original validity period, whichever is later.

(41) Inland transportation including loading, un-loading, insurance and other costs incidental to delivery (demurrage, wharfage, etc.): The supplier is required under the Contract to transport the Goods to place of destination defined as Site. Transport to such place of destination in India including insurance, as shall be specified in the Contract, shall be arranged by the supplier, and the related cost shall be included in the Contract Price. Vendor shall book the consignment through vendor's approved Road carriers on "Freight pre-paid" basis & to be claimed from BHEL through a separate invoice against proof of acknowledged L/R.

(42) Evaluation criteria for tendered item/s: Items will not be split on item-wise lowest offer. Items shall be evaluated and procured as a combined package. Clause 'A' Sl. No. 12 of 'Instructions to Bidders' shall also be referred in this regard.

(43) Reverse Auction: Not applicable for this tender.

With this, we hereby confirm that all the terms & conditions as indicated in Instructions to Bidders (Document Ref: CE: PR: 001- Rev 03) & General Commercial Conditions for Contract (Document Ref: CE: PR: 002- Rev 02) are accepted without any deviation.

Vendor's Signature with Seal

Note: This document has to be mandatorily filled & furnished as part of Part-I bid.