

**Amendment - 1**

NIT No: SEC/C&P/NIT/2019/LKRE/II					
Tender for Design, Engineering, Supply, Construction, Erection, Testing & Commissioning of cumulative capacity of 1.95 MW (AC) Solar PV Power Plant with 2.15MWh BESS at UT, Lakshadweep, India					
Sl. No.	Section	Page No.	Clause	Original Version	Amendment
1	Section VII-B, Part-C	78 of 145	3.8	The report shall also include ground water analysis (water sample collected from bore well) to ascertain its suitability for construction purposes, recommendations for type of cement, grade of concrete & minimum cement content as per prevalent soil characteristics with respect to presence of aggressive chemicals and environment exposure conditions as per relevant BIS specifications. However, minimum grade of concrete shall be M25 (M30 in coastal areas/ marshy soil) for all RCC works except liquid retaining structures like underground water tank etc. where minimum grade of concrete shall be M30 (M35 in coastal areas/ marshy soil). Cement higher than 43 Grade, shall not be used in construction.	The report shall also include ground water analysis (water sample collected from bore well) to ascertain its suitability for construction purposes, recommendations for type of cement, grade of concrete & minimum cement content as per prevalent soil characteristics with respect to presence of aggressive chemicals and environment exposure conditions as per relevant BIS specifications. However, minimum grade of concrete shall be M25 (M30 in coastal areas/ marshy soil) for all RCC works except liquid retaining structures like underground water tank etc. where minimum grade of concrete shall be M30 (M35 in coastal areas/ marshy soil). Cement higher than <b>OPC 43</b> grade shall not be used in construction.
2	Section VII-B, Part-C	86 of 145	8.6.3	The main gate shall be of 2.5m height and shall have 4.5m wide Gate for vehicular movement and an adjacent 1.5m wide wicket gate for pedestrian movement.	The main gate shall be of 2.5m height and shall have <b>4m</b> wide Gate for vehicular movement and an adjacent 1.5m wide wicket gate for pedestrian movement.
3	Section VII-A, Scope of Works	8 of 15	4.1.18	Testing instruments as specified.	Testing instruments as specified <b>(for each project site)</b> .
4	Section VII-A, Scope of Works	11 of 15	7.3	Gate Entry System..	Void
5	Annexure E 0 PG Test Procedure	3	2	Functional Guarantee for Solar PV Plant shall comprise of following Guarantees: (1) Performance Ratio Guarantee test for operational acceptance. (2) Annual Generation Guarantee up to a period of 10 years (O&M Period), starting from the date of Operational Acceptance.	Functional Guarantee for Solar PV Plant shall comprise of following Guarantees: (1) Performance Ratio Guarantee test for operational acceptance. (2) Minimum Annual Plant Availability as specified in the document.
6	VII	220	1.2	Temperature co-efficient of power - Not less than -0.30%/°C	Temperature co-efficient of power - Not less than <b>-0.40%/°C</b>
7	Missing References				
7.1		35 of 145	8.3.5	Error! Reference source not found	10.5
7.2		118 of 145	3.2.1	Error! Reference source not found	4.5.1
7.3		122 of 145	4.6	Error! Reference source not found	3.1
7.4		135 of 145	5.7.5	Error! Reference source not found	5.7.3
8	Annexure E 0 PG Test Procedure		2.2		Kindly Refer Annexure 1 to Amendment 1
9	Appendix II - Suggestive Array Layout				Attached
10	Annexure A: Site Layout				Attached
11	Annexure B: Indicative Single Line Diagram				Attached
12	Section VII-A, Scope of Works	10 of 15	6.1.7	Foundation and erection of portable cabin (Main Control Room).	Foundation and erection of Main Control Room.
13	Section VII-B, Part-C		24	New Clause	Kindly Refer Annexure 2 to Amendment 1 for Portable Cabin Specifications, wherever applicable.
14	Section-I_Invitation for Bids	2 of 10	-	SECI RESERVES THE RIGHT TO INCREASE OR DECREASE THE MW AND MWH CAPACITY DURING THE TENDERING PROCESS (ON ISLAND BASIS OR CUMULATIVE BASIS). SECI AT ITS OWN DISCRETION MAY INCREASE OR DECREASE ANY OF THE ABOVE-MENTIONED SITE CAPACITY FROM THE OVERALL CUMULATIVE CAPACITY BEFORE/AFTER AWARD OF CONTRACT AGREEMENT. ACCORDINGLY, THE TOTAL CONTRACT PRICE WILL BE PROPORTIONATELY AMENDED & THE FINAL CONTRACT PRICE ARRIVED AS SUCH AFTER AMENDMENT WILL BE THE FINAL CONTRACT PRICE OF THE CONTRACT AGREEMENT. THE FINAL PROJECT CAPACITY MAY VARY WITHIN A TOLERANCE BAND OF + (PLUS) OR – (MINUS) 20% (TWENTY PERCENT) OF THE ORIGINAL PROJECT CAPACITY.	Void

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**NIT No: SEC/C&P/NIT/2019/LKRE/II**

**Tender for Design, Engineering, Supply, Construction, Erection, Testing & Commissioning of cumulative capacity of 1.95 MW (AC) Solar PV Power Plant with 2.15MWh BESS at UT, Lakshadweep, India**

Sl. No.	Section	Page No.	Clause	Original Version	Amendment
15	Section IV - General Conditions of Contract	37 of 72	45.3	Operation and Maintenance Breakdown / Corrective maintenance: The Contractor must demonstrate the committed CUF at the end of every year in accordance with commitment made in line with the Performance guarantees.	Operation and Maintenance Breakdown / Corrective maintenance: The Contractor must demonstrate the committed Availability Factor at the end of every year in accordance with commitment made in line with the Performance guarantees.
16	Section V - Special Conditions of Contract	2 of 10	3	The Time for Commissioning of the respective Plants at respective Islands shall be:  a)Agatti Island, 300 KWp: 12 (Twelve) Months b)Kavaratti Island, 1400 KWp: 12 (Twelve) Months c)BangaRam Island, 150 KWp: 06 (Six) Months d)Thinnakara Island, 100 KWp: 06 (Six) Months  All above mentioned commissioning timelines are from the date of Notification of Award (NOA)/LOA/LOI  Further Contractor is also to provide Operation & Maintenance Contract of Solar Photo Voltaic Plant with BESS for a period of 10 (Ten) years from the date of Operational Acceptance of the Plant.	The Time for Commissioning of the respective Plants at respective Islands shall be:  a)Agatti Island, 300 KWp: 12 (Twelve) Months b)Kavaratti Island, 1400 KWp: 12 (Twelve) Months c)BangaRam Island, 150 KWp: 12 (Twelve) Months d)Thinnakara Island, 100 KWp: 12 (Twelve) Months  All above mentioned commissioning timelines are from the date of Notification of Award (NOA)/LOA/LOI  Further Contractor is also to provide Operation & Maintenance Contract of Solar Photo Voltaic Plant with BESS for a period of 10 (Ten) years from the date of Operational Acceptance of the Plant.  This revised Time of Commissioning will supersede any other Time of Commissioning mentioned anywhere in the tender document. Bidders are required to bid accordingly.
17	Section V - Special Conditions of Contract	2 of 10	3.1	Commissioning of the respective Plants Plant as stated under this Tender Document.  a)Agatti Island, 300 KWp: 12 (Twelve) Months b)Kavaratti Island, 1400 KWp: 12 (Twelve) Months c)BangaRam Island, 150 KWp: 06 (Six) Months d)Thinnakara Island, 100 KWp: 06 (Six) Months	Commissioning of the respective Plants Plant as stated under this Tender Document.  a)Agatti Island, 300 KWp: 12 (Twelve) Months b)Kavaratti Island, 1400 KWp: 12 (Twelve) Months c)BangaRam Island, 150 KWp: 12 (Twelve) Months d)Thinnakara Island, 100 KWp: 12 (Twelve) Months  This revised Time of Commissioning will supersede any other Time of Commissioning mentioned anywhere in the tender document. Bidders are required to bid accordingly.
18	Schedule of Rates	Revised Format for Schedule of Rates (SOR) has been added with changes in SOR-1. This revised SOR format will supersede the earlier SOR format & this revised SOR only will be used for filling up the Financial Bids.			1) Schedule of Rates, SOR-1 has been amended with the addition of the provision of breakup of line items regarding BESS & regarding the Scrap sale clarifications.  2) Earlier Schedule of Rates uploaded at the time of tendering will not be considered for the Financial Bids evaluation purpose & only this revised Schedule of Rates, as attached with amended SOR-1 will be considered. Bidders are required to refer this revised SOR only.
19	Instruction to bidders (ITB) & Schedule of Rates (SOR)	REPLACE "CELL NO I 28" WITH "CELL NO I 35" UNDER SOR 1 WHILE READING THE RESPECTIVE CLAUSES REPLACE "CELL NO J 23" WITH "CELL NO I 23" UNDER SOR 2 WHILE READING THE RESPECTIVE CLAUSES			"CELL NO I 28" is replaced with "CELL NO I 35", Under SOR-1 wherever appearing in the entire tender document. "CELL NO J 23" should be read as "CELL NO I 23" Under SOR-2 at all the respective places of the tender document.

**Clarifications to Queries raised during Pre-Bid Meeting**

NIT No: SEC/VC&P/NIT/2019/LKRE/II							
Tender for Design, Engineering, Supply, Construction, Erection, Testing & Commissioning of cumulative capacity of 1.95 MW (AC) Solar PV Power Plant with 2.15MWh BESS at UT,Lakshadweep, India							
Sl. No.	Tender Section	Page No.	Clause No	Description as per Tender Document	Queries	Category (Finance/Technical/Contractual)	Clarifications
1				General	As SECI, being a CPSU under the administrative control of MNRE, is the owner of the project, reference is invited to the Office Memorandum dated 11.12.2018 by MNRE regarding Implementation of Public Procurement (Preference to Make in India) Order 2017 vide DIPP Notification No. P-45021/2/2017-B.E.-II, dated 15.06.17 as per which preference shall be given to domestically manufactured/produced products such as solar PV modules, inverters, etc.Request SECI to add a suitable clause in conformance to the abovementioned Order.	Contractual	The terms & conditions of the Tender Document will prevail
2				Approved makes of PV Modules	As the project will be commissioned after Mar-2020, by when the MNRE O.M. dated 02-Jan-2019 on approved list of models and manufacturers shall be implemented, as per which, only the models and manufacturers included in the list will be eligible for use in projects set up for sale of electricity to Government (Central Govt, State Govt, Central PSEs, State PSEs, Central/State Organizations). SECI may please consider adding this mandatory requirement as a tender condition	Technical	ALMM requirement is already mentioned in the tender document. Kindly refer Clause 1.1 of Section VII-B (Technical Specifications).
3				Environmental Clearance	Bidder understands that relevant Environmental clearance certificates for the proposed project is already obtained by Customer. Bidder request you to share the same.	Technical	Environmental Clearance is not required for the project.
4				Land availability	Bidder understands that sufficient land for installation of Solar PV and BESS Containers and Control Room is available at site. Kindly Confirm.	Technical	Kindly refer Annexure-A (Site Layout) to Section-VII(B).
5				Load Pattern	We request SECI to kindly provide the island-wise Electrical load pattern for system design.	Technical	System design has already been done by SECI based on which Solar PV and BESS capacities are arrived.
6	I	5		THE PROJECT ALSO INCLUDES THE DISMANTLING & DEMOLISHING OF THE EXISTING SOLAR PROJECTS WHICH WILL BE IN THE SCOPE OF THE CONTRACTOR ONLY. THE COMPLETE WORK OF SITE CLEARANCE & PREPARATION INCLUDING DISMANTLING, DEMOLISHING, MMS REMOVAL, CIVIL STRUCTURES REMOVAL, GROUND CLEARANCE, LEVELLING, BACK FILLING (IF REQUIRED), DEBRIS REMOVAL INCLUDING SCRAP HANDLING WILL BE IN THE SCOPE OF CONTRACTOR ONLY.....	Please provide the complete scope of scrap handling and its disposal by the Contractor. We understand that the Debris/Scrap is to be disposed off at a location decided by the contractor. Kindly confirm.  Further, we understand that the existing solar projects at the respective locations are under the ownership of LEDA/Lakshadweep Administration. If ownership of debris/scrap shall be with the contractor, SECI may please ensure that necessary approvals for transfer of ownership to the contractor is in place. Kindly confirm.	Technical	As per Section VII A. , Scope of Works , Clause 6.1.3, Dismantling & disposal of existing concrete support pedestals, MMS structure and any other existing facility which is to be dismantled and disposed of from the site is in the scope of the Contractor.
7	I	5		DEBRIS REMOVAL INCLUDING SCRAP HANDLING WILL BE IN THE COPE OF CONTRACTOR ONLY & ACCORDINGLY SUCH COST FOR DISMANTLING WORK SHALL BE FILLED BY THE BIDDER IN THE SOR SHEET WHILE SUBMITTING THE BID.	We understand that the cost against dismantling and debris removal to be filled in the SOR sheet is only on account of the works component.  We understand that, as the ownership of the scrap shall be with the contractor, any other party including SECI/Lakshadweep authorities shall not stake any claim in the proceeds from scrap sale. If this is not the case, then Please include a separate line item for price adjustment on account of sale of scrap by the contractor.	Technical	SECI/Lakshadweep shall not claim any stake on scrap sale by contractor subject to passing the cost of the scrap (while determining the tariff ) to the Administration as discovered during the bidding process. Bidders are required to quote in the mentioned SOR line item for :  'Site clearance & preparation including dismantling, demolishing, mms removal, Civil structures removal, ground clearance, leveling, back filling (if required), debris removal including scrap handling and its sale & adjusting the Scrap sale cost in this line item only along with the other services cost'.  The disposal of such items is to be done in accordance with the E-Waste (management & Handling rules), 2011 and its subsequent amendments Kindly refer Amendment Point No 18 for the same.
8	I	5		BIDDERS ARE REQUIRED TO QUOTE ACCORDINGLY IN THE SCHEDULE OF RATES (SOR) FOR THE COMPLETE CUMULATIVE PACKAGE COMPRISING OF ALL THE 04 ISLANDS RE PROJECTS. THE TOTAL PACKAGE/WORK AS MENTIONED ABOVE WILL BE AWARDED TO A SINGLE SUCCESSFUL BIDDER ONLY SELECTED AFTER E-REVERSE AUCTION (E-RA). E-RA WILL BE CONDUCTED FOR THE COMPLETE PACKAGE ONLY	As the reverse bidding will take place on EBV (EPC + NPV of O&M), it is requested that SECI may consider that bidder submits only total EPC price and yearly O&M price at the time of bid submission. Only the successful bidder may be asked to submit the EPC price break-up after e-Reverse Auction.	Contractual	The terms & conditions of the Tender Document will prevail
9	I	6		Invitation for Bids (IFB)  ..... SECI AT ITS OWN DISCRETION MAY INCREASE OR DECREASE ANY OF THE ABOVE-MENTIONED SITE CAPACITY FROM THE OVERALL CUMULATIVE CAPACITY BEFORE/AFTER AWARD OF CONTRACT AGREEMENT. ACCORDINGLY, THE TOTAL CONTRACT PRICE WILL BE PROPORTIONATELY AMENDED & THE FINAL CONTRACT PRICE ARRIVED AS SUCH AFTER AMENDMENT WILL BE THE FINAL CONTRACT PRICE OF THE CONTRACT AGREEMENT. THE FINAL PROJECT CAPACITY MAY VARY WITHIN A TOLERANCE BAND OF + (PLUS) OR - (MINUS) 20% (TWENTY PERCENT) OF THE ORIGINAL PROJECT CAPACITY.	Bidder request that increase or decrease of site capacity shall be carried out before award of contract agreement as this will enable proper planning of material and manpower for timely execution at site. Same is requested as Batteries to be imported and have a significant lead time and cost implication. Please accept.	Contractual	Kindly refer Amendment Point No 14 for the same.
10	IV	79	2	GCC	As Lakshadweep is an island territory, Bidder requests SECI, being the owner, to provide resources like water, power through the Lakshadweep authorities and details on availability of labor etc required to carry out all the construction/commissioning works. Also kindly share the permission/pass requirement for equipment & manpower to carry out the above activities. Is there any restriction on entry of foreign nationals to site? If yes kindly share the details.	Technical	Entry to the islands is through permits issued by LED. There are no specific restrictions for the entry of foreigners. SECI shall facilitate the issuance of permits as and when required. The Contractor shall intimate any such requirement at least 7 working days in advance.
11	IV	80	2.3	Contractor will have to make his own arrangements for supply of water to his labor camps and for works.....Alternatively, the Employer/ Owner at his discretion may endeavor to provide water to the Contractor at the Employer's/ Owner's source of supply.....However, the Owner does not guarantee the supply of water and this does not relieve the Contractor of his responsibility in making his own arrangement	Bidder requests SECI to provide water for construction and O&M on chargeable basis at all the four locations.	Technical	The terms & conditions of the Tender Document will prevail

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**Clarifications to Queries raised during Pre-Bid Meeting**

12	IV	80	2.4.1	Contractor has to arrange for the construction power supply of their own. However, subject to availability, Employer/ Owner may provide access to the nearest available point in his location for supply power at only one point, from where the Contractor will make his own arrangement for temporary distribution through a temporary energy meter (sealed by Employer/ Owner).	Bidder requests SECI to provide power for construction on chargeable basis at all the four locations, up to plant commissioning.	Technical	The terms & conditions of the Tender Document will prevail
13	IV	97	32.1.3	In the matter of connectivity of Plant to DISCOM's substation, the Owner will take the necessary connectivity permission, however, all the other permissions and clearances as deemed required by the State Agency/DISCOM for Bay allocation, technical/regulatory compliance for interconnection, ROW etc are to be taken by the Contractor. Statutory fees pertaining to such shall be reimbursed by the Owner on production of the documentary evidence/Demand note over and above the contract value.	We request that Right of Way, if any, may please be in owner's scope.  Also we understand that all statutory fees pertaining to commissioning and O&M of the plant is in owner's scope. Please confirm.	Technical	The terms & conditions of the Tender Document will prevail
14	IV	107	48.3	The Contractor shall supply & deliver all equipment and materials for installation at site. The Contractor shall arrange for transportation, loading & unloading, local sifting, EAR insurance and safe storage of materials at project site at his own cost & risk.	We understand that there is no jetty available at Bangaram. Therefore, we request SECI, being the owner, to arrange the logistics at Bangaram on chargeable basis through Lakshadweep Port department.	Technical	It shall be the responsibility of the Bidder to arrange for logistics to each site.
15	IV	107	48.3	The Contractor shall supply & deliver all equipment and materials for installation at site. The Contractor shall arrange for transportation, loading & unloading, local sifting, EAR insurance and safe storage of materials at project site at his own cost & risk.	Alternatively, we propose that Contractor shall supply all equipment and materials up to Cochin/Beyport port only, thereafter logistics up to respective sites may please be taken care by SECI on chargeable basis through Lakshadweep port department.	Technical	It shall be the responsibility of the Bidder to arrange for logistics to each site.
16	IV	108	51.1	Change in laws and Regulations: ".....these adjustments would be restricted to direct transactions between the Owner and the Contractor. This adjustment shall not be applicable on procurement of raw materials, intermediary components etc. by the Contractor and shall also not be applicable on bought out items dispatched directly from sub- vendor works to site....."	Dispatches from Sub-Vendor's works constitute a major portion of Supplies for SPV project. Hence any adjustments in Contract Price due to changes in laws and regulations shall be allowed on such procurement and dispatches also as well as on procurement of raw materials and components to avoid any loss to contractor due to Change in Laws and regulations. For kind information, such adjustments are being allowed by NTPC also. SECI may please consider the above and clarify and confirm	Contractual	The terms & conditions of the Tender Document will prevail
17	V	142	3	The Time for Commissioning of the respective Plants at respective Islands shall be: a) Agatti Island, 300 KWp: 12 (Twelve) Months b) Kavaratti Island, 1400 KWp: 12 (Twelve) Months c) BangaRam Island, 150 KWp: 06 (Six) Months d) Thinnakara Island, 100 KWp: 06 (Six) Months	Considering the additional scope of work pertaining to dismantling and demolishing the existing solar plant and site preparation thereafter, in addition to logistics, labor availability, working challenges at the site. Prolonged monsoon period & other uncertain climatic conditions that would require longer project completion time, Bidder requests SECI to revise the Time for completion to:  a) Agatti Island, 300 KWp: 18 (Eighteen) Months b) Kavaratti Island, 1400 KWp: 18 (Eighteen) Months c) BangaRam Island, 150 KWp: 12 (Twelve) Months d) Thinnakara Island, 100 KWp: 12 (Twelve) Months	Technical	Kindly refer Amendment Point No 16 & 17 for the same.
18	VII	199	1	Project Particulars: Site location and land details : Refer Annexure-A Electrical Interconnection details: Refer Annexure-A	Kindly provide Annexure-A having location of the proposed ground mounted solar plant and the area available, distance to the connecting substations  Also please share the ACAD of the proposed SPV project location for understanding the area available, contour, cable length etc.	Technical	Annexure-A (Site Layout) contains site layout and corresponding power house locations. The file is in .kml format from which area and perimeter details can be seen.
19	VII	205	5.1.5	Laying of 11 kV/415 V AC cables (two runs) in brick trenches from Plant end to switchgear panels at LED power house along with termination at both the ends	Right of Way (RoW) and associated statutory permissions for laying of 11KV/415V AC cables may please be in owner's scope.  Kindly provide the tentative route of 11KV/415 V AC cable from SPV to LED power house for estimation of underground cable length and details of private land, if any, enroute.	Technical	Please refer Annexure A (Site Layout) for estimation purposes
20	VII	219	1.2	PV technology - Mono crystalline	This is a restrictive clause. Since multi crystalline performance is also comparable with mono crystalline, please allow multi crystalline modules also.	Technical	The terms & conditions of the Tender Document will prevail
21	VII	220	1.2	Module efficiency - ≥ 20% (Glass/Polymer PV Modules) ≥ 19.5% (Glass/Glass PV Modules)	This is a restrictive clause. Module efficiency as per standard Industry practice of min 16% (multi) and min 17% (mono) may please be allowed	Technical	The terms & conditions of the Tender Document will prevail
22	VII	220	1.2	Temperature co-efficient of power - Not less than -0.30%/°C	Temperature co-efficient of power of -0.45%/°C may please be allowed as per standard industry practice.	Technical	Kindly refer Amendment Point No 6 for the same.
23	VII	223	1.6.6	Current binning of modules shall be employed so that current mismatch of modules in a pallet does not exceed 0.1 A. Different color codes shall be provided on the modules as well as pallet for identification of different bins. Maximum three nos. of bins will be allowed for each Module rating.	BHEL does binning as per each five wattages band by our automated packing machine instead of current binning. Please allow.	Technical	The terms & conditions of the Tender Document will prevail
24	VII	225	3.4	Compact Sub-Station shall consist of 2 (two) nos. of 11 kV/inverter output voltage - dry type inverter duty transformers in parallel, 11 kV SF6 insulated Ring Main Unit (RMU), LT switchgear, Power Conditioning Units with all accessories, interconnections, fittings and auxiliary equipment. The complete unit shall be installed on a plinth (base) as outdoor substation.	As Power Conditioning Units in the form of String Inverters is envisaged for the project(s), due to the decentralized nature of installation of string inverters, they may please be excluded from the Compact Sub-station at Agatti and Kavaratti also. Kindly accept.	Technical	The terms & conditions of the Tender Document will prevail
25	VII	270	17.3.8	Controllers shall be capable of sending data over Internet connections USB data cards	Controllers having inbuilt GSM module may also be approved for sending data over internet	Technical	The terms & conditions of the Tender Document will prevail
26	VII	329	3.1.1	The BESS Supplier/sub-Contractor must have experience of having successfully completed Design, Engineering, Procurement, Construction, Installation, Testing and Commissioning of Grid Connected Battery Energy Storage System (BESS) of at least 03 (Three) Grid connected BESS Plants, each having an individual capacity of 0.5 MWh (Five hundred kilo Watt Hour) or above in last Five years. However, such BESS Plant capacity must have been in satisfactory operation for at least 12 (Twelve) months from the date of commissioning.	Bidder understands that the said requirement is for BESS supplier. Sub-contractor only and is not a qualifying criteria for Bid-submission. Kindly confirm.	Technical	Yes, the said requirement is for BESS supplier-sub-contractor and is not a qualifying criteria for Bid-submission
27	VII	346	5.7.4	Digital displays, on the BESS Control Panel, shall update at least once per second. The DAS shall be integrated with the Solar PV SCADA described elsewhere in this Technical Specification either as addendum or within an overall Energy Management System Interface.	The SCADA system shall be interfaced to BESS DAS system through a standard protocol supported by SCADA system	Technical	Please refer Clause 5.7.3. The terms & conditions of the Tender Document will prevail
28	VII	359	14.1	MMS structure shall be supported on precast RCC sleepers to be designed to withstand the loads coming from MMS and effectively transfer them to the ground.	We understand that MMS foundations as Clause 12, Pg 301-305 are also allowed. Please confirm.	Technical	Kindly refer Para 2 of Clause 2 of Section-VII(A) - Scope of Works. "All works shall be executed as per Technical Specifications given in Section VII-B. Section VII-C lays down Special Technical Specifications with reference to site specific design requirements. However, in case of any conflict in requirements between Section VII-C and Section VII-B, Section VII-C shall have the precedence."
29	Section- VII (B)	TS-117	3.1	Rated No of Cycles (Minimum): 4000 cycles at rated energy capacity at 80% Depth of Discharge (DoD) at 25oC and up to C/3 Rate of Discharge	Since the battery End of life is defined for the battery performance & contractor has to make periodic replacements/replenishments of batteries if and when required up to the end of life of battery, the number of cycles are irrelevant. Hence the same shall be removed. The supporting clauses are reproduced below.	Technical	The terms & conditions of the Tender Document will prevail

**Declaration : The compiled Pre Bid Queries have been reproduced on as it is basis, without any modifications.**

**Clarifications to Queries raised during Pre-Bid Meeting**

30	Section II - Annexure II to ITB	39	5.1 (b)	Hard Copy (b)Original Non-Refundable Cost of Tender Document	It is understood that the tender document is free of cost, hence bidders don't need to purchase the tender document, only download the official copy for participating in the bid. Please confirm	Contractual	Yes
31	Section III - Annexure to BDS	2	1.2	TECHNICAL ELIGIBILITY CONDITIONS Bidders can participate through any one of the below mentioned qualifying routes. The Bidder shall be considered meeting Technical Eligibility criteria either from Route I or Route II.	Bidder is already having experience in EPC/ Developing SPV projects with BESS integration of similar capacity, nature & complexity in Roof Top PV installations. 1. 1 MW RTPV with BESS, 2. 200kW RTPV with BESS, 3. 220kW RTPV with BESS. Hence we request SECI to consider the credentials of rooftop solar projects as well in order to meet the Technical Eligibility Criteria.	Contractual	The terms & conditions of the Tender Document will prevail
32	Section IV - GCC	37	45.3	45. Operation and Maintenance Breakdown / Corrective maintenance: The Contractor must demonstrate the committed CUF at the end of every year in accordance with commitment made in line with the Performance guarantees.	As per bidders understanding there is no committed CUF during the O&M period only Availability Factor is to be demonstrated at the end of every year. Request SECI to confirm the same.	Contractual	Kindly refer Amendment Point No 15 for the same.
33	Section V - SCC	2	3	The Time for Commissioning of the respective Plants at respective Islands shall be: a) Agatti Island, 300 KWp: 12 (Twelve) Months b) Kavaratti Island, 1400 KWp: 12 (Twelve) Months c) BangaRam Island, 150 KWp: 06 (Six) Months d) Thinnakara Island, 100 KWp: 06 (Six) Months All above mentioned commissioning timelines are from the date of Notification of Award (NOA)/LOA/LOI	Since transportation and logistics will be very critical and time bound for these projects to be installed in 4 (four) separate islands of Lakshadweep, all four projects will have similar complexity and time requirement independent of the capacity of the project. Hence we request SECI to consider the commission period of 12 months for all the four projects.	Contractual	Kindly refer Amendment Point No 16 & 17 for the same.
34	Section V - SCC	2	3.1	Zero Date - Issue of NOA/ LOA/ LOI (as applicable) of the respective Plants at respective Islands	Request SECI to consider Notice to Proceed (NTP) / Hand over of site as ZERO date.	Contractual	The terms & conditions of the Tender Document will prevail
35	Section V - SCC	6	5	Further, any delay beyond 30 (Thirty) days shall attract delay charges @ 1.25% per month on the total Contract Performance Security amount, calculated on pro-rata basis accordingly. However, total project completion period shall remain same. Part Security shall not be accepted. Further, Owner at its sole discretion may cancel the Contract Agreement/ NOA & forfeit 100% of EMD inclusive of GST, in case Contract Performance Security is not submitted within 45 (Forty-Five) days from issuance of NOA/LOA/LOI.	Since there is already imposition of Liquidated Damages for delay in time of commissioning as per SCC Clause 4 (GCC Sub clause 20), we request SECI to waiver of additional delay charges @ 1.25% per month on the total Contract Performance Security amount.	Contractual	The terms & conditions of the Tender Document will prevail
36	Section V - SCC	6	6	For every 0.01 shortfall in PR below the committed PR value, a penalty of 1% of the total Contract Value (i.e., total sum of all the Supply, Service and absolute value of O & M Contract) shall be levied.	We request SECI to reduce the penalty to 0.5 of the total contract value to be levied for every 0.01 shortfall in PR below the committed PR value.	Technical	The terms & conditions of the Tender Document will prevail
37	Section V - SCC	7	6	4.Liquidated damages during O&M period against breakdown of other Infrastructure of Plant which doesn't affect the generation of power, directly such as but not limited to civil infrastructure, water supply system/network, other infrastructure developed by the Contractor as a Scope of Work for the Project (Section-VII: Scope of Works & Technical Specifications) shall be penalized @ Rs.1000/day, per incident of breakdown reported beyond 07 Days of such reporting. Cumulative value of such penalty shall be limited to 50% of yearly O&M cost.	Request SECI to consider the cumulative value of such penalty shall be limited to 10% of yearly O&M cost.	Contractual	The terms & conditions of the Tender Document will prevail
38	Section VI - SOR			Form F2, F3 & F5 - Indemnity Bond	Request SECI to confirm the value and the state of which stamp paper is required for INDEMNITY BOND	Contractual	INR 100, Delhi
39	Section VII - SOW	3	1	Project Particulars	Request SECI to share Annexure A referred to in the tender document as the same is missing from the tender document downloaded.	Technical	Attached.
40	Section VII - SOW	10	1.3.7	Each PV Module shall be provided a RFID tag which is embedded inside the module lamination and must be able to withstand harsh environmental conditions	RFID can be outside the module laminate or behind the name plate sticker. Request SECI to consider the same.	Technical	The terms & conditions of the Tender Document will prevail
41	Section VII - SOW	11	1.4.3	The above warranties shall be backed by third party insurance.	Third Party Insurance to cover the warranty on the module is an unnecessary obligation which increase the price of the module. Bidder is already providing Contract Performance Guarantee for up to 10 years to compensate for any loss due to defect in the system. Moreover very few manufacturers provide third party insurance on their module which is already backed by manufacturers warranty. Hence we request SECI to remove such clause.	Contractual	The terms & conditions of the Tender Document will prevail
42	Section VII - TS	86	9	Plant Layout	Request SECI to share indicative site layout (having area, lat & long etc.) and Single Line Diagram for understanding and clarity.	Technical	Attached. Kindly refer Annexure-A (Site Layout) and Annexure-B (Indicative Single Line Diagram).
43	Section VII - TS	115	2.3	Grid Characteristics The BESS shall be capable of continuous operation under variable voltage, frequency and phase imbalance conditions at the PCC, as described in Table-1. Information on available fault current and other characteristics of the Host Utility grid will be provided by the Host Utility. The Contractor shall confirm, for each Host Utility site, that this information has been received and understood during the site-specific engineering phase.	Request SECI to arrange for getting the Grid Characteristics of local Host Utility Grid of Lakshadweep Electricity Department, for better understanding and designing the SPV & BESS system.	Technical	It shall be the responsibility of the successful Bidder to collect requisite data at the time of detailed engineering.
44	Annexure E 0 PG Test Procedure	3	2	Functional Guarantee for Solar PV Plant shall comprise of following Guarantees: (1) Performance Ratio Guarantee test for operational acceptance. (2) Annual Generation Guarantee up to a period of 10 years (O&M Period), starting from the date of Operational Acceptance.	As per bidders understanding the following is not part of functional guarantee "(2) Annual Generation Guarantee up to a period of 10 years (O&M Period), starting from the date of Operational Acceptance.". Request SECI to confirm the same.	Technical	Kindly refer Amendment Point No 5 for the same.
45	Section VII - SOR			Schedule of Rate (SOR 1 & SOR 2)	It is observed in the Schedule of Rate (SOR 1) that there is no breakup of line item regarding BESS. Since the SOR 1 will be referred in future for preparing the billing break-up for each item we request SECI to incorporate the same in the SOR and share the revised copy.	Contractual	Kindly refer Amendment Point No 18 for the same.
46	GCC	97	32.1.3	In the matter of connectivity of Plant to DISCOM's substation, the Owner will take the necessary connectivity permission, however, all the other permissions and clearances as deemed required by the State Agency/DISCOM for Bay allocation, technical/regulatory compliance for interconnection, ROW etc are to be taken by the Contractor.	please clarify about the necessary connectivity permission which owner will perform ??	Technical	The terms & conditions of the Tender Document will prevail
47					Any mix technology can be used wrt battery according to use case ???	Technical	No, a mix of technology is not accepted.
48					BESS min. requirement is 0.5 mwh three plant. is this clause for globally installation experience accepted??	Technical	Yes global experience is accepted.
49					Any load profile pattern details according to use case as mentioned .	Technical	Not available.
50					codes and standard that is applicable for BESS part is it for complete system ??	Technical	Yes it is for complete system.
51					Previous plant installed capacity at various location with total area ,SLD, photo graph, lat long, kmz file etc required.	Technical	Kindly refer Annexure-A (Site Layout) which is in kml format.
52					soil report of all the location	Technical	Soil test report is not available. However, information regarding soil strata, safe load bearing capacity and ground water table are mentioned in Clause 4 of Section-VIII(C) - Special Technical Specifications.

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**Clarifications to Queries raised during Pre-Bid Meeting**

53					As tender all the dismantling of all the previous plant is in bidder scope any confirmation of the disposal of scrap and find out the purchaser of that scrap( sale of scrap ) , is this in bidder scope ??? Le handling of scrap till which stage is in bidder scope	Technical	As per Section VII A , Scope of Works , Clause 6.1.3, Dismantling & disposal of existing concrete support pedestals, MMS structure and any other existing facility which is to be dismantled and disposed of from the site is in the scope of the Contractor
54	IFB	5		Dismantling and Demolishing of the existing solar project	Please clarify if any of the the project from 4 sites are to be installed at the land of the existing project which is required to be dismantled	Technical	Kindly refer Clause 5 of Section-VIII(C). Except Trunkara, all the other projects have to be installed on the land of the existing projects.
55	Il (b) As part of Second Envelope	23		Main Price Bid comprising of SOR-1 & SOR-2 of the Price Schedule (available in Section - VIII, SOR), duly completed, sealed and signed/ digitally signed shall be uploaded. "Termed as MAIN BID".	Please confirm if bid price is required to be filled online or duly filled in price SOR-1 and SOR-2 needs to be uploaded in portal?	Contractual	It's a complete Online Tendering Process and No prices are to be submitted in Hard copies. The SOR sheets are to be duly filled and uploaded under Envelope 2/Price Bid. No SOR sheets are to be uploaded under Envelope 1/ Technical Bid.
56	Cl. 32.1.3	97		Tree cutting	Please confirm land will be provided by SECI after cutting and removal of trees, if any.	Projects	Cutting and removal of trees, if any, shall be in the scope of the bidder.
57	Cl. 32.1.3	97		Approval- Tree cutting	Please confirm tree cutting approval will be taken by SECI	Projects	Cutting and removal of trees, if any, shall be in the scope of the bidder. However SECI will facilitate in this regard.
58	Cl. 32.1.3 & 7	97 & 207		Connectivity approval- in scope of owner/bidder	The is contradiction in clause, please confirm that Connectivity approval will be taken by owner.	Contractual	The terms & conditions of the Tender Document will prevail
59				Indemnity Bond	Please provide the value of stamp paper of the Indemnity Bond	Contractual	INR 100, Delhi
60	Cl 7.3	207		Gate entry system, as per SCCL requirement, shall be followed by the contractor for all their personnel and vehicle movement.	This seems to be a typo error, please clarify.	Contractual	Kindly refer Amendment Point No 4 for the same.
61	8.6	208		DSM Charges	We request SECI to consider DSM charges, if any, in their scope or share part of 50% of the DSM Charge	Contractual	The terms & conditions of the Tender Document will prevail
62	1.4.3	222/390		The above warranties shall be backed by third party insurance.	None of the Indian module mfg has this insurance, we request SECI to also accept BG for performance of the module in place of insurance , this is the prudent industry practice followed by GIPCL, GSECL, NTPC etc, pls accept BG as of Rs 10 lakhs/MW of PV modules valid for 25 years .	Contractual	The terms & conditions of the Tender Document will prevail
63	1.2	219		Monocrystalline modules/Module Efficiency	Plss allow mono or poly crystalline modules.	Technical	The terms & conditions of the Tender Document will prevail
64	1.3.1	220		The minimum thickness of glass shall be 4.0 mm for 72 cell module and 3.2 mm for 60 cell module.	Please consider glass thickness to be 3.2 mm for 72 cell module as industry standard for major module manufacturers.	Technical	The terms & conditions of the Tender Document will prevail
65	Sec-VII, B, 3.4	255		Compact Sub-Station shall consist of 2 (two) nos. of 11 kV/inverter output voltage - dry type inverter duty transformers in parallel, 11 kV SF6 insulated Ring Main Unit (RMU), LT switchgear, Power Conditioning Units with all accessories, interconnections, fittings and auxiliary equipment. The complete unit shall be installed on a plinth (base) as outdoor substation.	Kindly consider solutions even without compact substations.	Technical	The terms & conditions of the Tender Document will prevail
66	TS 3.1	328		One discharge cycle per day is envisaged overall for all use cases, combined. (i.e. 3650 cycles considering 10 years) 4000 cycles at rated energy capacity at 80% Depth of Discharge (DoD) at 25oC and up to C/3 Rate of Discharge	Discrepancy is observed in no. of cycles for which BESS is to be designed. Requesting confirmation	Technical	The terms & conditions of the Tender Document will prevail
67				Clause Error! Reference source not found..	Multiple references in the tender have these invalid references. Client to confirm the clause no. for each of error.	Technical	Kindly refer Amendment Point No 7 for the same.
68	5.7.4	Page 135 of 145		The DAS shall be integrated with the Solar PV SCADA either as addendum or within an overall Energy Management System Interface.	Details of existing Diesel Generator system (No. of DG, Make, model and Location of DG shall be provided Distance between BESS/PV/DG locations shall be provided We assume, communication network is available between DG and proposal BESS and PV locations, which can be used for interface with existing system. Please confirm. Single line diagram of existing system with DG interconnection.	Technical	The Make and Models of DGs are provided in Annexure 3 to Amendments. Please refer Annexure A for project locations. No communication network is available between DG and proposal BESS and PV locations, which can be used for interface with existing system. It shall be the responsibility of the successful bidder to integrate the SPV and BESS with existing DG Grid.
69	1.2	Page 113 of 145		Interconnection of the BESS with the grid is at the point of common connection (PCC). The Contractor shall be responsible for all equipment and installation activities up to the system side of the PCC. The Contractor will be responsible for completing the necessary work for interconnection point.	Please provide details of existing system and interconnection requirements.	Technical	Please refer SECTION - VII : Scope of Work & Technical Specifications
70	3.1	Page 117 of 145		Peak Management - In the PM use case, the BESS is controlled to reduce peak power demand on the Host Utility feeder to which the BESS is connected. The BESS would be discharged at any power level up to the maximum power level specified as the nameplate watt rating	We assume, external real power set points will be given to BESS controller by customer control/dispatch center to perform required Charge and Discharge. No automatic monitoring of loads and peak control is envisaged in BESS controller.	Technical	Automatic monitoring of loads is envisaged in BESS controller.
71	4.3.1	Page 120 of 145		Containerization and transportability - When fully installed, all BESS components—including battery racks all auxiliaries, such as HVAC and fire suppression systems, step-up transformers to match grid, ac switchgear, and so on—and tools shall be enclosed in (or on) the containers, even if certain components must be separately shipped and installed at the site.	Can bidder offer suitable rated outdoor type step-up transformers.	Technical	The terms & conditions of the Tender Document will prevail
72	4.9	Page 125 of 145		Power Conditioning System Design Requirements	Can bidder offer outdoor rated PCS inverters, which is suitable for specified ambient conditions of site?	Technical	Outdoor inverters are not allowed. Original tender conditions shall prevail.
73	4.9.4.3	Page 128 of 145		The transformer must be dry type.	Can bidder offer oil type transformer?	Technical	Oil type transformers are not allowed. Original tender conditions shall prevail.
74	6.1.2	206/390		General clearing of plant site and TL corridor by cutting of bushes and shrubs including disposal of waste material	The corridor for transmission line ROW shall be in clients scope. The distance of the evacuation point from respective solar plant shall be shared.	Technical	Please refer Annexure A (Site Layout) for estimation purposes
75				Compact substation	Please share the details/ sld for compact substations.	Technical	Kindly refer Annexure-B for indicative single line diagram. Detailed SLD shall be decided during detailed engineering.
76	5	358/390		The existing ground mounted SPV plants at Agatti, Kavaratti and Bangaram islands are to be dismantling	Please share the details of the existing solar plant / MMS structure etc to be dismantled.	Technical	Kindly refer Annexure-A (Site Layout) for the layout of existing plants.
77	5.3.6	229/390		.....DC negative terminal shall be grounded	In case of string inverters the negative shall be floating.	Technical	Kindly refer the last line of the same clause. "In case DC negative grounding is not possible, appropriate anti-PID device shall be provided."
78	6.4.3	233/390		Inverter Transformer shall be designed for at least 5% total harmonic distortion (THD) to withstand distortion generated by the inverter as well as possible outside harmonics from the network	THD shall be max 3%	Technical	The terms & conditions of the Tender Document will prevail
79				For HT cables (from Transformer to LED power house), maximum voltage drop shall be limited to 0.5 % of the rated voltage	In case of LT (415V ) evacuation , please share the maximum permissible voltage drop.	Technical	In case of LT (415V ) evacuation , maximum voltage drop shall be limited to 1%.
80	3.8.1	226/390		The CSS shall have separate compartments for transformer, RMU and PCU &....	string inverters shall be placed in between or below the the MMS structure.	Technical	The terms & conditions of the Tender Document will prevail
81				SCADA	Each plot shall have separate SCADA system.	Technical	Yes SCADA shall be provided for each island/site
82				Main control room	Bidder understands that, the Main control room shall be separate for all the four plots with separates items	Technical	Main Control Room shall be provided for all the four sites.
83				Weather monitoring system	All the items and quality shall be supplied for the whole whole project irrespective of location/site.	Technical	Kindly refer Clause 4.1.17 of Section-VIII(A) - Scope of Works. All the items mentioned under 'Weather Monitoring Station' shall be provided for each of the four sites.

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**Clarifications to Queries raised during Pre-Bid Meeting**

84					The tender specification has no specific specification of the BESS system. Please share the technical specification of the same.	Technical	Please refer Section VII B: Part E: Battery Energy Storage System of the Technical Specifications.
85	6.1.2	206/390		General clearing of plant site and TL corridor by cutting of bushes and shrubs including disposal of waste material	Please share the details of the specific waste material, if any, which needs special care / location to be disposed.	Technical	Existing concrete support pedestals, MMS structure, PV modules and any other existing facility which is to be dismantled and disposed of from the site.
86	6.1.3	206/390		Dismantling & disposal of existing concrete support pedestals, MMS structure and any other existing facility which is to be dismantled and disposed of.	If found "OK", can bidder use the existing MMS structure for placement of modules.	Technical	No, the existing MMS structures are to be dismantled.
87					The shared MMS sketch, shows string of 20 modules, i.e. 1000V DC system. Bidder advise to go for 1500V DC system, i.e. 30 module string. This will help to get more generation from the plant.	Technical	Although the suggestive MMS drawing shown in Appendix-1 is for 1000V only, the same may be extended for 1500V with 6L x 5 configuration.
88	C - 3.3	287/390		The field investigations shall mainly include drilling of min. 5m deep boreholes (50% of total No. of boreholes shall be 10m deep).	The founding depth of any structure will be within 5 m depth from NGL. So, we propose all boreholes of 5 m length to study the soil behavior.	Technical	The terms & conditions of the Tender Document will prevail
89	C - 3.8	289/390		Cement higher than 43 Grade, shall not be used in construction.	Please mention the type of cement (OPC or PPC)	Technical	OPC 43. Kindly refer Amendment Point No 1 for the same.
90	C - 8.3.2	296/390		50 thick PCC (1:2:4) coping finished smooth and projecting 25mm on either side of the wall with top sloping inwards.	Providing projection will result in delay in site execution work. So, coping of same width of wall is proposed.	Technical	The terms & conditions of the Tender Document will prevail
91	C - 8.6.3	297/390		The main gate shall be of 2.5m height and shall have 4.5m wide Gate for vehicular movement and an adjacent 1.5m wide wicket gate for pedestrian movement.	As per clause 8.2 (page 296), the main gate shall be min. 5.5m wide (clear) (4 m carriage way + 1.5m wicket gate). So clarification required regarding the width of main gate.	Technical	Kindly refer Amendment Point No 2 for the same.
92	C - 12.2.1	301/390		The min. dia. and depth of the pile shall be 300mm and 1800mm respectively for MMS foundation.	Length of pile shall be as per recommendations of Geotechnical investigation report corresponding to prevalent soil characteristics at site. Clarification required regarding the min. length of pile as 1800 mm.	Technical	For MMS foundation design criteria, kindly refer Clause 14.1 of Section-VII(C) - Special Technical Specifications which supersedes the provisions in Section-VII(B) for MMS foundation.
93				land layout	Please share the available land area of each plot with Land drawing in Auto cad format.	Technical	Kindly refer Appendix 2 : Suggestive site layout
94				Topography report	Pls share topography report	Technical	Topographical report is not available. However, the ground is generally flat at all the proposed sites with local undulations. Kindly refer Clause 4 of Section-VII(C) - Special Technical Specifications.
95				Soil test report	Pls share Soil test report	Technical	Soil test report is not available. However, information regarding soil strata, safe load bearing capacity and ground water table are mentioned in Clause 4 of Section-VII(C) - Special Technical Specifications.
96	SECTION - VII : SECTION - VII A. SCOPE OF WORKS	Page-200 of 390	3.2	All documents and drawings shall be submitted to the Employer both in soft as well as hard copy (1 no.) for review and approval. Every drawing shall also be submitted in ".dwg" format. In case of design calculations done in spread sheet, editable (working) soft copy of the spread sheet shall also be submitted along with 'pdf' copies during every submission.	As per various company policy, contractor can share only pdf copy. Request to remove this clause.	Technical	The terms & conditions of the Tender Document will prevail
97	SECTION - VII B. TECHNICAL SPECIFICATIONS	page-225 of 390	3.4	3.4 Compact Sub-Station shall consist of 2 (two) nos. of 11 kV/inverter output voltage - dry type inverter duty transformers in parallel, 11 kV SF6 insulated Ring Main Unit (RMU), LT switchgear, Power Conditioning Units with all accessories, interconnections, fittings and auxiliary equipment. The complete unit shall be installed on a plinth (base) as outdoor substation.	At Page-199 of 390, mentioned plant capacity as 1400kW/kWp- Kavaratti, evacuation at 11 kV & 300kW/kWp-Agatti, evacuation at 11 kV. Please suggest the vendor to provide the compact station for this two projects of mentioned capacity or request to remove this clause & add the normal oil cooled transformer with ICOG & other suitable protection, etc.	Technical	The terms & conditions of the Tender Document will prevail
98	SECTION - VII B. TECHNICAL SPECIFICATIONS	Page-281 of 390	22	The Contractor shall provide the following set of instruments for on-site testing.	Is it required only one between four sites? Please confirm.	Technical	Kindly refer Amendment Point No 3 for the same.
99	SECTION - VII B. TECHNICAL SPECIFICATIONS	Page-292 of 390	6.2	The Approach road connecting nearest public road and the Main gate shall be of 5m wide carriage way with 0.5m wide shoulders on either side.	Please provide the approx length from each site to nearest Public road.	Technical	Please refer Annexure A (Site Layout) for estimation purposes