Clarifications for 2x1.5 MW (AC) PV Power Plant with BESS at Tangtse and Durbuk in Leh district of J&K dated 20.08.2016						
S. No.	**Section**	**Page No.**	**Clause No.**	**Tender Description**	**Query**	**Clarification**
1	GCC	30 of 76	32.1.4	In the matter of connectivity of Plant to DISCOM's substation, ……"coordination with DISCOM for Bay allocation, technical/regulatory compliance for interconnection including payment of Fee or any other charges to the state agencies/DIOSCOM as the case may be shall be taken care by the Contractor. Bidders are advised to include these cost in their final offer/Price BID."	We understand that the project is for microgrid application and therefore no such approval and payment of fee to DISCOM or any other state agency for interconnection is required. Please confirm.	Confirmed.
2	SCC	5 of 9	8 (1)	every 0.01 shortfall in PR below 0.78 by the bidder, a penalty of 0.1% of the total Contract Value (i.e., total sum of all the Supply Contract, Service Contract and absolute value of O & M Contract) shall be levied. In case the Plant PR result is 0.05 below 0.78, i.e., 0.73 or lower, the total Contract Performance Security submitted by the bidder will be forfeited	It is requested that contractor should only be penalised by means of PR shortfall LD and not by means of forfeiting total Contract Performance Security. Please consider.	Kindly refer amendment-01

3	GCC	40 of 76	51.1	Change in Laws and Regulations If, after the date seven (7) days prior to the date of Bid submission, in the country where the Site is located, any law, regulation, ordinance, order or by-law having the force of law is enacted, promulgated, abrogated or changed (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the costs and expenses of the Contractor and/or the Time for Completion, the Contract Price shall be correspondingly increased or decreased, and/or the Time for Completion shall be reasonably adjusted to the extent that the Contractor has thereby been affected in the Performance of any of its obligations under the Contract. However, these adjustments would be restricted to direct transactions between the Executing Agency//Owner and the Contractor/assignee of Foreign Contractor (if applicable). 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.	As majority of the items are bought out items, being dispatched diretly from vendor works to site, the impact of change in law will be considerable. We request SECI/MES to consider adjustment of the Contract Price on account of change in law for bought out items as well.	MES shall award the contract based on EPC price discovered through bidding process. Only tax implications arised on account of agrement between MES and the contractor shall be adjusted and not on input cost. Hence, Tender conditions shall prevail.
4	GCC	64 of 76	93.4	GST :in case of Bought out Items supplied in the Project execution, there would be two transactions viz. one between “Third Party/Subcontractor/Supplier” and the “Contractor” and second between “Contractor and Owner/Employer”. In such case, statutory variation in taxes levied/to be levied between the former transactions would not be reimbursed, however, same would be reimbursed for the later transaction	We request that any statutory variation in taxes and duties may please be reimbursed at actuals for bought out items as well.	Tender conditions shall prevail.
5	SCC	5 of 9	8(2)	Difference in units derived from committed and achieved CUF x Rs. (to be decided with MES LEH); for period after commissioning till the O&M contract closure	Kindly provide "Rs. (to be decided with MES LEH)". Further, we understand that this clause pertains to incentive for extra units generated during the O&M period. Please confirm.	Applicable penalty shall be Rs. 8.0/unit x Difference in units derived from committed and achieved CUF.
6	SCC	6 of 9	10A(i)	Interest bearing adjustable initial advance (OPTIONAL) of 10% of the Contract Value.	We request for interest free advance.	Tender Conditions shall prevail.

7	SCC	7 of 9	10(B)	advance for services	We request for interest free advance for the services portion of the contract as it is critical for site mobilization given the logistics and environmental constraints associated with the project site.	Tender Conditions shall prevail.
8	General			Form-5	We assume that MES will issue Form-5 in the name of the sub-contractors working at site for the purpose of obtaining labour license. Please confirm	MES will issue Form-5
9	BDS	2 of 3	5 (ITB 15.0)	Bid Validity: The bid validity period shall be 150 (One Hundred and Fifty Days) from the date of opening of Techno-Commercial Bid (Envelope-I).	Whether Bid Validity is 150 days or 180 days. Please clarify.	Bid Validity is for 150 days from the date of opening of Techno-Commercial Bid (Envelope-I)
10	Sample forms and formats	6 of 36	Para 2	……We confirm that all the terms and conditions of our Bid are valid for acceptance for a period as specified in BDS {180 (One Hundred and Eighty Days)} from the date of opening of "Techno-Commercial/ Un-priced Bid (Envelope-I)".....		
11	SCC	5 of 9	8(1)	……..For every 0.01 shortfall in PR below 0.78 by the bidder, a penalty of 0.1% of the total Contract Value…….	We understand the desired PR is 0.78. Please confirm.	The desired PR is 0.82
12	SOW	2 of 14	1.1	PR : 82%		
13	BDS	4 of 6	1.3	A summarized sheet of average turn over certified by a practicing CA/ Statutary Auditor should be compulsorily enclosed along with corresponding annual accounts.	Audited Financial statement extracted from the Annual Reports of relavant years shall be furnished by the bidder. Same may please be considered	Tender conditions shall prevail.
14	GCC	30 of 76	32.1.5	The Contractor shall acquire in its name all permits..... that are necessary for the Performance of the Contract, including, but not limited to, the right of way for the access to site and for erection of transmission lines as applicable.....The Contractor shall acquire all other permits, approvals and/or licenses that are not the responsibility of the Owner/ Executing Agency and that are necessary for the Performance of the Contract.	Right of Way issues are time consuming and sometimes get into legal tangles which further leads to time loss and stoppages in contract execution. It is therefore requested that SECI/MES obtains and passes on clear title of Land, free from all encumbrances and right of way to the Contractor on the date of NOA/LOA. Further, kindly also inform us regarding the "other permits, approvals and/or licenses that are not the responsibility of the Owner". We again request MES that all statutory approvals and clearances may please be in owner's scope.	All the statutory approvals and clearances are in the scope of contractor/bidder.

15	IFB	6 of 9	1.10	Data acquisition system with remote monitoring facilities. Provision for specific data transfer to the State Load Dispatch Centre (SLDC) shall also be provided.	Bidder shall provide the SCADA and HMI interface at the site for monitoring/controlling the Site parameters. Further Bidder understands that for data transfer to the SLDC, dedicated communication link from site MCR to SLDC will be provided by Customer for data transmission.	Data transfer from MCR to SLDC will be in the scope of contractor (if applicable).
16	IFB	7 of 9	(F) & (G)	Tender Processing Fee: INR Rs. 1,77,000/- EMD: INR Rs. 60,00,000/-	Bidder being a PSU requests for waiver from submission of Tender Processing Fee and EMD.	Tender Conditions shall prevail.
17	SCC	2 of 9	3	Time for Completion is: 12 (twelve) Months from the date of issuance of NOA	Due to weather and logistics constraint at site with sub-zero temperature and heavy snow fall over a period of 4-5 months in a year, in view of the extent of transportation and manual work at site, it is requested to extend the time of completion of the project to 24 months. The same is requested considering the duration of carrying out the PG test in line with the tender requirement.	Tender Conditions shall prevail.
18	BDS	3 of 6	1.2	If the BESS provider is participating as a subcontractor to the bidder then the Bidder shall submit the list of proposed BESS makes they intend to provide along with the submission of Technical documents, also with the credentials for all those makes and all such mentioned makes shall satisfy the Qualification requirements mentioned in the bidding document. During the execution of the Project, the supplied make of the BESS by the bidder shall have to be mandatorily among the list of makes submitted by the bidder during the Techno commercial stage.	Bidder being a PSU has to finalize/shortlist the vendor for supply of the major item of the project through tendering process only. Bidder request that proposed vendors name shall be furnished along with the bid, however, during detailed engineering stage, acceptance of new/more vendors meeting the tender requirements , subject to customer's approval may please be accepted. Thereafter, on finalization of the sub-contractor, subcontracting agreement shall be submitted in line with the tender condition.	There is no restriction on number of BESS providers that can be proposed during bid submission. However, all such providers shall satisfy the Qualification requirements mentioned in the bidding document.
19	BDS	3 of 6	1.2	he bidder/BESS provider should have experience of having successfully completed Design, Engineering, Supply, Installation, Testing & Commissioning of at least 03 (Three) Grid connected Battery Energy Storage Systems (BESS) having an individual capacities of 375 (Three Hundred seventy five) kWh or above in last Five Financial years and till last date of bid submission. However, such BESS Plant capacity must have been in satisfactory operation as on the last date of bid submission for at least six (06) months from the date of commissioning.	BESS started picking up the pace in India very recentrly and najority of the projects have come up in last 12 months only. Hence, it is impractical for majority of the bidders to obtain such experience before hand. It is requested to shortlist the bidders based on their experience of execution of EPC projects in the field of power/solar projects only. Hence, the PQC may please be amended accordingly.	Tender conditions shall prevail.

20	SCC	4 of 9	6(2) & note after (8)	Second Stage (O&M): The Performance security shall be furnished 30 days prior to completion of first 5 years of O&M and value of the Contract Performance Security shall be 5% of the Contract Value (i.e., total sum of the Supply Contract, Service Contract and absolute value of O & M Contract) and will remain valid 90 (Ninety) days beyond the balance O & M Period, i.e. 5 (five). Henceforth, 5% Contract Performance Security Contract Performance Security submitted shall be released to the Contractor without any interest not later than 75 (Seventy- Five) days after the successful completion of the complete O&M period (10 Years) subject to the approval and	Bidder understands that the EMD BG submitted for the first 5 years of O&M shall be released to the Bidder at the end of 5 years and grace period. Please confirm.	Performance Security furnished for first 5 years of O&M shall be released to the Bidder at the end of 5 years and after getting due verification and confirmation from the concerned Banker for the Performance security furnished for next 5 years i.e Second Stage.
21	GCC	22 of 76	19.2	Force Majeure Exclusions : Normal rainy seasons, snow and monsoon	MES/SECI may please consider "snowfall" as force majeure condition, as snowfall will render it impossible to carry out any site activity.	Tender Conditions shall prevail.
22	BDS	2 of 6	1.2	Except BESS, a job executed by a Bidder for its own Plant/ Projects cannot be considered as experience for the purpose of meeting the Eligibility Conditions of the tender. Also, the jobs executed for Subsidiary/ Fellow Subsidiary/ Holding Company will not be considered as experience for the purpose of meeting Eligibility Conditions.	We request that job executed by Bidder for own plant/subsidiary etc. may be considered as experience for meeting eligibility conditions.	Tender Conditions shall prevail.
23	BDS	5 of 6	1.4.1	JV/ Consortium members can be partner to the single JV/ Consortium arrangement only and they shall not be allowed to participate in multiple JV/ Consortium arrangements, wherein the same member is actually participating in multiple number of JVs/ Consortiums	Does this apply to BESS vendor who may be a sub-contractor?	Yes. This clause is applicable to BESS provider also. If BESS provider is participating in one JV/Consortium arrangement, the same BESS provider shall not be allowed to participate in other JV/ Consortium arrangements. **However, same BESS provider may act as sub-contractor to multiple bidders.**
24	IFB	8 of 9	(J)	23.08.2018 up to 14:00 hrs	Request an extension of bid submission to 15.09.2018	Tender Conditions shall prevail.
25	SCC	2 of 9	3	Time for Completion is 12 months from date of issuance of NOA	Considering the vagaries of weather, request a timeline for completion of 15 months from date of issuance of NOA	Tender Conditions shall prevail.
26	General			Time of completion is 12 months from date of issuance of NOA	Assuming that the bid process will be completed by Sep 2018 and site construction can commence by April 2018, can 18 months be provided for completion?	Tender Conditions shall prevail.

27	BDS	3 of 6	1.2	Except BESS, a job executed by a Bidder for its own Plant/ Projects cannot be considered as experience for the purpose of meeting the Eligibility Conditions of the tender. Also, the jobs executed for Subsidiary/ Fellow Subsidiary/ Holding Company will not be considered as experience for the purpose of meeting Eligibility Conditions	Any of our associate or affiliate entity having less than 26% of stake in the company should not be considered as the Subsidiary/ Fellow Subsidiary of our company.	Tender conditions shall prevail.
28	BDS	3 of 6	1.2	The bidder should have experience in development of Ground mounted Solar Projects on Turnkey basis including Design, Supply, Installation and Commissioning of Grid Connected Solar PV Power Plant and Solar Systems of cumulative Capacity not less than 1.5 (One and half) MW in last Seven Financial years as on last date of bid submission. However, such Solar PV Power Plant and Solar System's capacity must have been in satisfactory operation as on the last date of bid submission for at least six (06) months from the date of commissioning.	We have a single project of GBT, 1 MW which standalone fulfills the eligibility criteria rather than going jointly side by side 300 KW each. Kindly consider this single project by giving the amendment in your existing tender document.	Tender Conditions shall prevail.

29	BDS	3 of 6	1.2	The bidder should have experience in development of Ground mounted Solar Projects on Turnkey basis including Design, Supply, Installation and Commissioning of Grid Connected Solar PV Power Plant and Solar Systems of cumulative Capacity not less than 1.5 (One and half) MW in last Seven Financial years as on last date of bid submission. However, such Solar PV Power Plant and Solar Systems capacity must have been in satisfactory operation as on the last date of bid submission for at least six (06) months from the date of commissioning. AND The bidder should have experience in development of Ground mounted Solar Projects on Turnkey basis including Design, Supply, Installation & Commissioning of at least 02 (Two) Grid connected Solar PV Power Plant Project having an individual capacities of 300 (Three Hundred) kW or above in last Seven Financial years and till last date of bid submission. However, such Solar PV Power Plant and Solar Systems capacity must have been in satisfactory operation as on the last date of bid submission for at least six (06) months from the date of commissioning. AND The bidder/BESS provider should have experience of having successfully completed Design, Engineering, Supply, Installation, Testing & Commissioning of at least 03 (Three) Grid connected Battery Energy Storage	We believe that the Technical eligibility conditions are on a higher side for this requirement of SECI/MES. Other PSUs with similar projects of Solar plus Energy Storage have asked for less capacities of Solar and ESS as their eligibility criteria. Specifically eligibility requirement of 3 grid connected BESS of capacities of 375KWh each is on the higher side. (a grid scale BESS in a recent concept in the Indian Power Sector). Therefore we would request you to reduce the BESS capacity eligibility conditions in order to have a healthy competition.	Tender conditions shall prevail.
30	General			Consortium	In order to bid in the tender , can a battery OEM form a consortium with multiple Solar EPC developers? Kindly clarify.	No. If BESS provider is participating in one JV/Consortium arrangement, the same BESS provider shall not be allowed to participate in other JV/ Consortium arrangements. However, same BESS provider may act as sub-contractor to multiple bidders.
31	SCC	6 of 9	9.0	Award of Contract ...Both contracts will contain a cross fall breach clause specifying that breach of one will constitute breach of the other..	Cross fall breach clause in both contracts may lead to classification of both contracts as works contract attracting GST @ 18% and project may not be able to avail GST @ 5% available for SPGS (Solar Power Generation System). We request to remove this clause and address the concern regarding breach in one contract through some other means.	Tender conditions shall prevail.

32	ITB	9 of 45	11. I. (g)	Power of Attorney for authorized signatory in non-judicial stamp paper (as per 'Form F-24')	Ca we submit our standard Power of Attorney for authorized signatory as it is difficult to obtain POA for every tender? The same is being accepted by all PSUs.	In exceptional cases General PoA may be accepted by the bidder duly authorised and signed by the Head of the Organisation/CEO/MD/Chairman. However, final discretion of acceptance shall remain with .SECI
33	ITB	11 of 45	12.6	In case of any variation (positive/ negative) in existing rates of taxes/ duties/ levies or a new tax/ duty/ levy is introduced or any existing tax/ duty/ levy is abolished or application of any Tax in the course of the performance of this Contract, which will/ may impact the overall pricing in connection with performance of the Contract, an equitable adjustment of the Contract Price shall be made	Directorate General of Trade Remedies (DGTR) has recommended safeguard duty on modules imported from China, Malaysia and all developed countries. And the same will consequently impact domestic module prices as well. Please confirm whether the safeguard duty shall be covered under 'Change in Law' or this clause and adjustment of the Contract Price shall be made for the safeguard duty, if implemented.	Only tax implications arised on account of agrement between MES and the contractor shall be adjusted and not on input cost. Hence, Tender conditions shall prevail.
34	Annexure to BDS - QR	3 of 6	1.2	If the BESS provider is participating as a subcontractor to the bidder then the Bidder shall submit the list of proposed BESS makes they intend to provide along with the submission of Technical documents, also with the credentials..... During the execution of the Project, the supplied make of the BESS by the bidder shall have to be mandatorily among the list of makes submitted by the bidder during the Techno commercial stage.	As the Project location is at very high altitude with sub-zero temperatures, evaluation and selection of most suitable BESS supplier will have to be done carefully as per site conditions and it will take time as not all battery technologies work optimally and safely at such locations. We request SECI to allow bidders to submit only name of BESS suppliers and also allow to add new BESS vendor(s) later after award who have requisite experience. Also technical qualification requirement of BESS provider may kindly be sought as provenness criteria at time of detailed engineering and not at bidding stage, as it is not in interest of Project.	Tender Conditions shall prevail.
35	SCC	5 of 9	8.0	For every 0.01 shortfall in PR below 0.78 by the bidder, a penalty of 0.1% of the total Contract Value (i.e., total sum of all the Supply Contract, Service Contract and absolute value of O & M Contract) shall be levied. In case the Plant PR result is 0.05 below 0.78, i.e., 0.73 or lower, the total Contract Performance Security submitted by the bidder will be forfeited	Please restrict the penalty to 5% of EPC Contract value only as PR shortfall does not reflect O&M deficiency.	Tender Conditions shall prevail.

36	SCC	6 of 9	10.0	Interest bearing adjustable initial advance (OPTIONAL) of 10% of the Contract Value (i.e., total sum of all the Supply Contract) shall be released to successful bidder upon receipt of unconditional acceptance of NOA	Interest bearing advance may kindly be amended as non-interest bearing advance as the present clause will lead to huge working capital cost and increase the bid price consequently. Also no sub-vendor such as Module/PCU/etc OEMs work without advance.	Tender conditions shall prevail.
37	SCC	7 of 9	10.A(iii)	Twenty percent (20%) payments shall be paid against successful erection, testing and commissioning of materials at site and Operational Acceptance of the Facility pursuant to successful Guarantee Tests and demonstration of Performance Ratio (PR) including submission of all as-built drawings and documents.	Please do not link supply payments with services contract activities as it will lead to classification of supply contract also as works contract leading to higher tax implications. Please release 90% supply payments on receipt at site and 10% on successful operational acceptance/ PR Test.	Tender conditions shall prevail.
38	SCC	7 of 9	10.A(iv)	Final Ten percent (10%) payment of Supplies shall be paid after CUF demonstration on completion of first year of O&M of the Facility pursuant to submission of all requisite documentation	Please release the final payment on completion of PR Test as there is no need to hold 10% of contract value for such a long period of 1 year as contractor will submit BG of 10% of EPC + O&M Price, so your concerns against poor performance are safeguarded by PBG. The present clause is unnecessarily leading to cash flow problems to EPC Contractor and consequently bid prices may be higher. Similar change is requested for Services contract as well.	Tender conditions shall prevail.
39	SCC	5 of 9	8.0	In case the Project fails to generate any power continuously for 1 month any time during the O&M period, apart from the force majeure and grid outages as certified by competent authority from STU/ CTU, it shall be considered as “an event of default”. In the case of default the entire Contract Performance Security will be forfeited.	If the plant does not generate power due to very poor solar irradiance or bad weather conditions such as snowfall, rainfall, etc., the same may kindly covered under force majeure. Please confirm.	Tender conditions shall prevail.

40	GCC	22 of 76	19.2	Force Majeure Exclusions Normal rainy seasons, snow and monsoon	As the Project is located at very difficult location in terms of weather and accessibility, there may be months when there is abnormally continuous rainfall/snowfall making execution and transport standstill. Please confirm the number of months/days to be considered as Normal rainy seasons, snow and monsoon. If bad weather continues beyond this period and contractor is unable to perform work, the extra period shall be considered under Force Majeure.	Tender conditions shall prevail.
41	GCC	67 of 76	96.0	Labor Laws	What type of labour compliance is require, If there is any special condition or requirement, please mention the same.	Tender conditions shall prevail.
42	ITB	12 of 45	12.8	Bidders are required to ascertain the correctness of amount related to Goods & Service Tax (GST) as mentioned in the SOR/ PS as on the date of techno-commercial bid opening as	GST or Tax rate may be considered differently by various paticpants so please clarify the financial bid evaluation criteria. Whether it will be evaluated on basic price (excluding GST) or overall price?	Bids shall be evaluated as mentioned in ITB Section Clause 32 (EVALUATION OF BIDS & E REVERSE AUCTION)
43	SCC	2 of 9	Table 3.1	Work Comletion Schedule	Considering site conditions, it will be very difficult to execute the Project within 12 months as approx from Nov to june, labour cannt work due to tough weather conditions. Request you to please consider these 12 month as a working 12 months or extend the time period to approx 2 years.	Tender Conditions shall prevail.
44	General				As it is a military area, request you to please provide the nearby land for Labour and staff colony accommodation from MES.	Contractor to make its own arrangements for Labour ans staff colony accomodation.
45	SCC	5 of 9	8(3)	In case the Project fails to generate any power continuously for 1 month any time during the O&M period, apart from the force majeure and grid outages as certified by competent authority from STU/ CTU, it shall be considered as “an event of default”. In the case of default the entire Contract Performance Security will be forfeited.	Considering the geographical location of the site and long lead items like BESS, inverter etc. more time should be given for rectifying the faults. Components like BESS, Inverter will have longer lead time. Material movement might not be possible during winter season.	Tender Conditions shall prevail.

46	Annexure to BDS - QR	3 of 6	1.2	The bidder/BESS provider should have experience of having successfully completed Design, Engineering, Supply, Installation, Testing & Commissioning of at least 03 (Three) Grid connected Battery Energy Storage Systems (BESS) having an individual capacities of 375 (Three Hundred seventy five) kWh or above in last Five Financial years and till last date of bid submission. However, such BESS Plant capacity must have been in satisfactory operation as on the last date of bid submission for at least six (06) months from the date of commissioning.	Request to reduce the experience requirement to atleast one Grid connected BESS with individual capacity more than 200KWh. As this is a new upcoming technology, very few bidders will qualify the mentioned criteria. Request you to please consider to reduce the capacity to 1 project of 200kWh.	Tender conditions shall prevail.
47	Annexure to BDS - QR	3 of 6	1.2	If the BESS provider is participating as a subcontractor to the bidder then the Bidder shall submit the list of proposed BESS makes they intend to provide along with the submission of Technical documents, also with the credentials for all those makes and all such mentioned makes shall satisfy the Qualification requirements mentioned in the bidding document. During the execution of the Project, the supplied make of the BESS by the bidder shall have to be mandatorily among the list of makes submitted by the bidder during the Techno commercial stage.	Request to remove the clause which requires mandatory selection of BESS provider from the list submitted along with bids	Tender Conditions shall prevail.
48	Annexure to BDS - QR	4 of 6	1.3.2	In case the bidder is a holding company, the financial position criteria referred to in clause 1.3 above shall be of that holding company only (i.e. excluding its subsidiary/ group companies). In case bidder is a subsidiary of a holding company, financial position criteria referred to in clause 1.3 above shall be of that subsidiary company only (i.e. excluding its holding company).	Request to allow holding company of the subsiday company also to consider the financial position of the subsidary company	Bidder may link it with the definition of Affiliates. So, Tender conditions shall prevail.
49	GCC	28 of 76	30.1(vi)	The Contractor has to execute the work by functioning like a contractor instead of sub-letting the entire work on back to back basis. The entire work cannot be sub-let to a sub-contractor on back to back basis.	Request remove the clause considering lot of local manpower to be involved for execution	Tender conditions shall prevail.

50	GCC	37 of 76	45.3	Whenever a fault occurs, the Contractor has to attend to rectify the fault & the fault must be rectified within the 24 hours from the time of occurrence of fault, failing which the Contractor will be liable for additional liquidated damages as per reference to the generation parameters accumulated in similar/ associated equipment of the Plant (for example if a block consists of 4 inverters and one inverter is down for more than 24 hours, then the generation for faulty inverter shall be calculated as the average of accumulated generation for the other 3 inverters over the 24 hours duration of fault as the deemed generation) and the LD shall be levied on the deemed generation as per the tariff of (to be decided with MES LEH). The contractor must maintain all the records pertaining to all such faults and necessary measures taken.	Request to remove the clause as the faults can arise at different levels due to various internal & external reasons, and resolving the major faults cannot be completed in a days time	Kindly refer Amendment-1.
51	GCC	38 of 76	45.4.6	O&M Routine & Manpower: Contractor shall provide Preventive / Routine Maintenance schedule based on Original Equipment manufacturer and good engineering practices. The team deployed for the O&M must have a minimum manpower structure with following qualification; Project Manager (B.E./B.Tech Electrical, with minimum 5 years of relevant experience) -1 No. Shift Engineers (BE/B-Tech Electrical, with minimum 3 years of relevant experience) –1 No / Shift Polytechnic/Diploma Electrical (with minimum 3 years of relevant experience) -2 / shift Polytechnic/Diploma Mechanical or Civil (with minimum 3 years of relevant experience) -1/shift Unskilled for cleaning & other unskilled works with respect to Plant -minimum 3/shift. However contractor shall engage additional manpower as and when need arise.	Request to reconsider the O&M requirement considering most equipment to run only during day time	Kindly refer Amendment-1.
52	GCC	52 of 76	73.16.3	The mechanical structures, electrical works and overall workmanship of the grid connected Solar Power Plant must be warranted for a minimum of 10 years.	Request to reduce the term to industry standard of 5 years	Tender conditions shall prevail.

53	GCC	64 of 76	92.1	Bidder should quote all-inclusive prices including the liability of GST (in line with the given SOR Format) whether on the works contract as a whole or in respect of bought out components used by the Contractor in execution of the Contract. Executing Agency/ Owner shall not be responsible for any such liability of the Contractor in respect of this Contract.	Request to bid evaluation done at basic price, as the tax liability be at actuals and common across bidders	Bids shall be evaluated as mentioned in ITB Section Clause 32 (EVALUATION OF BIDS & E REVERSE AUCTION). Further, bidders are required to ascertain the correctness of amount related to Goods & Service Tax (GST) as mentioned in the SOR/ PS as on the date of techno-commercial bid opening
54	SCC	2 of 9	3	Time for Completion is: 12 (twelve) Months from the date of issuance of NOA	Request to increase the timeline to 18 months considering lead time for batteries are high	Tender Conditions shall prevail.
55	Annexure to BDS - QR	3 of 6	1.2	Except BESS, a job executed by a Bidder for its own Plant/ Projects cannot be considered as experience for the purpose of meeting the Eligibility Conditions of the tender. Also, the jobs executed for Subsidiary/ Fellow Subsidiary/ Holding Company will not be considered as experience for the purpose of meeting Eligibility Conditions.	Our understanding is that if the Bidder has a stake less than 26% in the project, then such a project will be considered for the qualification purposes. Such a company is not an "Associate" of the Bidder as per clause 1.1.3 of page 62 anyway. Project owners tend to give minority stakes (less than 26%) to the Bidders in lieu of the EPC fee to get the Bidder's interests aligned with the project for long term, and hence such projects cannot be considered to be owned by the Bidders.	Tender conditions shall prevail.
56	Annexure to BDS - QR	2 of 6	1.2	The bidder should have experience in development of Ground mounted Solar Projects on Turnkey basis including Design, Supply, Installation and Commissioning of Grid Connected Solar PV Power Plant and Solar Systems of cumulative Capacity not less than 1.5 (One and half) MW in last Seven Financial years as on last date of bid submission. However, such Solar PV Power Plant and Solar Systems capacity must have been in	As there is hardly any difference in the design, implementation and commissioning of the ground based plants and the rooftop solar plants, we sincerely request you to consider the experience of building solar rooftop plants of 200 KW and above towards meeting the qualification criteria.	Tender Conditions shall prevail.
57	GCC	12 of 76	2.1.b	Contractor, if necessary, shall build other temporary access roads to the actual site of construction for his own work at his own cost.	Kindly share the road layout with road details.	It is the responsibility of the bidder to asses the site conditions and plan for roads accordingly.
58	GCC	12 of 76	2.3	Contractor will have to make his own arrangements for supply of water along with water quality check to his labour camps and for works.	We request the client to provide the construction water & drinking water.	Tender conditions shall prevail.

59	GCC	13 of 76	2.4	Contractor has to arrange for the construction power supply of their own. However, subject to availability, Executing Agency/ Owner may provide access to the nearest available point in his location for supply power	We request the client to provide the construction power.	Tender conditions shall prevail.
60	GCC	13 of 76	2.4.1	The cost of power supply shall be payable to the Executing Agency/ Owner by the contractor.	What is the cost of power (Rs./KWh) to be paid for power, by the Executing Agency.	Contractor has to arrange for the construction power supply of their own.
61	Annexure to BDS - QR	3 of 6	1.2	If the BESS provider is participating as a subcontractor to the bidder then the Bidder shall be required to establish subcontracting agreement with the BESS supplier in the format as provided by the Owner within 90 days from the effective date of the Contract Agreement.	Can the BESS provider be part of the OEMs or is the sub-contractor agreement mandatory?	If BESS provider is participating in one JV/Consortium arrangement, the same BESS provider shall not be allowed to participate in other JV/ Consortium arrangements. However, same BESS provider may act as sub-contractor to multiple bidders.
62	SCC	5 of 9	8(1)	For every 0.01 shortfall in PR below 0.78 by the bidder, a penalty of 0.1% of the total Contract Value (i.e., total sum of all the Supply Contract, Service Contract and absolute value of O &M Contract) shall be levied. In case the Plant PR result is 0.05 below 0.78, i.e., 0.73 or lower, the total Contract Performance Security submitted by the bidder will be forfeited.	Kindly revise the PR limit (based on site climate and irradiance level) to 75% liable for LD penalty	Refer Amendment-1.
63	GCC	31 of 76	33.1	The Contractor shall have to execute the Work in such place and conditions where other agencies may also be engaged for other works such as site grading, filling, and levelling, electrical and mechanical engineering works, etc.	We understand, land levelling, grading etc remains in client scope.	Land levelling and grading are in the scope of contractor.
64	General				Kindly share Bank Name & IFSC code for EMD BG	Please refer SECI website :FINANCIALS" tab for bank details.
65	Annexure to BDS - QR	3 of 6	1.2	The bidder/BESS provider should have experience of having successfully completed Design, Engineering, Supply, Installation, Testing & Commissioning of at least 03 (Three) Grid connected Battery Energy Storage Systems (BESS) having an individual capacities of 375 (Three Hundred seventy five) kWh or above in last Five Financial years and till last date of bid submission.	We request you to amend the clause to One BESS project Instead of 03 (Three) Grid connected Battery Energy Storage Systems (BESS) having an individual capacities of 375 (Three Hundred seventy five) kWh or above	Tender Conditions shall prevail.
66	SCC	6 of 9	9	First Contract (for Supply) Second Contract (for Service) Third Contract (for O&M)	We request you to give single composite Order for Supply & Service. Kindly confirm	Tender Conditions shall prevail.

67	General				What is the project completion time?	Kindly refer SCC for project completion timelines
68	General				Any tax benefit w.r.t Defence project	Regarding tax benefit, Bidders are requested to refer relevance tax laws.
69	Annexure to BDS - QR	2 of 6	1.2	The bidder should have experience in development of Ground mounted Solar Projects on Turnkey basis including Design, Supply, Installation and Commissioning of Grid Connected Solar PV Power Plant and Solar Systems of cumulative Capacity not less than 1.5 (One and half) MW in last Seven Financial years as on last date of bid submission. However, such Solar PV Power Plant and Solar Systems capacity must have been in satisfactory operation as on the last date of bid submission for at least six (06) months from the date of commissioning. AND The bidder should have experience in development of Ground mounted Solar Projects on Turnkey basis including Design, Supply, Installation & Commissioning of at least 02 (Two) Grid connected Solar PV Power Plant Project having an individual capacities of 300 (Three Hundred) kW or above in last Seven Financial years and till last date of bid submission. However, such Solar PV Power Plant and Solar Systems capacity must have been in satisfactory operation as on the last date of bid submission for at least six (06) months from the date of commissioning. AND The bidder/BESS provider should have experience of having successfully completed Design, Engineering, Supply, Installation, Testing & Commissioning of at least 03 (Three) Grid connected Battery Energy Storage	The bidder should have experience in development of **Roof top/Ground mounted** Solar Projects on Turnkey basis including Design, Supply, Installation and Commissioning of Grid Connected Solar PV Power Plant and Solar Systems of **cumulative Capacity not less than 1.5 (One and half) MW in last Seven Financial years as on last date of bid submission.** However, such Solar PV Power Plant and Solar Systems capacity must have been in satisfactory operation as on the last date of bid submission for at least six (06) months from the date of commissioning. AND The bidder should have experience in development of **Roof top/Ground mounted Solar Projects on Turnkey basis including Design, Supply, Installation & Commissioning of at least 02 (Two) Grid connected Solar PV Power Plant Project having an individual capacities of 300 (Three Hundred) kW** or above in last Seven Financial years and till last date of bid submission. However, such Solar PV Power Plant and Solar Systems capacity must have been in satisfactory operation as on the last date of bid submission for at least six (06) months from the date of commissioning. AND The bidder/BESS provider should have experience of having successfully completed Design, Engineering, Supply, Installation, Testing & Commissioning of **at least 01 or above** Grid	Tender conditions shall prevail.

70	Annexure to BDS - QR	3 of 6	1.2	The Performance Certificate must be issued minimum six (06) months from the date of commissioning. The Performance Certificate/ Joint meter reading (JMR) reports shall be issued from any state/ central owned agencies or state power departments or authorized representative of Power Offtaker (DISCOM/ Private Power purchaser). The Bidder shall furnish copies of the following documents along with the Bid in support of meeting the above mentioned BEC: a. Certificate of incorporation and MoA/ AoA in support of 1.1 above Note: Except BESS, a job executed by a Bidder for its own Plant/ Projects cannot be considered as experience for the purpose of meeting the Eligibility Conditions of the tender. Also, the jobs executed for Subsidiary/ Fellow Subsidiary/ Holding Company will not be considered as experience for the purpose of meeting Eligibility Conditions	The Performance Certificate must be issued minimum six (06) months from the date of commissioning. **The Performance Certificate and daily meter reading (DMR) reports shall be issued from any state /central/Private Organization and owned agencies or state power departments or authorized representative of Power Offtaker (DISCOM/ Private Power purchaser).** The Bidder shall furnish copies of the following documents along with the Bid in support of meeting the above mentioned BEC: a. Certificate of incorporation and MoA/ AoA in support of 1.1 above **Note: Include BESS, a job executed by a Bidder for its own Plant/ Projects can be considered as experience for the purpose of meeting the Eligibility Conditions of the tender.** Also, the jobs executed for Subsidiary/ Fellow Subsidiary/ Holding Company will not be considered as experience for the purpose of meeting Eligibility Conditions	Tender Conditions shall prevail.
71	General			Project completion schedule - 12months	Please extend the time from 12 months to 18 months due to site levelling at Durbuk and only the work can be done from Apr - Oct.	Tender Conditions shall prevail.
72	General				Please clarify whether the GST is 5% or 18% though the supply and service contracts are separate	Bidders are requested to refer relevant Section/Clauses of GST laws. Further, Bidders are required to ascertain the correctness of amount related to Goods & Service Tax (GST) as mentioned in the SOR/ PS as on the date of techno-commercial bid opening as it will impact the Price assessment part at the time of evaluation of price bid.
73	Annexure to BDS - QR	2 of 6	1.2	Designed, supplied, erected, commissioned, Ground mounted, grid connected Solar Systems of cumulative Capacity not less than **1.5 (One and half) MW** in last Seven Financial years as on last date of bid submission.	Designed, supplied, erected, commissioned, RoofTop/Ground Mounted grid connected Solar PV Projects of cumulative capacity 1 MW and competed with successful operation till bid opening date	Tender Conditions shall prevail.
74	Annexure to BDS - QR	3 of 6	1.2	Atleast 02 (Two) Grid Connected Solar PV Power Plant Project having an individual capacities of 300 (Three Hundred) kW or above in last Seven Financial years and till last date of bid submission.	Atleast 03 (Three) Grid Connected Solar PV Power Plant Project having an individual capacities of 100 (One Hundred) kW or above in last Seven Financial years and till last date of bid submission	Tender Conditions shall prevail.

75	General				We, Solar Philippines Commercial Rooftop Projects, Inc., write to you regarding our interest to participate in the tender process of the development of 2 x 1.5 MW (AC) Solar PV Power Plant with BESS in Leh District. At the moment, we are in the process of incorporating our entity in India. In regards to this, provided that our Indian entity will be officially registered before the tender submission, can it bear Solar Philippine's eligibility qualification and continue the bidding process?	Kindly refer Clause 1.1 of Annexure to BDS-QR for General Eligibility Conditions.
76	Annexure to BDS - QR	2 of 6	1.2	Technical Eligibility Conditions If the BESS provider is participating as a subcontractor to the bidder then the bider shall submit the list of proposed BESS makes they intend to provide along with the submission of Technical documents, also with the credentials for all those makes and all such mentioned makes shall satisfy the qualification requirements mentioned in the bidding document. During execution of the project, the supplied make of the BESS by the bidder shall have to be mandatorily among the list of makes submitted by the bidder during the techno-commercial stage	Request SECI to accept the makes which were not mentioned in technical bid but have the credentials and qualifications satisfying the requirements of technical document can be used during the supply and execution.	Tender conditions shall prevail.
77	SCC	2 of 9	3	Time Period of completion: 12 months	Request you to increase the time period upto 18 months	Tender conditions shall prevail.
78	IFB	4 of 9	13.2	Comprehensive operation & maintenance of the Solar PV Power Plant for 10 (Ten) years	Request you to reduced the period of O & M upto 5 years	Tender conditions shall prevail.

79	GCC	22 of 76	19.1	Act of God, including, but not limited to lightning, fire not caused by contractors' negligence and explosion (to the extent originating from a source external to the site), earthquake (above 7.0 magnitude on Richter Scale), volcanic eruption, landslide, unprecedented flood, cyclone, lightining, typhoon Snow Avalanche or tornado	Request you to include all earthquake which is measured on Richter scale under force majeure clause due to which contractor gets affected.	Tender conditions shall prevail.
80	GCC	22 of 76	19.7	If works are suspended by Force Majeure conditions lasting for more than two months, the Executing Agency/Owner shall have the option of cancelling this Contract in whole or part thereof, at its discretion.	If the force majeure events continues more than 2 months, then request you to compensate the contractor for the value of the work executed and expenses madeby the contractor for performing the work till date.	Any due pertaining on the day of Force Majeure will be liable for payment. However, any damages during Force Majeure will not be compensated.
81	GCC	22 of 76	19.8	The Contractor will not be entitled to claim any compensation for Force Majeure conditions and shall		
82	GCC	35 of 76	43.1.1	Accept the equipment after levy of liquidated damages in accordance with the provisions specified	Request you to provide the LD applicable?	Kindly refer SCC Clause 8 & 14 for LD.
83	GCC	37 of 76	45.3	Breakdown / Corrective maintenance Whenever a fault occurs, the Contractor has to attend to rectify the fault & the fault must be rectified within the 24 hours from the time of occurrence of fault, failing which the Contractor will be liable for additional liquidated damages as per reference to the generation parameters accumulated in similar/ associated equipment of the Plant (for example if a block consists of 4 inverters and one inverter is down for more than 24 hours, then the generation for faulty inverter shall be calculated as the average of accumulated generation for the other 3 inverters over the 24 hours duration of fault as the deemed generation) and the LD shall be levied on the deemed generation as per the tariff of (to be decided with MES LEH). The contractor must maintain all the records pertaining to all such faults and necessary measures taken.	1) Request you to kindly consider the rectification time period as the mutually agreed time between the contractor and the owner as the time period will depend upon the severity of the fault. 2) Kindly provide the tariff which is applicable as LD?	Kindly refer Amendment-1.

84	GCC	37 of 76	45.4.4	Any complaint related to unserviceability/improper functioning of any & all component of the plant including but not limited to PV Module, PCU, Transformers, switchgears, SCADA, roads, drainage, water supply lighting system, office infrastructure, CCTV system which is not attended & rectified within 48 hours, shall attract a penalty of Rs. 1000 per 24 hours, which shall be over & above GCC Clause. If such complaint is not rectified within 480 hours from logging of complaint. Executing Agency/Owner may choose to rectify the same through any other agency at the risk of Contractorand Executing Agency/Owner shall recover 110% of such cost incurred from subsequent payment to the contractor	1) Request you to kindly consider the rectification time period as the mutually agreed time between the contractor and the owner as the time period will depend upon the severity of the fault.	Kindly refer Amendment-1.
85	GCC	37 of 76	51.1	If, after the date seven (7) days prior to the date of Bid submission, in the country where the Site is located, any law, regulation, ordinance, order or by-law having the force of law is enacted, promulgated, abrogated or changed (which shall be……..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. Notwithstanding the foregoing, such additional or reduced costs shall not be separately paid or credited if the same has already been accounted for in the price adjustment provisions where applicable.	For EPC player almost all item are bought out item, request you to allow for the adjustment for the bought out item as well	Tender conditions shall prevail.
86	General			Land Area	Please provide the land area available for the respective projects at Tangtse and Durbuk.	Kindly refer S.No.9 of Amendment-1.
87	General			Location of interconnection point	kindly provide the location of the interconnection point of BESS and SPV.	Kindly refer S.No.10 of Amendment-1.
88	TS	9 of 118	2.2	Module Wattage	Request you to specify the minimum wattage of the PV modules for the project.	Minimum wattage can be derived from minimum efficiency (17.5% for mono-crystalline & 16.5% for multi-crystalline) and area of module.

89	TS	9 of 118	2.2	Module Efficiency: More than 18% for mono-crystalline More than 17% for multi-crystalline	The module efficiency is on a higher side as compared to standard practice in SECI/NTPC tenders. We request you to kindly consider the Module Efficiency: More than 17% for mono-crystalline More than 16% for multi-crystalline	Kindly refer S.No.14 of Amendment-1.
90	SOW	7 of 14	6.1	Obtaining statutory approvals /clearances on behalf of the Employer from various Government Departments, not limited to, the following: 6.1.1 Pollution control board clearance, if required 6.1.2 Mining Department, if required 6.1.3 Forest Department, if required 6.1.4 All other approval, as necessary for setting up of a solar power plant including CEIG/ CEA, connectivity, power evacuation, railways, PTCC etc. as per the suggested guidelines	We understand that Railway/PTCC is not required. Request the clause to be amended suitably to address relevant approvals only. Contractor shall take CEIG clearance. All other statutory approvals and clearances required may please be in MES' scope.	All applicable clearances/approvals shall be taken by the Contractor. Original tender conditions prevail.
91	TS	14 of 118	4.5 (ii)	The average voltage drop in the cables (Modules to Inverter) shall be limited to 1.5 % of the rated voltage	We request you to consider limiting the average voltage drop from Modules to Inverter to 3% of the rated voltage as per standard industry practice.	Original tender condition prevails.
92	TS	7 of 118	1.2.2	Trackers can also be used for tracking the sun on daily or seasonal basis. In case of fixed tilt, the tilt angle shall be defined in such a way that optimum generation is achieved at all times.	We understand that seasonal tilt is also allowed. Please confirm.	Yes. Seasonal tilit is also allowed.
93	TS	73 of 118	36.2.1 & 36.2.2	LCR/ MCR Building - Unless otherwise specified elsewhere, all buildings except Security room/ cabin shall have RCC framed structure	We request SECI/MES to consider PEB/containerised solution for IR/Control Room.	Original tender condition prevails.
94	SOW	11 of 14	5	The basic wind speed 'Vb' = 55m/sec(198 Km/Hr)	The wind speed may please be as per relevant IS.	As per IS 875-3, the basic wind speed of the sites is 55 m/s. Original tender condition prevails.
95	SOW	11 of 14	9	Min. length of pile shall be 1500mm except in case of very hard soil or rock (N>100) where it shall be min. 1200mm with rock socketing equal to 1 pile dia.	Length of pile may please be left to the contractor to be designed on the basis of SBC/Soil investigation report.	Original tender condition prevails.
96	General			PR test	Please specify month-wise reference radiation for PR test or indicate meteonorm/NASA data as reference.	PR test does not require reference radiation to be indicated.
97	SOW	3 of 14	3.2	Design calculations and sheets (licenced software as well as design templates)	Detailed design docuemnts shall be provided in line with the approved Master Document List. Kindly specify the requirement of licensed software.	Procurement of licensed softwares is not in the scope of works.

98	General			Evacuation Point	Power evacuation point for the respective project sites is not clear. Kindly provide the requisite details.	Kindly refer S.No.10 of Amendment-1.
99	General			Site related	Please share Geo-technical reports, topographical survey etc. for both the sites. Same will enable the Bidders for preparing a competitive offer.	Geo-technical report and topographical survey are not available for both the sites. The same is in the scope of contractor.
100	SOW	4 of 14	3.2	Transmission line drawings and erection plans as per DISCOM/ STU guidelines	Bidder understands that the power evacuation point for both the plants will be provided at the site location itsely by the customer. Please confirm. Alternatively, please elaborate on the requirement of Transmission lines at the sites. Scope Clarity requested.	Kindly refer S.No.10 of Amendment-1.
101	SOW	5 of 14	4.1.20	CCTV cameras for plant surveillance	Please specify the location, type and no. of CCTV cameras envisaged.	Kindly refer Clause 18 of Technical Specifications.
102	General			BESS EOL	Please provide details on the end of life of the BESS. Please claify whether the dismantling and removal of the complete installed BESS at the end of life of BESS (10 years) is in Bidder's or customer's scope. Scope clarity requested.	Kindly refer Clauses 70.5.1 & 70.5.2 along with Table-2 of Technical Specifications for details on End of Life. Dismantling and removal of BESS is not in the scope of contractor.
103	General			BESS	Please specify annual degradation rate for BESS batteries if any.	No specific annual degradation rate is required as long as BESS meets the power and energy requirements as mentioned in Table-2 of Technical Specifications.
104	SOW	8 of 14	7.10	Availability of vehicles for Employer staff during construction and O&M period as per requirement may be ensured,……	Based on the person's availability and place of stay; arrangment of vehicle for Employer staff may please be taken care by customer. Same shall not be in Bidder's scope. Please accept	Original tender condition prevails.
105	TS	6 of 118	1.1.9	The MEMS shall be implemented over a distributed microcontroller architecture with local controllers for interfacing with, monitoring and controlling the Solar PV System, BESS and Diesel generators (existing).	As MEMS function involves interaction with the existing DG sets which are under operation by MES in the vicinity of the proposed project, we understand that the MEMS in all respects shall be arranged by customer. Please Confirm.	MEMS is removed from the scope of contactor. Kindly refer S.Nos. 12-13 & 19 of Amendment-1.
106	TS	94 of 118	69.1	A = 750 kW, B = 2MWh (dispatchable) at A MW net ac output at the beginning of life and not less than 80% of this capacity at any point of time up to End of Battery Life.	Please clarify whether the nameplate rating shal be 2MWh or 2.5MWh per site.	Kindly refer S.No.18 of Amendment-1.

107	TS	95 of 118	69.1	No. of days per year: 365 Annual Availability for Performance Guarantee: 90 %	Considering the situations where the system can be available/ready for operation but not functional due to non availability of the required solar insolation or microgrid failure/outage or snowfall. Such instance shall be recorded by the Weather Monitoring System(s) installed at the site and such period/time durations shall be eliminated from the calculation of Annual Availability of system for Performance Guarantee.	Annual Availability Guarantee is for BESS only. Kindly refer Clause 70.6 of Technical Specifications for definition of accountable and unaccountable outage hours.
108	TS	95 of 118	69.1	Any excess solar power generation over the load being served at instance shall be stored in the BESS (in case it is not fully charged already) for discharge during the evening hours as per the discharge instructions/load pattern.	Please provide the load pattern to be catered from the envisaged BESS. The same is requested to design the optimum BESS to meet customer's requirements. Further, the details on discharge instructions may please be shared.	Load profile is not available.
109	TS	9 of 118	2.1	IEC 62716 : Ammonia Corrosion Testing	Contractor may please be exempted from this certification as Ammonia Corrosion comes into effect if the power plant is near to any chemical/fertilizer industry or poultry farm.	Original tender condition prevails.
110	TS	11 of 118	2.3.7	Bar code scanner and database of all the modules containing the following information shall also be provided - S.No. (i) to (x)	Bar code information will be provided as per MNRE guidelines which doesn't include S.No. (iii) of 2.3.7 Please accept.	Acceptable.
111	TS	9 of 118	2.1	As per the Solar Photovoltaics, Systems, Devices and Components Goods (Requirements for Compulsory Registration) Order, 2017, PV Modules used in the grid connected solar power projects shall be registered with BIS and bear the Standard Mark as notified by the Bureau of Indian Standards.	We request acceptance of applicable IEC certifications from reputed international agencies.	Original tender condition prevails.
112	TS	15 of 118	5.1	As per the Solar Photovoltaics, Systems, Devices and Components Goods (Requirements for Compulsory Registration) Order, 2017, inverters used in the grid connected solar power projects shall be registered with BIS and bear the Standard Mark as notified by the Bureau of Indian Standards.	We request acceptance of applicable IEC certifications from reputed international agencies.	Original tender condition prevails.
113	SOW	6 of 14	5.1.3	Earthwork for site levelling & grading including dozing off the ground as required to make it fairly flat including compaction	We understand that the terrain for installation is quite uneven which will make levelling and grading quite expensive. Will the developers be permitted to follow the contour instead?	Contactor is free to follow the contour.

114	TS	6 of 118	1.1.9	The MEMS shall be implemented over a distributed microcontroller architecture with local controllers for interfacing with, monitoring and controlling the Solar PV System, BESS and Diesel generators (existing).	Can details of existing diesel generators be provided?	MEMS is removed from the scope of contactor. Kindly refer S.Nos. 12-13 & 19 of Amendment-1.
115	General			Load profile	Can a load profile be made available?	Load profile is not available.
116	General			BESS Temperature	The battery bank will be operating in sub-zero temperatures (as low as -25 deg C) in winters. There is a need to increase operating temperature to around 7-8 deg C. Will the power for this heating be outside the scope of the MEMS or will it have to be factored in?	All auxiliary consumption for mainting the operating conditions for BESS is to be factored in.
117	TS	94 of 118	69.1	Rated No of Cycles (Minimum): 4000 cycles at rated energy capacity at 80% Depth of Discharge (DoD) at 25oC and C/3 Rate of Discharge	You will appreciate that there are very few chemistries / technologies that can meet the technical requirement of 80% DOD for 4000 cycles which in turn will tend to cut out many better and cheaper technology options. It will also increase the cost of BESS as most technologies will not be able to participate in the tender. So we request you to relax 80% depth of discharge condition to 50% depth of discharge which is the most prevalent standard in India and abroad. This relaxation will not lead to any compromise in the quality of performance but will help to improve the overall costing of the solution.	Original tender condition prevails.
118	General			Load profile of two sites i.e. Durbuk and Tangste	We request you to provide Electricity load profile of Durbuk and Tagste project sites in order to design the system efficiently.	Load profile is not available.
119	TS	94 of 118	69.1	Rated Number of cycles : 4000 cycles at rated capacity at 80% DOD at 25 Deg C and C/3 rate of discharge	The required criteria does not promote various battery chemistry . We request you to reconsider the same. Also, recently various PSUs in their requirement have asked for yearly energy capacity as a measure of output. We request you consider this; as it helps in sizing of the battery.	Original tender condition prevails.

120	Annexure-B (PG Test Procedure)	8 of 9	2.2	It is the responsibility of the Contractor to build-in the expected variation of irradiance in their design by installing additional DC capacity to meet the committed CUF. Irradiance variation will not be considered for the calculation of CUF.	This clause is highly unreasonable, as EPC Contractor cannot be expected to control solar irradiance. Even if the installed capacity is increased, EPC Contractor cannot be expected to achieve CUF if solar irradiance is very poor in certain period. A developer is expected to take solar irradiance risk in its own scope as low CUF due to poor irradiance does not indicate quality of EPC work or system supplied and so all project risks need not be passed on to EPC contractor. Please provide adjustment due to Irradiance variation as otherwise most of reputed EPC Players consider such blanket risks and uncontrollable liabilities as strict NO-GO for tenders with such kind of clauses. No other PSU (e.g. NTPC, NHPC, GIPCL, APGENCO,etc) keep such absolute generation guarantee clause in their tender.	Original tender condition prevails.
121	TS	10 of 118	2.3	The glass used to make the PV modules shall be toughened low iron glass with minimum thickness of 4.0 mm for 72 cell module and 3.2 mm for 60 cell module.	Please allow 3.2 mm for 72 cell module as well as same in being acceted widely.	Original tender condition prevails.
122	TS	82 of 118	54.0	The contractor shall design and install the effective module cleaning system.	Please confirm the source of water supply and water quality test reports, if available.	The Contractor shall arrange water for module cleaning.
123	TS	95 of 118	69.0	Use case requirements - Evening Peak management (EPM)	Please provide charge/discharge pattern as the same is required by battery OEM for sizing.	BESS size is already mentioned. Discharge at rated power should be assumed.
124	SOW	2 of 14	1.1	Performance Parameters: SPV Plant: Minimum values of PR and CUF of the plant after netting off the auxiliary consumption. PR : 82% CUF : 17.7%	As the sites are surrounded by high peaks and there is very high shading at different times of day and generation will be limited to only few hours. Under such scenarios, we suggest to mutually finalize the guarantee generation figures only during detailed engineering when plant layout is finalized maximizing shadow free area.	Original tender conditions prevail.
125	SOW	2 of 14	1.1	Performance Parameters: SPV Plant: Minimum values of PR and CUF of the plant after netting off the auxiliary consumption. PR : 82% CUF : 17.7%	Please provide Reference Irradiance Data such as Meteonorm, NASA, etc. so that we can estimate generation. In absence of Reference Irradiance Data we may not be able to work out generation. Please provide basis of requisite PR of 82% and CUF of 17.7%	Original tender conditions prevail.

126				General construction	Please confirm the requisite grading and levelling work at site shall be done by the Client and the time when suitably graded site shall be handed over to Contractor for execution activities.	Site levelling and grading are in the scope of contactor. Kindly refer S.No.8 of Amendment-1.
127	TS	95 of 118	69.0	Grid Charging- Allowed with the discretion of grid operator. If the BESS is charged through the grid, the energy consumed shall be considered part of the Auxiliary power and shall be metered.	There may be periods when Battery Charging cannot be done due to unavailability of solar power (say snowfall/rainfall) and battery remains completely discharged. Please confirm that contractor will be able to charge the battery from Grid/ DG Sets to maintain critical SOC and also perform requisite application. Please confirm that under such conditions the grid supply for battery charging shall not metered as auxiliary consumption.	The system shall be designed such that it does not depend on Grid/DG sets of MES for auxiliary consumption. The contractor may keep a standby DG at their own cost.
128	SOW	7 of 14	6.0	Statutory Approvals	As the site is located at a strategic and sensitive location, Contractor will not be able to obtain approvals being a private entity. Contractor shall provide all support in terms of documentation required from execution perspective, but cannot be held accountable for obtaining approvals on behalf of Employer. Please confirm.	All approvals are in the scope of contractor. However, the owner will facilitate the contractor in obtaining approvals.
129	SOW			Site location single coordinate has mentioned in tender	Proper Boundary Coordinates are require for both the sites.	Kindly refer S.No.9 of Amedment-1.
130	SOW	12 of 21	21.0	All roads (Approach, internal and peripheral) shall be provided with Interlocking concrete block pavement (ICBP). The design of the road shall conform to the provisions of IRC SP20, All roads (Approach, internal and peripheral) shall be provided with Interlocking concrete block pavement (ICBP). The design of the road shall conform to the provisions of IRC SP20	Main Road to approach road distance quite far away sp for tangatse site. Please clarify the legth or wheter it is in scope of contractor or Developer	Approach road is in the scope of the contractor. Kindly refer the reference point (B2) given for Tangste site. Length of approach road may approximately be derived from the nearby main road.
131	TS	57 of 118	25.0	Area Grading and Land Development	Area grading and land development work - Is Grading in contractor scope as mentioned in in technical specfication?	Site levelling and grading are in the scope of contactor. Kindly refer S.No.8 of Amendment-1.
132	TS	58 of 118	26.0	Roads	Road specification is different in SOW & technical spec like 80mm thick Concrete payment or Bitumen road	Annexure-3 (Special Technical Specifications) prevail over Technical Specifications. Kindly refer Para 2 of Clause 2 of Scope of Works.

133	TS	97 of 118	70.2.3	Resonnace and Fero resonance	Please clarify which statndard you are considering for the same ?	Existing IEC/IS standards shall be followed.
134	SOW	7 of 14	6.0	Electrical clearance	Please clarify the statuatory approval process (i.e. Which agency will be involved in issuing electrical clearance certificate?)	MES will be involved in issuing electrical clearance certificate.
135	TS	57 of 118	25.0	Area Grading and Land Development	As per contract, Grading will be in the scope of MES. Please reconfirm	Site levelling and grading are in the scope of contactor. Kindly refer S.No.8 of Amendment-1.
136				Battery Energy Storage System	What is the ramp rate for the BESS?	Not specified.
137				Battery Energy Storage System	Aux power consumption for the BESS will be high as the containers will need to be heated. In the unavailability of power , the grid might be needed to be used to keep the HVAC system running and subsequently protect the health of the battery by maintaining a certain level of SOC. Is this what they are implying by permitting charging from the grid	The system shall be designed such that it does not depend on Grid/DG sets of MES for auxiliary consumption. The contractor may keep a standby DG at their own cost.
138				Battery Energy Storage System	Is there a grid management system for the existing network and what are the requirements if a new BESS has to be integrated with that system	No grid management system exists.
139				Battery Energy Storage System	Please provide details of Grid situation in Project locations (no. of DG's, peak power etc). Who is handling this grid?	Grid is being handled by MES.
140				Battery Energy Storage System	If solar is available but grid is down, what do we do with the surplus power and how do we satisfy the generation guarantee? If the grid is down at the night time and battery is fully charged, how do we handle the situation and maintain requiste minmum performance requirement of BESS.	Grid outage hours are exempted from generation guarantee. Please Clause 70.
141	SCC	3 of 9	4	The contractor has to suitably plan the layout of the Plant including shadow analysis for optimum utilization of Space and the structural analysis. For actual distance/ routing of cables & evacuation, Bidders are advised to visit the site. The allocated land will be handed over to the Contractor by the owner.		

142	SOW	11 of 14	3	The proposed land is covered with pebbles and protruding rock structures varying in height up to approx. 500 mm-600mm which would be generally cleared by the owner. However minor undulations shall require some area grading and levelling which is in the scope of EPC Contractor. Considering the type of soil and very high water table, the contractor shall adopt suitable foundation system for MMS structure. The Bidder is advised to inspect the site and study the nature of soil to decide the foundation system to be provided before submission of the Bid. The Employer shall not be responsible for any variations in soil characteristics, between those observed during preliminary site visit and detailed investigations to be carried out by the Contractor during contract execution and there shall be no compensation what so ever in the contract price on this account.	Shadow free installation compatible land should be provided. Owner should take care of boulders removal and making land compatible for SPV installation. Else alternate (shadow free, feasible flat levelled) land should be provided. Contractor should be given liberty to choose the land patch for installation. MES/SECI should carry out detailed survey for both the land patches for verifying Horizon shading effect. Instead of only removing 500-600 mm boulders / pebbles, MES should provide flat, levelled alternate land for solar installation.	Site levelling and grading are in the scope of contactor. Kindly refer S.No.8 of Amendment-1. Land co-ordinates for both the sites are attached. Kindly refer S.No.9 of Amendment-1.

143	SOW	2 of 14	1.1	Performance Parameters SPV Plant: Minimum values of PR and CUF of the plant after netting off the auxiliary consumption. PR : 82% CUF : 17.7%	Considering the climatic conditions. PLF should be linked with the reference GHI. CUF cannot be met in case of reduction in received GHI. Contractor should be asked to guarantee plant Uptime and Performance ratio instead of CUF. Budgeting irradiation for such challenging location would be difficult and PLF cannot be met in case expected irradiation is not received. Contractor can grantee plant uptime and Performance ratio which would be in contractors control.	Original tender conditions prevail.
144	SOW	7 of 14	6.1	Obtaining statutory approvals /clearances on behalf of the Employer from various Government Departments, not limited to, the following: 6.1.1 Pollution control board clearance, if required 6.1.2 Mining Department, if required 6.1.3 Forest Department, if required 6.1.4 All other approval, as necessary for setting up of a solar power plant including CEIG/ CEA, connectivity, power evacuation, railways, PTCC etc. as per the suggested guidelines	All required approvals should be taken by Owner. It should also be clarified which approvals shall be applicable considering it's an Army base. Many of the external approvals might not be applicable here. It would be easier for MESS to facilitate such external approvals.	All approvals are in the scope of contractor. However, the owner will facilitate the contractor in obtaining approvals.
145	SOW	11 of 14	13	The plant peripheral boundary shall be provided with chain link fencing.	Barbed wire fencing should also be allowed. Barbered wire fencing should allowed as per details given in Technical specification.	Annexure-3 (Special Technical Specifications) prevail over Technical Specifications. Kindly refer Para 2 of Clause 2 of Scope of Works.
146	SOW	11 of 14	20	Weather Monitoring Station (Clause 19) shall include 2 (two) number of secondary standard pyranometers (ISO 9060 classification) along with necessary accessories and minimum 3 (six) temperature sensors (1 (one) for ambient temperature measurement with shielding case and 2(two) for module temperature measurement at each block.	Number of sensors per site should be clarified. 2 nos of pyranometer should be sufficient for one site, thus 4 nos in total should be required.	Annexure-3 (Special Technical Specifications) prevail over Technical Specifications. Kindly refer Para 2 of Clause 2 of Scope of Works.
147	TS	44 of 118	17.1.1	The Contractor shall provide minimum 4 (four) number of secondary standard pyranometers (ISO 9060 classification) along with necessary accessories for measuring the incidental solar radiation at horizontal and inclined plane of array.		

148	TS	7 of 118	1.2.1	SPV power plant should be designed to operate satisfactorily in synchronization with the grid within permissible limits of high voltage and frequency fluctuation conditions. It is also extremely important to safeguard the system during major disturbances, internal and external surge conditions while ensuring safe operation of the plant.	Load profile, load details, DG set details would be required for ensuring protections while designing and budgeting the cost of the system. Such factors are required for designing the system and designing the protections required, for estimating auxiliary consumption, power rating, selection of technology load details are required.	MEMS is removed from the scope of contactor. Kindly refer S.Nos. 12-13 & 19 of Amendment-1. Load profile is not available.
149	TS	84 of 118	56	Transmission line drawings and erection plans as per DISCOM/ STU guidelines, Galvanized 220 kV and 132 kV Transmission Line towers, Tower extensions & accessories and 11 kV, 22kV, 22kV & 33 kV transmission poles, towers & accessories shall be designed following latest guidelines of respective SEB (State electricity board)/ STU (State transmission utility) and got approved from them before execution. In absence of SEB/ STU guidelines REC (Rural Electrification Corporation) standards may be followed. Support at corner with angle > 100 shall be provided with a 4-pole structure or a lattice tower structure. Use of PCC spun pole and RCC pole is not acceptable.	It should be clarified if Transmission line will be in scope of contractor/bidder. SLD indicating metering point should be shared. It should be confirmed if offtake will be from the plant boundary and transmission line erection will be in scope of MES. For declaring grunted generation, metering point must be known.	Kindly refer S.No.10 of Amendment-1.
150	TS	95 of 118	69.1	Grid Charging Allowed with the discretion of grid operator. If the BESS is charged through the grid, the energy consumed shall be considered part of the Auxiliary power and shall be metered.	Grid charging should not be treated as auxiliary in case excess energy is drawn than planned. Grid charging of battery after excessive drawl of energy than planned should not be treated as auxiliary. As load details are unknown, consumption from the BESS is unknown. If batteries are discharged early due to drawl of excess energy than designed, batteries will have to be charged through Grid power. Thus same should not be treated as auxiliary consumption.	BESS will be not discharged more than the specified dispatchable capacity (2.5 MWh) at maximum of specified power rating (750 kW).

151	TS	94 of 118	69.1	Rated No of Cycles (Minimum) 4000 cycles at rated energy capacity at 80% Depth of Discharge (DoD) at 25°C and C/3 Rate of Discharge	No of cycles should be relaxed to 2000. Same is required as 4000 no. of cycles would be available with very limited storage technologies provider.	Original tender condition prevails.
152	General			SLD of the network with which systems are to be integrated (Durbuk & Tangtse) must be provided along with DG details, load details, consumption details and yearly pattern	Same would be required for ensuring protections while designing and budgeting the cost of the system. Such factors are required for designing the system and designing the protections required, for estimating auxiliary consumption, power rating, selection of technology load details are required.	An indicative single line diagram with metering point marked is attached. Kindly refer S.No.10 of Amendment-1. DG control is removed from the scope of the contractor. Load details are not available.
153	General			Details of existing DG	Compatibility with microgrid controller and protection of DGs should be ensured and confirmed by the MES/SECI. DGs should be compatible to receive and act on command of Microgrid controller. DGs should be able to communicate the operational status and also on instances.	Microgrid controller is removed from the scope of contactor. Kindly refer S.Nos. 12-13 & 19 of Amendment-1.

154	General			Technical Specifications	It was discussed in the meeting that technical specifications given in the bid document are for the are generic and for reference only. Bidder can choose and design specification during detailed engineering. bidder needs to adhere only special conditions, GCC and scope of work while designing the system. It should be clarified if technical specifications are mandatory or advisory.	Technical Specifications (TS) are mandatory. However, Annexure-3 (Special Technical Specifications) prevails over Technical Specifications. Kindly refer Para 2 of Clause 2 of Scope of Works. The design shall comply with TS and Annexure-3 (STS) to the extent specified; further design shall be finalized during detailed engineering.
155	TS	93 of 118	68.3	The grid available at various sites are isolated grids with Diesel Generators. The BESS shall be capable of continuous operation under variable voltage, frequency, and phase imbalance conditions at the PCC, which could vary as per different sites. It shall be the responsibility of the Contractor to ensure, for each site, that relevant information on the characteristics of the distribution network's power grid is collected and understood during the site-specific engineering phase.	Request to kindly share the network SLD, considering it being isolated grid to the load and connection scenarios	Indicative single line diagram is attached. Kindly refer S.No.10 of Amendment-1.
156	TS	97 of 118	70.3	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 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.	Request to consider the installation of equipment within RCC buildings also	Original tender condition prevails.

157	General				Kindly specify the required functionalities of micro grid controller	Microgrid controller is removed from the scope of contactor. Kindly refer S.Nos. 12-13 & 19 of Amendment-1.
158	TS	102 of 118	70.9.1	The PCS shall preferably be air-cooled suitable for the site climatic conditions, with final rejection of waste heat to the ambient air. The air-handling systems shall include filtering that is adequate to keep dust from the interior of the PCS system.	Kindly allow liquid cooling system for PCS	Liquid cooling system is not disallowed.
159	TS	103 of 118	70.10.3	The PCS transformer may be used to aid in harmonic cancellation and may include tertiary windings to supply BESS auxiliary power requirements. The transformer must be dry type. The PCS shall include provisions for disconnect on both its AC and DC terminals for maintenance work.	Kindly allow for oil cooled transformer also	Original tender condition prevails.
160	TS	94 of 118	69.1	Nameplate watt rating* B = 2MWh	Kindly confirm the required MWh capacity at point of common coupling	Kindly refer S.No.18 of Amendment-1.
161	TS	95 of 118	69.1	Use case requirements discharge during the evening hours as per the discharge instructions/load pattern.	Kindly share the load pattern of the system with minute wise data for whole year	Load profile is not available.
162	TS	95 of 118	69.1	System AC-DC-AC efficiency - 75%	Specified effiency after PCS (power conditioning system) or at point of common coupling at 11kV grid connecting point	AC-DC-AC efficiency is specified at PCS level.
163	TS	100 of 118	70.7.1	Up to 5 weeks each year will be permitted for a planned outage to perform any required maintenance. The Contractor shall provide a guarantee for the maximum length of time required for this type of maintenance operation.	Monthly maintenance shutdown shall be counted as outage or not.	Yes. All BESS outages - planned and uplanned shall be counted as Accountable BESS outages for the purpose of calculation of BESS availablity.
164	TS	118 of 118	82	Microgrid controller have a minimum IP56 degree protection	Kindly revise to minimum IP26	Microgrid controller is removed from the scope of contactor. Kindly refer S.Nos. 12-13 & 19 of Amendment-1.

165	TS	94 of 118	69.1	Rated No of Cycles (Minimum): 4000 cycles at rated energy capacity at 80% Depth of Discharge (DoD) at 25oC and C/3 Rate of Discharge.	You will appreciate that there are very few chemistries / technologies that can meet the technical requirement of 80% DOD for 4000 cycles which in turn will tend to cut out many better and cheaper technology options. It will also increase the cost of BESS as most technologies will not be able to participate in the tender. So we request you to relax 80% depth of discharge condition to 50% depth of discharge which is the most prevalent standard in India and abroad. This relaxation will not lead to any compromise in the quality of performance but will help to improve the overall costing of the solution.	Original tender condition prevails.
166	TS	9 of 118	2.1	IEC 61215-1 Ed. 1.0	IEC 61215:2005 is readily available with manufacturers. However, 61215:2016 is under lab testing. Kindly approve IEC 61215:2005 as well.	Original tender conditions prevail.
167	TS	10 of 118	2.3.2	Elongation at break > 100%	Machine-extrusion direction (MD) >100% Transverse direction (TD) >80%	Original tender conditions prevail.
168	TS	10 of 118	2.3.2	Interlayer adhesion strength > 5 N/cm	Interlayer adhesion strength > 4 N/cm	Original tender conditions prevail.
169	TS	11 of 118	2.3.7	Each PV Module shall be provided a bar code which is embedded inside the module lamination and must be able to withstand harsh environmental conditions	All the required infomration shall be available in RFID	Original tender conditions prevail.
170	TS	12 of 118	2.6.2	The Employer shall perform material inspection at the Manufacturer's factory before the start of proposed manufacturing schedule.	The inspection at manufacturer's place shall be as per their COC	OK
171	TS	9 of 118	2	PV Modules	Kindly confirm if bidders are allowed to supply INDIAN as well as other outsource modules .	PV Modules and cells shall be indigenously manufactured. Kindly refer S.No.14 of Amendment-1.
172	TS	93 of 118	68.3	The grid available at various sites are isolated grids with Diesel Generators.	As per our site visit, there is neither DG nor grid at site. We may need DG or grid when there are cloudy days or when solar is not available to prevent battery from deep discharge.So kindly confirm the DG availability with rating/Capacity	The system shall be designed such that it does not depend on Grid/DG sets of MES for auxiliary consumption. The contractor may keep a standby DG at their own cost.
173	TS	17 of 118	5.2.2	Maximum power point tracker (MPPT) shall be integrated in the PCU to maximize energy drawn from the Solar PV array.	Kindly allow separate MPPT units as well.	OK
174	TS	88 of 118	62.4	Reinforcement steel shall be procured only from main steel producers and Mill test certificates (MTC) shall be obtained and submitted to the Engineer for correlation.	MTC shall be submitted of the main steel producer. However, it should be allowed to procure the steel from the dealers / traders.	OK

175	TS	93 of 118	68.3	The grid available at various sites are isolated grids with Diesel Generators	Kindly confirm ratings of the generators which is available for solar combinations.	MEMS is removed from the scope of the contractor. Kindly refer S.Nos. 12-13 & 19 of Amendment-1.
176	TS	94 of 118	69.1	4000 cycles at rated energy capacity at 80% Depth of Discharge (DoD) at 25°C and C/3 Rate of Discharge	Kindly allow 1500 - 1800 Cycles @ 80% DoD at 27Deg . So, we have various options avaialble. Tubular Lead Acid or VRLA Batteries have proven record in leh Ladak Region & these are best suited for Low Temperature applications as compared to Li on Technology	Original tender condition prevails.
177	TS	84 of 118	56.1	Galvanized 220 kV and 132 kV Transmission Line towers, Tower extensions & accessories and 11 kV, 22kV, 22kV & 33 kV transmission poles, towers & accessories shall be designed	We understand from tender the evacuation is planned at 11KV. Kindly confirm requirement of 220KV & 132 KV transmission line tower. Kindly share the SLD & scope of work.	The clause is generic. Power evacuation is 11 kV only. An indicative single line diagram is also attached. Kindly refer S.No.10 of Amendment-1.
178	TS	96 of 118	70	PCU vs PCS	Tender somewhere states PCU & somewhere PCS. Kindly confirm what is the exact requirement with rating.	Term 'PCU' is referred in Solar PV section and 'PCS' is referred in BESS section.
179	SOW	6 of 14	5.1.2	Clearing plant site including disposal of waste material.	Kindly clarify what type of waste is to be expected at site. Also, how & where to dispose the same?	As decided by MES.
180	General				Kindly confirm what is the load profile. We need hourly load profile to optimize the battery storage system.	Load profile is not available.
181	TS	94 of 118	69.1	Nameplate watt rating*, AC (A) A = 750 kW B = 2MWh (dispatchable) at A MW	Kindly confirm if 2MWh battery requirement includes all the losses or this is the output required from battery.	Kindly refer S.No.18 of Amendment-1.
182	SOW	2 of 14	1.1	BESS Rating 0.75MW/ 2.5MWh	Kindly confirm the battery rating - 2MWh (dispatchable) at a MW (mentioned on page no. 295) OR BESS Rating 0.75MW/ 2.5MWh (mentioned on page no. 189) which one is correct	Kindly refer S.No.18 of Amendment-1.
183	TS	95 of 118	69.1	Nameplate watt-hour rating, ac (B) net ac output at the beginning of life and not less than 80% of this capacity at any point of time up to End of Battery Life.	Kindly clarify if this includes battery degradation factor or this is only battery DC to AC conversion losses.	It includes battery degradation only.
184	TS	95 of 118	69.1	System AC-DC-AC efficiency : 75%	For normal batteries, if we consider DOD, battery efficiency, PCS efficiency cable losses etc, the losses will come more than 25%. Kindly have a look & confirm.	Original tender conditions prevail. Kindly refer Annexure-D for methodology for measurement of AC-DC-AC efficiency.

185	SOW	2 of 14	1.1	SPV Plant: Minimum values of PR and CUF of the plant after netting off the auxiliary consumption. PR : 82% CUF : 17.7%	Kindly confirm where the required PR will be measured at Plant end or at the end of transmission line? Also, please link the PR & CUF with irradiance data. Also, Kindly confirm what are the auxiliary needs of the plant. The requried PR & CUF will be very difficult to achieve after netting off the auxiliary consumption.	PR will be measured at the metering point. Kindly refer S.No.10 of Amendment-1 for metering point.
186	TS	9 of 118	2		Modules are not usually BIS Certified. IEC Certifications can be complied. Kindly confirm	As per the Solar Photovoltaics, Systems, Devices and Components Goods (Requirements for Compulsory Registration) Order, 2017, PV Modules shall mandatorily be registered with BIS and bear the Standard Mark from 5th September, 2018. Original tender condition prevails.
187	General				Since, an existing Solar Project is being installed just adjacent to the present site, Actual Site Irradiance Data will provided to be of great help.	No measured irradiance data is available.
188	General			PDI for Imported Items	Inverter Manufacturer's being out of country, Pre-Dispatch Inspection may please be exempted for Imported Items.	PDI is the responsibility of the Contractor. Inverter being the criticial component cannot be exempted.
189	General			Metering Point	Kindly confrim, Measurement of PR and CUF.Is it at Inverter Level or Metering Point and what are consequences of BESS in it. A basic indicative block diagram will be preferred.	An indicative single line diagram with metering point marked is attached. Kindly refer S.No.10 of Amendment-1.
190	TS	9 of 118	2	Photovoltaic modules	PV module indigenous or imported also acceptable?	PV Modules and cells shall be indigenously manufactured. Kindly refer S.No.14 of Amendment-1.
191	TS	38 of 118	15	SCADA	String monitoring required or not.	Yes. String monitoring is required at SCADA.
192	TS	94 of 118	69.1	BESS Rating	As per scope of work page 2, BESS rating 0.75 MW/2.5 MWh and as per Technical Specification of Battery Energy Storage System, BESS rating is 0.75 MW/2 MWh. Why battery bank size is 750 kW? Please confirm the final BESS rating.	Kindly refer S.No.18 of Amendment-1.
193	General				As per actual site condition there is no grid available than what is the solar sysnization source, if source is DG then what is the rating and it is in the scope of whom?	The plant shall be designed so as not to depend solely on DG as synchronization source.
194	TS	14 of 118	4.5(ii)	DC voltage drop	Kindly extend DC voltage drop range up to 2 %	Original tender condition prevails.
195	TS	91 of 118	67	BESS	For BESS design we need the load schedule data of 8760 hour of an year. Please share the same.(Load pattern) & what is the load power factor	Load profile is not available.

196	TS	31 of 118	11	Metering System	As per actual site condition there is no grid than why we need ABT meter. Please confirm.	Original tender condition prevails.
197	TS	57 of 118	25	Area Grading and Land Development	As per discussion with MES person, site area grading in MES scope but as per tender documents grading is in contractor scope. Please confirm.	Site levelling and grading are in the scope of contactor. Kindly refer S.No.8 of Amendment-1.
198	TS	95 of 118	69.1	Procurement-Specific Ratings and Requirements	As per technical specification, use case requirement, what is the meaning of annual availability for performance gaurantee 90%	Kindly refer Clause 70.6 of Technical Specifications for definition of annual availability.
199	General				Electrical Schematic of the premise where BESS and solar is supposed to be integrated (with Voltage and current requirement at all the nodes)	Kindly refer S.No.10 of Amendment-1.
200	General				We will require the connected load parameters i.e a. Number of DGs and its capacity – Make & year of Manufacturing – If there are any DG synchronizer already installed then details of that b. Distance between Solar & BESS c. Load (Critical & Non-Critical) profile. d. Solar generation profile e. All the connected Breaker/ Relays details – Whether they are communicable or needs to be upgraded f. Present Grid Voltage and fluctuation range	a. MEMS is removed from the scope of the contractor. Kindly refer S.Nos. 12-13 & 19 of Amendment-1. b. Solar and BESS will be at the same site. c. Load profile is not available. d. It is the responsibility of the bidder to study the solar generation profile e. Details not required as MEMS is removed from the scope of the contractor. f. No grid is available now. 11 kV network with DGs and loads is being built.
201	General				Footprint available for BESS	Maximum of 7 acres will be allotted for the complete plant facilities at each site.
202	General				Whether there are any PLC/Scada panel already available or any other HMI/communication	No PLS/SCADA panels are available.
203	General				Logistics arrangement to the Site- Whether 20 ft standard marine container can reach till site or we need to find some other alternatives.	It is the responsibility of the bidder to assess the logistics arrangement.
204	General				During the year when there are Road blockage etc.	It is the responsibility of the bidder to assess the logistics arrangement.
205	General				Height of the site ….min & Max temp during a year…humidity range	Kindly refer Table 1 of Technical Specifications.
206	General				BESS application	Evening Peak Management (EPM)
207	TS	94 of 118	69.1	4000 cycles at 80% DoD at 27Deg C.	2700 - 3000Cycles @ 50% DoD at 27Deg C.	Original tender condition prevails.
208	General				Scope of site levelling at Durbuk shall be in MES. Please clarify.	Site levelling is in the scope of contactor. Kindly refer S.No.8 of Amendment-1.
209	General			Please provide load profile of the project	Please provide land profile of the project	Kindly refer S.No.9 of Amendment-1.
210	General			PR at plant end which is now asked for 82%	Not possible. Possibility of PR is 70-75%. Please clarify.	Original tender condition prevails.

211	Scope of Works	5 of 14	4.1.2	Array Junction boxes, distribution boxes and Fuse boxes: MCBs/ isolators, Surge Arrestors with string monitoring capabilities and with proper lugs, glands, ferrules, terminations and mounting structures.	This shall be followed as per "SECTION - VII B. TECHNICAL SPECIFICATIONS Cl.3 String Monitoring Unit", Kindly confirm	Confirmed.
212	Technical Specifications	12 of 118	3	String Monitoring Unit		
213	Technical Specifications	9 of 118	2	Module efficiency - More than 17% for multi-crystalline	There are limited vendors are available with above17% module efficiency, Please give relaxation above 15%.	Kindly refer S.No.14 of Amendment-1.
214	Technical Specifications	13 of 118	3.2.3	Every SMU input shall be provided with fuses on both positive and negative side.	Since the all grid connected central inverters are with negatively grounded, the fuse at negative side of SMU are not required technically, In case the inverters are not with such facility the fuses -ve side also shall be provided. Kindly accept	Accepted.
215	Technical Specifications	14 of 118	4.5 (ii)	The average voltage drop in the cables (Modules to Inverter) shall be limited to 1.5 % of the rated voltage. Contractor shall provide voltage drop calculations in excel sheet.	Request to accept the Average DC Voltage (Modules to Inverter) shall be up to 2%. Please confirm	Original tender condition prevails.
216	Technical Specifications	15 of 118	4.9.7	A.C and D.C cables shall be kept in separate trenches.	In case of string inverters same trench shall be used for DC & AC cables with proper clearance. Please confirm.	Allowed as long as clearance requirement as per IS 1255 is satisfied.
217	Scope of Works	2 of 14	1.1	SPV plant: minimum values of PR&CUF of plant after netting off the auxilary consumption PR 82% CUF 17.7%	We understand the provided PR to be ensured by the bidder at commissioning time. It is understand that the provided CUF commitment shall be at end of first year, Kindly clarify	Yes. PR will be measured after commissioning. CUF shall be calculated at the end of each year till the end of O&M.
218	Technical Specifications	7 of 118	1.2.7	The designed array capacity at STC shall be suitably determined to meet the proposed guaranteed generation output at the point of interconnection by the contractor in his bid. The contractor shall take care of first year degradation also by installing additional DC capacity as the CUF calculations will not factor the first year degradation of the modules		
219	Annexure-B (PG Test Procedure)	8 of 9	2.2	It is the responsibility of the Contractor to build-in the expected variation of irradiance in their design by installing additional DC capacity to meet the committed CUF. Irradiance variation will not be considered for the calculation of CUF	Request to allow the radiation & temperature correction for provided CUF commitment. Kindly accept	Original tender condition prevails.
220	Annexure-B (PG Test Procedure)	4 of 9	2.1.2	PR is calculated as per the formula given in Clause no. 2.1 and recorded as per the format provided at Annexure 1.	The annexure 1 is missing, Please provide.	Annexure-1 mentioned in Clause 2.1.2 is "Sample Report for PR Test" attached in Page No. 9 of 9 (Annexure-B: PG Test Procedure).

221	Annexure-B (PG Test Procedure)	6 of 9	2.1.4.3(1)	Energy injected into grid (kWh) (Source: Plant ABT Meter at GSS/injection point, Temporal Resolution: 15 minute)	We understand that the specified PR in tender is excluding BESS system loss. Please confirm.	Yes. Kindly refer S.No.10 of Amendment-1 for metering point where PR will be measured.
222	Scope of Works	5 of 14	4.1.11	ABT meters with all necessary metering rated CT's and PT's seperately at the SPV plant take off point and the BESS as per CEA Metering Regulation 2006 as amended time to time and state metering code		
223	General				Please provide boundary coordinates/layout/ (cad copy) for both locations.	Kindly refer S.No.9 of Amendment-1.
224	Technical Specifications	20 of 118	6.2	Auxiliary Transformer: Vector Group & Neutral earthing - Dyn11	Pls. confirm whether Auxiliary transformer shall be considered to be tapped from LV winding of the Inverter Transformer.	Confirmed.
225	Technical Specifications	26 of 118	8.3	Following consideration shall be taken into account while sizing the auxiliary transformer: (i) 20% future load margin (ii) 20% design margin (iii) Total connected load at 0.8 power factor	We propose to have 10% design margin only & 0.9 power factor for arriving kVA capacity of auxiliary transformer. Pls. accept.	Original tender condition prevails.
226	Technical Specifications	27 of 118	9.2	Distribution Switchgear: Rated system voltage: 415V+10%,3 Phase, 50Hz, 4 wire, Neutral Solidly Earthed	Request SECI to share the SLD.	Distribution switchgear is for auxiliary supply of plant premises which shall be designed by the Contractor inline with Technical Specifications.
227	Technical Specifications	20 of 118	6.2	VA Rating As per system requirement and SLD	It is presumed that the battery limit is till the outgoing feeder of HT panel. Pls. confirm. Request SECI to share SLD.	Kindly refer S.No.10 of Amendment-1 for indicative SLD.
228	Technical Specifications	25 of 118	7.5	AC Cable Short circuit withstand capability as per design for 1 sec	1. HT cable shall be sized for a system short circuit current considering a fault clearance time of 0.4 sec. specifications. Kindly accept.	Original tender condition prevails.
229	Technical Specifications	43 of 118	16.3.2	H – pole and metering point	Request SECI to share the specification of H-pole.	H-pole is not in the scope of contractor.
230	Technical Specifications	2 of 118		Battery and Battery Charger ..... Error! Bookmark not defined.	Request SECI to share the specification of Battery & Battery charger as the same is not there in the specification.	Battery & Battery Charger under Solar PV part is not in the scope of Contractor.
231	Technical Specifications	103 of 118	70.10.3	The PCS transformer may be used to aid in harmonic cancellation and may include tertiary windings to supply BESS auxiliary power requirements. The transformer must be dry type. The PCS shall include provisions for disconnect on both its AC and DC terminals for maintenance work. Conductor separation must be clearly visible. The detailed maintenance procedure shall be addressed in the O&M manual.	We propose to have oil-type transformer in place of dry type transformer. Pls. accept.	Original tender condition prevails.
232	Technical Specifications	47 of 118	18.2	Monitoring stations of the CCTV Network shall be installed in Main Control Room.	Please specify the no. of Monitoring Stations to be installed at control room.	One monitoring station each for Tangste and Durbuk.

233	Technical Specifications	41 of 118	15.3.1	The Hardware as specified shall be based on latest state of the art Workstations and Servers and technology suitable for industrial application & power plant environment.	Please specify the no. of operator workstations considered for the control room.	One operator workstation each for Tangste and Durbuk.
234	Annexure-C (Special Technical Specifications)	12 of 14	21	WBM (CBR>100%): compacted 75 mm thick, Grade III WBM (CBR>100%): compacted 100 mm thick, Grade III	For same CBR Value (>100) two different thickness of sand layer is indicated. Kindly clarify.	Second set of specifications is for peripheral road and the first set of specifications is for other roads. Kindly read Clause 21 of Special Technical Specifications in total.
235	Annexure-C (Special Technical Specifications)	13 of 14	21	WBM (CBR>100%): compacted 50 mm thick, Grade III WBM (CBR>100%): compacted 50mm thick, Grade III		
236	Annexure-C (Special Technical Specifications)	12 of 14	21	Approach road from nearest existing Public road to Main Gate, Access road from Main Gate to MCR building and Internal roads connecting MCR building with LCR building and other facilities: 1) Topping –Interlocking precast concrete blocks of thickness min. 80mm and of grade M35 laid over compacted sand bed (Zone-II sand conforming to IS-383) of 50mm thickness with all joints to be filled with Zone-IV sand conforming to IS 383. 4) Granular drainage/ filter layer, compacted 100 mm thick 5) Well compacted subgrade (Note - In case of CBR<2, top 300mm thickness shall be compacted up to 98% of standard proctor density in 2 layers of 150mm) 6) Shoulders: Interlocking precast concrete blocks of thickness min. 80mm and of grade M35 laid over compacted sand bed (Zone-II sand conforming to IS-383) of 50mm thickness with all joints to be filled with Zone-IV sand conforming to IS 383.	We have noted the two different specifications for the same approach road. Kindly clarify	Annexure-3 (Special Technical Specifications) prevail over Technical Specifications. Kindly refer Para 2 of Clause 2 of Scope of Works.

237	Technical Specifications	59 of 118	26.3	However, following minimum road section details shall be followed: Approach road from nearest existing Public road to Main Gate, Access road from Main Gate to MCR building and Internal roads connecting MCR building with LCR building and other facilities: 1) Topping: wearing course of 20 mm thick pre-mix carpet or surface dressing, compacted 75mm thick, with murrum blended with WBM Grade-III, as applicable. 4) Granular sub-base (CBR>15%): compacted 200 mm thick in two layers of 100mm thickness each, 5) Compacted subgrade: top 300mm thick, compacted up to 98% of standard proctor density 6) Shoulders: compacted 150mm thick, murrum blended with WBM Grade-III		
238	Annexure-C (Special Technical Specifications)	13 of 14	21	Peripheral Road: 1) Topping: Interlocking precast concrete blocks of thickness min. 80mm and of grade M35 laid over compacted sand bed (Zone-II sand conforming to IS-383) of 50mm thickness with all joints to be filled with Zone-IV sand conforming to IS 383. 2) WBM (CBR>100%): compacted 50 mm thick, Grade III 3) WBM (CBR>100%): compacted 50mm thick, Grade III 4) Granular drainage/ filter layer, compacted 100 mm thick 5) Well compacted subgrade (Note - In case of CBR<2, top 300mm thickness shall be compacted up to 98% of standard proctor density in 2 layers of 150mm) 6) Shoulders: Interlocking precast concrete blocks of thickness min. 80mm and of grade M35 laid over compacted sand bed (Zone-II sand conforming to IS-383) of 50mm thickness with all joints to be filled with Zone-IV sand conforming to IS 383.	We have noted the two different specifications for the same peripheral road. Kindly clarify.	Annexure-3 (Special Technical Specifications) prevail over Technical Specifications. Kindly refer Para 2 of Clause 2 of Scope of Works.

239	Technical Specifications	59 of 118	26.3	Peripheral Road: 1) Topping: surface dressing, compacted 75 mm thick, murrum blended with WBM Grade - III 2) WBM (CBR>100%): compacted 75 mm thick, Grade III 3) WBM (CBR>100%): compacted 75 mm thick, Grade II 4) Granular sub-base (CBR>15%): compacted 150 mm thick in two layers of 75mm thickness each, 5) Compacted subgrade: top 300mm thick, compacted up to 98% of standard proctor density 6) Shoulders: compacted 150mm thick, murrum blended with WBM Grade-III		
240	Technical Specifications	65 of 118	30.9.1	Appropriate Load factors in LSM design for concrete structures and appropriate Factor of safety in WSM design (ASD) for all steel structures including MMS shall be considered as per relevant BIS standard. No increase in permissible stress is permitted in design of MMS	We infer that increase in permissible stress can allowed for the MMS structure design only for the temperature load combination. Kindly confirm.	Confirmed.
241	Annexure-C (Special Technical Specifications)	11 of 14	8	However, the permissible stresses under effect of (DL ± WL ± TL) may be increased by 33%.		
242	Annexure-B (PG Test Procedure)	4 of 9	2.1.2	The test (PR Test) will consit of guaranteeing the correct operation of plant facilities, by way of the performance ration based on the reading of the energy produced and delivered to the grid at the plant end ABT meter and the Plane of Array incident solar radiation	Request you to provide the SLD for the proposed system	Kindly refer S.No.11 of Amendment-1.