SECI	SECI–SGM10–1–2015/10072015/Clarifications-01 Date: 10/07/2015						
			Pre-Bid Qu	eries - Commercial			
S. No.	Section	Clause	Tender Spec	Query	SECI Response		
1	I	2.2.5	Design, supply, erection, testing and commissioning of 33kV OH transmission line and connect it to 220/132/33kV GSS including ROW	Any support that SECI will provide in obtaining the same?	The scope of obtaining (Right of Way) ROW and relevent clearances for the erection of Transmission line shall be in Contractor scope only. However, SECI, at its own discretion, may assist for obtaining the same.		
2	I	2.6	Obtaining all associated statutory and regualtory compliances and approvals	Need more details on the same . Does it include all the necessary approvals for setting up of the plant? Any support/ responsibility from SECI side? Ideally it should be done by SECI.	Contractor must take all the necessary approvals for setting up the plant. However, SECI will support the bidder with necessary documents and statutory fees as intimated by the respective Government departments. Contractor shall provide the list of required documents 10 days prior to their actual requirement. However, Contractor must provide a tentative list of all documents required pertaining to such approvals within one month of issue of LOI. Please refer GCC Clause 8 & 9.		
3	I	4	Technical and Financial Criteria of Bidder	We request you to accept consortium or Joint Venture to meet financial and technical criteria	Consortium/Joint venture is not allowed and Bid conditions will prevail.		
4	I	4.2	Technical and Financial Criteria of Bidder	A new company in Solar with experience in other industry meeting the financial criteria	Original bid conditions will prevail.		
5	I	4.2.1	Technical Criteria of Bidder: Minimum cumulative installed capacity shall be 25MW or above, with minimum megawatt scale of project	Minimum Cumulative installed capacity to be 10MW with minimum megawatt scale of plant	Original bid conditions will prevail.		
6	I	4.2.2	Technical Criteria of Bidder: Minimum 2 Nos. of plants of 5MW capacity or above should have been under operation for 2 years	Minimum one plant of 1MW capacity or above should have been under continous operation for 1 year	Original bid conditions will prevail.		
7	I	4.3	Financial Criteria of Bidder: Average annual turnover for the preceeding three years shall not be less than INR 100crores	Average annual turnover for the preceeding three years shall not be less than INR 50crores	Original bid conditions will prevail.		
8	11	1.2.3	Cost of Tender document (50000+5%VAT) and Bid Bond (INR 2 crore)	Request SECI to reduce the tender document cost considering the recent NTPC tender fee around INR 2500-3000. Also reduce the bid bond value to INR 50Lacs.	The tender document cost inculdes processing fee also. Original Bid conditions will prevail.		
9	II	1.2.3	PBG is to be submitted in 3 Nos. BG in 20%, 40% and 40%	Request to clarify wheather all PBG to be released at time or in parts.	All the PBG's will be released at time of maturity subjected to fulfillement and compliance of the liabilities under this contract.		
10	II	2.9	Financial propsal and currencies: Bidder shall quote the prices inclusive of all taxes and duties	Clarify as to weather the Service tax is applicable for the said work which is proposed to be undertaken by your department. The rate of service tax shall also be mentioned	All taxes will be appliable as per the governing laws at applicable rates.		

SECI	SECI-SGM10-1-2015/10072015/Clarifications-01 Date: 10/07/2015						
	r		Pre-Bid Qu	eries - Commercial			
S. No.	Section	Clause	Tender Spec	Query	SECI Response		
11	II	1.3.7	The Employer shall not be liable for any omission, mistake or error on the part of the Bidder in respect of any of the above or on account of any matter or thing arising out of or concerning or relating to the NIT document or the Bidding process, including any error or mistake therein or in any information or data given by the Employer.	The bidder cannot be held liable for the error or mistake in any information or data provided by the employer.	SECI takes utmost care on preparation of the document . However notwithstanding the same, any data provided is for information only. It is suggested that the bidder, with his expertise and experience to satisfy himself with the correctness of relevant data and prevailing conditions at the site.		
12	II	2.11.2	All the expenses of inspection regarding fabrication, installation, hook - up and commissioning during the execution of the project shall be borne by the contractor and the notice for such inspection shall be made at least 1 month advance.	The nature of expenses during the inspections and frequency of occurance, either by SECI or its authorized representatives, to be catagorized and capped. Also define the third party inspection needs.	SECI or its authorized representatives, reserves the right to inspect the critical components of the plant before despatch for site. SECI at its own discretion will visit the premises for inspection. Contractor is requested to provide intimation alteast 14 days prior for inspection. All expenses for SECI personnel or its authorised represenative will be borne by SECI. All other expenses related to testing and inspection shall be borne by the Contractor.		
13	II	2.12.1	Bidder to furnish the EPF code number with relevent document along with the bid.	We request you to delete this clause as it would be difficult for us to comply.	Original bid conditions will prevail.		
14	II	3.1.7	Bidder shall submit the PF code number provided by the local PF commissioner	We request you to delete this clause as it would be difficult for us to comply.	Original bid conditions will prevail.		
15	ш	7.1.3	Earth work for site grading, cutting, filling, levelling and comapacting of land.	Is this activity for total 80 acres of the plant area?	The total land area of 80 acres need to be developed.		
16	IV	25.3	Difference in units derived from committed and achieved CUF x Rs. [Tariff as per SECI's PPA] for period after commissioning till the O&M contract closure.	Kinldy confirm the PPA tariff applicable. Also kindly cap the Liquidated damages for shortfall in P.R. to 10% of the O&m value.	For PPA tariff, Bidder to consider prevailing CERC tariff at the time of commisioning. The LD, if any, on O&M portion of contract will be deducted from O&M bank guarantee provided by the bidder and payments due to the bidder.		
17	IV	27.4	In case the Project fails to generate any power continuously for 1 month any time during the O&M period, it shall be considered as "an event of default". In the case of default the entire O&M Bank Guarantee will be encashed.	The failure of power generation due to external factors like grid outages/ force majeure shall not lead to fault of bidder. No BG shall be encashed for that reason. Please confirm.	Apart from the force meajure conditions, grid outage conditions, as certified by the concerned authority from STU/ CTU, shall also be considered in declaraton of event of default.		
18	111	34	Liquidity damages on completion of plant: 1. Delay up to 1 month - 20% of PBG encash 2. Delay up to 2 month - 40% of PBG encash 3. Delay up to 3 month - 40% of PBG encash	Request you to consider LD @ 0.2% of Contract value/ week up to a maximum cap of 5% of Contract value	Original bid conditions will prevail.		
19	111	39	Insurance: During the contract period all the insurances related expenses shall be borne by the contractor	Request SECI to provide all the insurance during the O&M period. Typically bidder shall provide the insurances during the construction period and insurance during O&M shall be taken by the Owner. Please confirm.	During O&M period all required insurance covers required for satisfactory operation and maintenance shall be borne by the contractor .		

SECI	SECI-SGM10-1-2015/10072015/Clarifications-01 Date: 10/07/2015						
			Pre-Bid Qu	eries - Commercial			
S. No.	Section	Clause	Tender Spec	Query	SECI Response		
20	111	42	Stoppage of Work: Employer shall not be responsible and liable to pay any compensation due to stoppage of work as a reaction from local public due to any undue action on the part of the contractor causing annoyance to local public	As the bidder shall be setting up the plant of SECI's land, therefore SECI shall bear the expenses for any loss to the bidder for delay caused due to stoppage of work. Please confirm	Original bid conditions will prevail.		
21	III	49.2.2	Whenever a fault has occurred, the Contractor has to attend to rectify the fault & the fault must be rectified within 24 hrs time from the time of occurrence of fault, failing which the Contractor will be liable for additional liquidated damages as per terms & conditions under Performance Guarantee and under Warranty mentioned in SCC.	As the bidder will be liable to pay liquidated damages for delay and performance, therefore this condition will impose double penalty on the bidder. Request you to waive this prevelant condition.	The plant is expected to operate continous with 99% uptime. So any breakdown in the plant needs a quick response time to rectify. To ensure the same from the O&M contractor the LD clause is imposed. Even after maintaining the up time the regular cleaining and preventive maintenance/checks of the plant also affetcts the CUF. Therefore the liqidated damages are imposed on meeting the committed CUF also.		
22	111	49.3	The contractor must demonstrate the committed CUF at the end of every year in accordance with commitment made in the Techno-Commercial Enclosures of the Bid.	Bidder shall only be guarantying the Performance Ratio (PR) and not CUF. CUF is dependent on lot of factors like irradiance, grid downtime etc which is beyond the control of the bidder. Please exclude the CUF guarantee from the contract.	Original bid conditions will prevail.		
23	IV	5	Final check-up of equipment and pre – commissioning, commissioning and putting the system into successful operation for performance emonstration while feeding power to the grid while keeping the plant up for 100%.	It is practically very difficult to keep the plant at 100% uptime. As a standard practice in the industry 98% uptime of plant (excluding the grid downtime or force majeure condition) is accepted. We request SECI to consider the same.	Suitable ammendment issued. Please refer ammendment No. SECI-SGM10-1-2015/10072015/ ammendment-01, S. No. 2		
24	IV	12.2	Time for completion of construction activities is 180 days	The period should be extended by another 60 days	Original bid conditions will prevail.		

SECI	ECI–SGM10–1–2015/10072015/Clarifications-01 Date: 10/07/2015						
			Pre-Bid Qu	eries - Commercial			
S. No.	Section	Clause	Tender Spec	Query	SECI Response		
25	IV	14	Terms of payment	We request SECI to consider the following payment terms. 1. Mobilization advance - Non interest bearing advance of 10% of the contrcat value after signing of the contract and submission of advance bank guarantee of equivalent amount. 2. 10% of contract amount Upon the completion of all drawings and deliverables required for the construction of plant 3. An irrevocable letter of credit (L/C) at despatch from A rated bank shall be opened within 5 working days from the date of advance for 67.5 % Payment on pro- rata basis against proof of dispatch of material. All these payments shall be under an irrevocable sight LC which shall be opened within 5 days of advance payment. 4. 7.5 % on pro rata basis against installation and commissioning • 5 % against succesful completion of Performance and guarantee test for 15 days. 6 O&M payment shall be inital quarterly advance and hence forth quarterly payment.	Original bid conditions will prevail.		
26	IV	14.1	Payment Terms: 10% of contrct value shall be released at the time of successful demonstration of CUF after 1 year of successful operation	Request SECI to release 10% of contract value as there is already 10% PBG retained	Original bid conditions will prevail.		
27	IV	14.1	Mobilization advance as 10% of ECV with interest	The same shall be given without interest as practiced by other PSUs	Original bid conditions will prevail.		
28	IV	14.5.3	SECI will not issue any C form	Any specific reason for the same? Providing the same will help SECI bring down the cost of the plant	If SECI is in a position to issue 'C' Forms, concessional Tax will be applicable and payable by SECI. If no 'C' Form is issued full Sales Tax will be payable.		
29	General			Extension in time for bid submission by at least 4 weeks.	SECI is working under predefined time lines. Time extension for bid submission is extended upto 27.07.2015 up to 1100hrs, subsequently bid opening shall be at 1200 hrs on 27.07.2015		
30	General			Kindly clarify whether SECI will enagage Civil Consultant for checking of drawings and design. If yes, shall we have to submit all drawings, design and calculation to that consultant? How much time it may take to approve drawings and documents after submission?	Please refer to GCC Clause 20.3		

SECI-S	ECI–SGM10–1–2015/10072015/Clarifications-01 Date: 10/07/2015						
			Pre-Bid Queries - Te	chnical			
S. No.	Section	Clause	Tender Spec	Query	SECI Response		
1	v	1.2	11MWp/ 10MW (AC)	11MWp DC can be considered during the calculations and PG tests or 10MW AC is to be considered for the same irrespective of the DC capacity?	The minimum DC capacity of the plant is mentioned as 11 MW and required AC capacity is 10 MW. Therefore, solar panels of minimum 11MW or more need to be installed in the plant to achieve the 10MW AC capacity. Accordingly All the PG tests ( PR and CUF) are to be demnonstared against the installed DC capacity ( i.e. 11MW or above) to achieve required AC output.		
2	v	2.1.1	Crystalline cells/ modules manufactured in India	Are only modules made in India acceptable? If yes, we request you to allow modules made out of India as well. Otherwise it is very difficult to comply	As per the policy under which the plant is envisaged, all the crystalline cells and modules are required to be manufactured in India. For thin film technologies no such condition exists.		
3	v	2.2.1	Plant layout to ensure optimum availability for generation during the day time without any shading.	Shading during day time will be determined as per the plot layout. For the calculation of the same, please share the plot layout with dimensions in Auto CAD.	Contractor has to develop an Auto CAD layout of the plant for approval of SECI. However, the approval of same will not relieve the bidder from its liability towards performance gurantee.		
4	v	2.4	Minimum array capacity at the end of 1st year is to be determined as 11MWp	It is written as 11MWp at array side so we are safely consider it to be DC side. Also please indicate the maximum capacity of DC capacity to be installed for achieving the PR & CUF	It is required to install minimum DC capacity of 11MWp (or more) at the time of installation with objective of achieving 10 MW AC capacity.		
5	V	2.7	The guaranteed annual system availability shall not be less than 99.9%.	As per standard solar power plant application, plant uptime should be atleast 99%. Please accept.	Suitable Amendment issued. Refer Ammdt No SECI–SGM10–1–2015/10072015/Amendment-01, SI No 2.		
6	V	3.2.4	415V/33kV stepup Transformers	Transfomer Ratio and Vector Group as per inverter requiment. Also, the inverter side AC voltage will vary between 380 - 400V from manufacturer to manufacturer.	The voltage level at LV side of the inverter duty transformer can be as per the inverter manufacturer. However, it must follow the grid code and local regulaton on power evacuation for the 33kV level and vector group for the inverter duty transformer.		
7	V	3.2.5	33kV / 415V auxiliary transformer.	Pls Confirm if bidder is allowed to use distributed auxiliary system, each inverter with Dry type 350V/415V transformer.	SECI recommends bidder to propose the best design for the net maximum generation from the plant. Bidder is requested to plan all the auxiliary loads and distribution methodology as per their design so as to meet the guaranteed performance conditions		
8	v	3.2.9	33kV indoor/ outdoor panels having incoming and outgoing feeders with VCBs, CTs, PTs, Bus bars, cables terminals kits and Bus coupler having Main and transfer Bus.	In case indoor HT panel is consider, transfer bus will not be required. Please accept.	The specifications written here considering both indoor and outdoor switchgears. It is however, bidders choice to have indoor or outdoor in their design to have the maximum output from the plant.		
9	v	3.7.6	Construction of 10m wide motorable approach road from main road for easy access to site & 3.75m wide internal roads with 0.5m wide well compacted shoulders on each side with WBM base to carry safe and easy transportation of equipment and material at the project site during and after construction.	As per IRC standards, Motorable approach road to be 7m wide with shoulders. Specify wearing course of the same. Also we propose WBM road of 3.5m wide including shoulders on either side.Kindly confirm.	Suitable Amendment issued. Refer Ammdt No SECI–SGM10–1–2015/10072015/Amendment-01, SI No 4.		

SECI-S	ECI-SGM10-1-2015/10072015/Clarifications-01						
	1 -		Pre-Bid Queries - Te	chnical			
S. No.	Section	Clause	Tender Spec	Query	SECI Response		
10	v v	5.1	Modules shall perform satisfactorily in relative humidity up to 95% and temperature between -10°C and 85°C (module temperature). It shall perform satisfactorily in relative humidity up to 100% with temperature between -10°C to +85°C (cell)	Humidity claimed by most of the module manufacturer is 95%. Please confirm.	Amendment issued. Refer Ammdt No SECI–SGM10–1–2015/10072015/Amendment-01, SI No 5.		
12	V	2.2.7	and Flat plate SPV arrays which are held fixed at an optimum tilted angle and face towards the equator, are most common. The angle of tilt should be approximately equal to the angle of latitude for the site. Module Mounting Structure (Fixed/Single Axis/Double	Can be read as "Module mounting structure will be designed for either Fixed Tilt/ Manual Seasonal Tracking / Single Axis Tracker / Double Axis Tracker to meet the required CUF and PR%". Please confirm.	Amendment issued. Refer Ammdt No SECI–SGM10–1–2015/10072015/Amendment-01, SI No 6.		
13	v	0.1	Axis):				
14	V	6.1.4 & 8.4	In order to withstand wind speed applicable for the zone (Site Location) or <b>180kmph</b> , whichever is higher, using relevant Indian wind load codes and also the structure shall be designed as per the Sesimic conditions	As per IS 875 part 3 Annexure 'A' nearby city is Jodhpur and wind speed is 47 m/s=170kmph, Please accept. As per the standard solar power plant application seismic load is not considered. In module mounting structure, no extra dead load is considerd other than module is envisaged. Wind load is governing load in this case.	Original bid conditions will prevail		
15	V	6.1.7	The array structure shall be made of hot dipped galvanized steel of suitable size. The thickness of galvanization should be as per the relevant standards for galvanization but minimum of 80 microns. It is to ensure that before galvanization the steel surface shall be thoroughly cleaned of any paint, grease, rust, scale, acid or alkali or such foreign material as are likely to interfere with the galvanization process. The bidder should ensure that inner side should also be galvanized.	Purlins to be coated with Galvalum (AZ-150). Kindly confirm.	As per the requests an amendment proposed with ASTM A792 / A792M - 10 standard AI - Zn alloy with hot dip process and thickness of 150CSM on both sides for Module mounting structure in place of Galvanization with 80micron thickness on both sides. Refer SECI–SGM10–1–2015/10072015/Amendment-01, SI No 7		
16	v	6.1.10	All fastners shall be of SS of grade SS316 and must sustain the adverse weather conditions. If any lower grade of Stainless Steel (SS 304/302 or equivalent) fastners are used, they must have protective coating to ensure life of 25 years	As per the industry practice GI fastners are acceptable except for PV modules which is SS304, we therefore request you to limit SS304 for module and rest for SS304. Please specify the protective coating material and thickness of coating. Also,Anti-theft fastners to create holes in the module frame at locations not specified by the manufacturer, which will debarr the module warrenty. kindly specify the other alternatives	Amendment issued for Fastners for MMS: Refer SECI–SGM10–1–2015/07072015/Amendment-01, SI No 8 Fastners used for structures shall have properties equivalent to structural material as per ASTM A792/ A792M (i.e., AI-Zn alloy). All the fastners used for modules must have a protective coating of anti corrosive material with sustained life of minimum 25 years. Anti-theft fastners do not require to create any holes in frame.		

SECI-S	ECI-SGM10-1-2015/10072015/Clarifications-01 Date: 10/07/2015						
			Pre-Bid Queries - Te	chnical			
S. No.	Section	Clause	Tender Spec	Query	SECI Response		
17	v	6.1.14	The minimum clearance between the lower edge of the module and the ground shall be the higher of (i) above highest flood level at the site and (ii) <b>600 mm</b> .	As per the standard solar power plant application ground clearance of 450mm is kept keeping in mind easy & proper cleaning & maintenance. Can we propose structure with 450 mm clearance?	Original bid conditions will prevail.		
18	V	6.2.3	Strings are required to be connected to the bus bar through individual fuses.	Pls confirm if bidder is allowed to use "Y" connectors at the string level and then take output of "Y" connector to String combiner box. We also propose to monitor 2 / 4 string instead of individual string at the combiner box.	Clause does not specify for individual strings. However, if the bidder propose to use Y connector; maximum of 2 strings can be combined keeping the losses within the specified limit.		
19	v	6.2.7	Each Array Junction Box will have suitable Reverse Blocking Diodes of maximum DC blocking voltage of 1000V with suitable arrangement for its connecting. The bypass & reverse blocking diodes should work for temperature extremes and should have efficiency of 99.98%, confirmed by appropriate IEC standards.	Please note bypass & reverse blocking diodes are not required, as reverse current protection can be done by fuses, and bypass diodes are already available in Module Junction box. Moreover, RBD will cause voltage drop and reduce the overall efficiency and also heat produces by diodes detoriates the performance of other item used in JB. Please accept the design of the SMB with RBD	If the proposed modules are provided with blocking diode the array blocking diodes are not required.		
20	v	6.1.11	Modules shall be clamped / bolted with the structure properly. The material of construction shall be GI / AI / Steel. Clamps / bolts shall use EPDM rubber and shall be designed in such a way so as not to cast any shadow on the active part of a module.	Plese confirm if Spring washers and plain washers can be provided in place of EPDM. Kindly confirm.	Original bid conditions will prevail		
21	V	6.3.6	PCU manufacturer must have experience of 50MW installation in India	There are many good inverter manufacturer who have not done 50MW in India	Original bid conditions will prevail. Bidder shall submit the list of installations in India as part of Enclosure to bid.		
22	v	6.4.1	The PCU must have the feature to work in tendem with other similar PCU and be able to be successively switched ON and OFF automatically based on solar radiation variation during the day	Inverter have self program routine of safety checks before ON. Upon fall of insolation level of a predetermined level or non availability of grid inverter will disconnect and go to sleep mode. The inverter automatically wake up after sensing the radiation of reestablishment of grid. Hence daily SCADA operation is not required. <b>NHPC</b> to accept the same. Since, the individual PCU is connected with selected MW block and operate with MPPT algorithm fr the block and accordingly load variation is controlled on the inverter. As an individual DC block and inverter are not connected for load control therefor this is not required.	The clause suggest that every inverter must work in synergy with other inverters. Inverters must work intellignetly in order to optimize the generation at all times with minimum losses		
23	V	6.5.4	Galvanic isolation	Galvanic Isolation is not a part of inverter it will be given through external MV transformer. Pls confirm the same.	Amendment issued. Refer Ammdt No SECI–SGM10–1–2015/10072015/Amendment-01, SI No 9.		
24	V	6.5.7	Unequal Phases: The system shall tend to balance unequal phase voltage (with 3-phase systems).	System is able to work up to +/-5% Phase voltage different, phase balancing is not possible by the inverter. Please confirm the acceptance.	Original bid conditions will prevail.		
25	V	6.6.2	Bidder shall supply only Central Inverter	Request you to allow string inverters as well.	Original bid conditions will prevail.		

SECI-	ECI-SGM10-1-2015/10072015/Clarifications-01 Date: 10/07/2015						
			Pre-Bid Queries - Te	chnical			
S. No.	Section	Clause	Tender Spec	Query	SECI Response		
26	V	6.7.1	All cables and connectors for use for installation of solar field must be of solar grade which can withstand harsh environment conditions including High temperatures, UV radiation, rain, humidity, dirt, burial and attack by moss and microbes for 25 years and voltages as per latest IEC standards. (Note: IEC standards for DC cables for PV systems is under development, the cables of 600 – 1800 volts DC for outdoor installations should comply with the draft EN 50618/ TUV 2PfG 1169/09.07 for service life expectancy of 25 years)	Pls confirm it this requirement is for cables is till Junction Box only. Junction Box to Inverter & other LT cable cable shall be XLPE AL 1.1kV cable. This is in line with the industry standard. As per standard solar application TUV certified XLPO insulated Copper solar cable will be provided for the interconnection of modules with SMU. As the XLPO insulation will be able to withstand harsh UV radiation condition.	Amendment issued. Refer Ammdt No SECI–SGM10–1–2015/10072015/Amendment-01, SI No 10. The DC cables from solar module to junction box are of solar grade Copper cables with XLPO insulation only. However, DC cables used from JB to inverter can be of solar grade XLPO AI 1.1kV. The required test certificates		
27	V	6.7.2	Insulation: Outer sheath of cables shall be electron beam cross-linked XLPO type and black in colour. In addition, Cable drum no. / Batch no. to be embossed/ printed at every one meter. Cable Jacket should also be electron beam cross-linked XLPO, flame retardant, UV resistant and black in colour.	As the cable after SMU will be burried inside ground 1.1kVAC grade Aluminiumm cable suitable for 1.5kVDC applications will be used for the interconnection of SMU to inverter, inverter to transformer and for further LT application. Please accept.	along with life expectancy of 25 years for all the cables used, must be supplied with cables.		
28	V	6.7.3	Wires with sufficient ampacity and parameters shall be designed and used so that maximum voltage-drop at full power from the PV modules to inverter should be less than 1.5% (including diode voltage drop).	As per standard solar power plant application, DC voltage drop from the module upto inverter DC side should be limited to 2%. Please accept.	Original bid conditions will prevail.		
29	V	6.9	Lightning Protection for PV Array	In standard solar power plant application ESE type lightning arrestor are used. ESE type lightning arrestor have higher area of protection and hence the quantity and the shadow effect will also be lesser. The ESE lightning rod will be provided as per NFC-17- 102. Please accept.	Amendment issued for the type of Lightning arrester. Refer Ammdt No SECI–SGM10–1–2015/10072015/Amendment-01, SI No 11. ESE type lightning arrester with reference to NFC 17-102.		
30	v	6.30.3	The ACSR bus bars are an underground system of wires strung between two supporting structures and supported by strain type insulators.	Can be read as "The ACSR bus bars are an overhead system of wires strung between two supporting structures and supported by strain type insulators". Please confirm.	Amendment issued. Refer Ammdt No SECI–SGM10–1–2015/10072015/Amendment-01, SI No 12. The ACSR bus bars are an <b>overhead</b> system of wires strung between two supporting structures and supported by strain type insulators. All the conductors/ bus bars are to be provided with insulation sleeves.		
31	v	6.47.1	The specification covers design of array yard and substation, street light using 50W LED luminares, tubular poles (from main gate to CR and periphery of the plant)	Suitable LED lights will be provided to meet the lux requirement. Street light will be solar or through auxillary supply. Pls	Suitable LED luminaire wattage can be used to maintain the required LUX levels. The street lights shall be based on Auxillary supply.		
32	V	6.47.3	Other areas including peripheral wall - 10 Lux	As per IS 1944 part 1&2, 1970, B2 secondary road with light traffic 4 lux is sufficient. So please accept it	Original bid conditions will prevail.		
33	V	7.1.2	PR test shall be performed at site for consecutive 30 days	Logging of data is done thorugh SCADA. Hence PR test at site may not be required.	PR test is to be conducted at site for the specified		
34	V	7.1.3	Performance guarantee test are required to be conducted at site for 30 consecutive days after commissioning	With the monitoring system Performance guarantee tests can be determined for the whole life time at monitoring centre and doing the same at site is not necessary	duration with the real time data accumulated at site either through SCADA or manual readings, in the format finalized mutually before the start of PR test.		

SECI-	ECI–SGM10–1–2015/10072015/Clarifications-01 Date: 10/07/2015							
	Pre-Bid Queries - Technical							
S. No.	Section	Clause	Tender Spec	Query	SECI Response			
35	V	7.1.5	PR and the efficiency of the plant is calculated as follows (according to IEC 61724)	Request the developer to share sample data of PR and weather corrected PR for a period of one year month wise to determine the PR that we can use.	The proposed PR formula is the temperature compensated one, through which the variations of PR due to temperature is adjusted.			
36	V	8.1	Topographical survey shall have to be done by the Successful Bidder of the proposed site at 5 m interval with the help of Total Station or any other suitable standard method of survey. All necessary Reduced Levels (RL) as entered in the Field Book have to be submitted along with pre contour layout of the total site. The formation levels of the proposed power plant have to be fixed with reference to High Flood Level of the proposed site. The ground level and plinth level of structures shall be fixed taking into consideration the highest flood level and surrounding ground profiles.	Topographical survey to be at 25m interval as per standard practices. Kindly confirm.	Topographical survey to be at 10m interval. Refer Ammdt No SECI–SGM10–1–2015/10072015/Amendment-01, SI No 14			
37	V	8.9.2	The Bidder shall estimate the water requirements for cleaning the photovoltaic modules at least once in every week in order to operate the plant at its guaranteed plant performance.	Period of cleaning of module will be done at an interval of 7/15days to keep the PR of the plant within range depending on the soiling condition present at site. Please accept.	Original bid conditions will prevail.			
38	V	8.12.2	Bidder is to provide RCC hume pipe at the crossing of road and drains and at required locations. The peripheral drain shall be of brick pitching which is backed up by cement mortar bed and all joints are filled up with cement mortar in C.M. 1:4, no pointing and plastering is required. All other internal drains i.e. on both side of central road, pathways to inverter room, control room, switchyard are to be done by excavating the drain of required size and with required trapezoidal section.	Drain to be provided as per the hydrology study and contour layout. Drain on both sides of road to be provided only in case of design requirement. Drain to be provided on only one side of the road. Kindly confirm.	Amendment issued.Refer Ammdt No SECI–SGM10–1–2015/10072015/Amendment-01, SI No 13 Drain at both sides of road is only if required . Wall of drains can be of stone pitching on cement mortar bed with pointing. Weep holes must be provided at an interval of 2m.			
39	v	8.15	construct 5 lacs litre underground RCC water tank with silting chamber for filtration of the water before the inlet which will match with invert level of Storm water drain.	5Lac Litre undergroung RCC water tank seems to be on a higher side. For 10 MW, 2Nos. 50kL RCC UG tanks are sufficient. Kindly confirm if this is acceptable	Amendment issued. Refer Ammdt No SECI–SGM10–1–2015/10072015/Amendment-01, SI No 15 Water tank can be Over head/ under ground placed at strategic location to carry water required for cleaning the modules at least for two cycles while estimated cleaning cycle is once per week.			