

Attachment-2 (Consolidated Response to Bidder's Queries)

References:

1	Tender for Design, Engineering, Supply & Procurement, Construction, Operation and Maintenance of 2x 75MW (AC) Solar Photovoltaic Grid-Connected Power Plant at Gujarat Solar Park, Village Charanka, Taluka Santalpur, District Patan, Gujarat (RFP No. No. GIPCL/ Solar/EPC/2017/2x75 MW (AC) Solar PV/ Rev. 1.0, E-Tender ID No: 288804 dated 18 December 2017).
2	Pre-bid queries received during Pre-Bid Meeting on 2nd January,2018 and also through various email(s).

Sr No.	Page No.	Description	EPC tender Clause	Details as per EPC Tender (GIPCL/ Solar/EPC/2017/2x75 MW (AC) Solar PV/ Rev. 1.0)	Bidder's Query	Owner (GIPCL/GSECL/GSFC) reply / clarification to Pre Bid Queries
1	96	Photovoltaic Modules	5.3.1 (v)	All photovoltaic modules should carry a performance warranty of >90% during the first 10 years, and >80% during the next 15 years. Further, module shall have performance warranty of > 98% during the first year of installation. Degradation of PV module for first year shall be limited to 3.5% and shall not be more than 1% in any subsequent year.	As mentioned, degradation shall be limited to a maximum of 3.5% in the 1st year, considering this, power/performance warranty for the first year shall be not less than 96.5% in place of 98%, pls clarify.	Please refer Amendment
2	101	Inverter and Power Conditioning Unit (PCU)	5.3.3 (xv)	The inverters shall have minimum protection to IP 65(Outdoor)/ IP 21 (indoor) and Protection Class II or higher.	Most inverter manufacturer's offer outdoor inverter with IP54 and indoor inverter with IP20, pls confirm if this can be considered, installation of the inverter shall be in line with manufacturer guidelines.	The inverters shall have minimum protection to IP 65(Outdoor)/ IP54 (with roof with separate structure)/ IP 21 (indoor) and Protection Class II or higher. Further all inverter (IP65 & IP54) inverters must be installed with proper plinth / platform. Further, all associated equipments like RMU, UPS, ACDB, SCADA Panel shall have suitable IP class and type of installation as per EPC tender.
3	103	Inverter and Power Conditioning Unit (PCU)	5.3.3 (xxvii) (g)	Heat Transfer / Cooling / Built in Ventilation Systems must be provided with 20% Spare capacity. Bidders to Submit Heat Rejection / Transfer calculation for Air Conditioning of Inverter Room.	We propose ventilation of inverter through necessary exhaust fans and louvers in case of indoor inverters as per inverter manufacturer guidelines. Air conditioning is not recommended as this will cause excessive auxiliary losses in the plant.	Type of Ventilation system for LCR shall be based on heat load calculation of equipment like Inverters, breakers, UPS etc as per recommendation by OEM.
4	107	Cables and Wires	5.3.4 (ii)	Wires with sufficient ampacity and parameters shall be designed and used so that average voltage-drop at full power from the PV modules to inverter should be maximum 2% (including diode voltage drop). PV Modules should be connected with USE-2/RHW-2 cables array to junction box conductors and junction box to photovoltaic disconnecter with the THHN/THWN-2 sunlight resistant with 90°C wet rated insulation cable. Due consideration shall be made for the de-rating of the cables with respect to the laying pattern in buried trenches / on cable trays, while sizing the cables. The Contractor shall provide voltage drop calculations in excel sheet.	DC cables used for interconnection of modules shall be as per EN 50618, pls confirm	Please refer Amendment
5	100	Inverter and Power Conditioning Unit (PCU)	5.3.3 (i)	Only those PCUs/ Inverters which are commissioned for more than 100 MW capacity (1000V DC) or 50 MW capacity (1500V DC) in other solar PV projects till date shall be considered for this project.	We understand that this requirement is for a certain inverter manufacturer and not a specific model of the manufacturer, pls confirm	Bidder to submit references and credentials after award of work as per the EPC tender. No change in Tender conditions. Bidder to comply with tender conditions.

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6	119	Step-Up Transformer	5.3.12 (i)	The Contractor shall provide the complete turnkey design, supply, erection, testing and commissioning of transformers and transformer substation to first step-up the output of the inverter to HV at the location of the inverter. Inverter Transformer must be protected with HV VCB Panel / RMU Capacity of each inverter block. Capacity of LCR (Inverter Block) shall not exceed more than 5 MW. Hence, total 75MW capacity of the solar plant with provision of rated 11kV or 33 kV HV Vacuum Circuit Breaker panel shall be connected upto 66 kV substation of the plant.	Considering larger inverters available in the market, request GIPCL to reconsider this and accept block size upto 10 MW.	Please refer Amendment
7	122	Technical Data of Inverter Transformer	5.3.13.1	Vector Group Dy5/ Dy11	The vector group indicated is for 2 winding transformers (1 LV winding and 1 HV winding), to optimize the system, we request GIPCL to consider transformers with upto 4 LV windings.	Maximum allowable rating of single Inverter transformer (with multiple winding) shall be 5 MVA.
8	123	Technical Data of Inverter Transformer	5.3.13.1	Impedance voltage (%) as per IS 2026 - 4%	Shall be as per IS 2026 based on the transformer sizing.	Yes as per IS 2026 without positive tolerance.
9	124	Technical Data Sheet of 66/11 or 33kV Step UP Power Transformer	5.3.14	Maximum value of percentage Impedance at the (Normal working) principle tap position at 36 /60 MVA &/ or 18/30 MVA ONAF: 11.76% or As per IS without positive tolerance	Request GIPCL to consider impedance and its tolerance as per IS 2026	Yes as per IS2026 without positive tolerance.
10	132	Circuit Breaker (66 kV) {General Parameters of SF6 Insulated Ring Main Unit (RMU)}	5.3.18 (xix) Table 5-15	SF6 Insulated Ring Main Unit (RMU)	Pls consider Air insulated Ring Main Unit of optimum configuration in place of SF6 insulated ring main unit as this is recommended only for restricted spaces.	No change in Tender Conditions. Bidder to comply with tender conditions.
11	152	SCADA and Remote Monitoring System	5.3.33.1 (xvii)	Spares and service support letter for SCADA system for 15 Years from date of COD shall be taken from OEM of SCADA system and shall be submitted to GIPCL/GSECL.	Noted, however if the OEM levies some charges over a long term for service support etc, this shall be to the account of GIPCL, pls confirm	No change in Tender Conditions. Bidder to comply with tender conditions.
12	153	SCADA and Remote Monitoring System	5.3.33.1 (xxv- e)	String Monitoring System: For SJB data acquisition at PLC/SCADA system, maximum 10 SJBs shall be looped in one loop for SCADA system.	This shall be in line with the SCB and data acquisition system recommendations, pls confirm.	No change in Tender Conditions. Bidder to comply with tender conditions.

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13	155	SCADA and Remote Monitoring System	5.3.33.1 (xxvi - ii)	Temperature Sensor: The Contractor shall provide suitable nos. of RTD type temperature sensors with required weather shield as per Indian Standards, so as to individually and simultaneously measure both, ambient temperature, and module temperature. To measure module temperature, the temperature sensors shall be located on the back of representative modules and on front glass surface. Care must be taken to ensure that the temperature of the cell in front of the sensor is not substantially altered due to the presence of the sensor. Instrument shall have a range of -5°C to 60°C.	It is recommended to consider the module temperature at the back of the module only, module temperature on the front side will not be accurate and may cause issues with module performance over long term, this is also recommended as per IEC 61724.	Please refer Amendment
14	249	Appendix 16: Procedure for Performance Testing	Part B: Operational Acceptance Test Procedure {Performance Ratio (PR) - Test Procedure} (Point No.3)	The test will consist of guaranteeing the correct operation of the plant over 30 days, by the way of the efficiency rate (performance ratio) based on the reading of the energy produced and delivered to the grid and the average incident solar radiation. During this period of 30 days, any 5 (five) instances of 15 (fifteen) minutes shall be taken to calculate the instantaneous Performance Ratio of 15 minutes block as per the formula given below in Point No. 5. If the PR of these fives instances is above 75%, then Operational Acceptance Test (OAT) shall be considered successful.	Request GIPCL to confirm how the 5 instances of 15 minutes will be decided. Request GIPCL to consider the PR number in line with the NEEGG number as seasonal variation will affect the overall performance of the plant.	Please refer Amendment
15	64	Civil and Other Non-Electrical Work	5.1.5 (ii)	Foundations: Grade of reinforced cement concrete shall be M25 with minimum 350kg of cement. Contractor has to submit mix design for reinforced cement concrete along with admixture.	Minimum cement shall be 350 kg/cum for pile foundation and 300kg/cum for other foundation.	No change in Tender Conditions. Bidder to comply with tender conditions.
16	73	Civil Work	5.2	The fresh OPC cement and TMT steel reinforcement bars Fe 500 shall be used confirming to relevant I.S Specifications of the approved manufacturers of GIPC L and GSECL.	Reinforcement steel shall be HYSD bars of min. grade FE415.	No change in Tender Conditions. Bidder to comply with tender conditions.
17	76	Storm Water Drainage System	5.2.9	Storm water drain shall be of Trapezoidal section. All the internal storm water drains i.e. on both side of main central road, approach road to all inverter rooms, control room, switchyard shall be of brick/ stone pitching which is backed up by cement mortar bed which is backed by PCC on side slope and at bottom of drain and all joints of Brick/Stone masonry are to be filled up with cement mortar in C.M. 1:4, further, plaster is to be applied in case of brick masonry surface.	Drain shall be provided only as per slope. Bidder proposes earthen drains. Lining of 50mm thickness for the stone slabs.	Additional clarification: Earthen drains are not envisaged as per EPC tender. Lining shall be brick / stone pitching as per EPC Tender. Drainage network shall be as per EPC Tender. However, Drainage system shall be optimised based on terrain, outlet, array layout, road layout and washing system during detailed engineering.
18	76	Storm Water Drainage System	5.2.9	All along the peripheral drainage shall be constructed by simply excavating and by carrying out dressing & compacting and maintaining the side slope of the drains of required size and with required trapezoidal section in which no brick pitching is required.	Drain shall be provided only as per slope.	No change in Tender Conditions. Bidder to comply with tender conditions.

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19	78	Boundary Wall (Fencing)	5.2.12	Precast compound wall of concrete grade M30 with use of OPC 53 Grade of GIPCL/GSECL approved brand cement, reinforced with 3mm wiro (Phosphorous Carbon steel) of TATA Make using pre-stressed technology, 1.80m high from finished ground level, Vertical post size 150mmx150mmx2700mm, reinforced of 7nos.- 3mm dia PC steel of TATA Make, grouted below ground level by Augur Piling or excavation trench of 300mm dia, 900mm depth and grouted with PCC of 1:1.5:3 proportion of cement concrete equivalent to grade M20 at 1.80m clear distance between two vertical posts, also providing extra columns at corners and at every 15nos. columns as expansion post . In addition to expansion joint, extra columns shall be erected at maximum original ground level difference of 300mm, horizontal planks of size 1800mmx300mm x 50mm thick, reinforced with 3nos.-3mm dia.	Pre stressed precast boundary wall shall be of pre-stressed, pre-cast concrete panels and post with rectangular groove, M.S. angle post, barbed wire, concertina wire, etc. Pre-cast columns of 150mm x 150mm x 2.1m with 7 numbers of 4mm dia high tensile steel. Precast slab panels of 2.135m x 0.3m x 50 mm thick with 3 nos. of 4mm dia high tensile steel. Height of M.S angle post above the concrete post shall be at least 450mm. Expansion joint shall be provided at every 30th bay. Joint between panels and post shall be filled with non-shrink grout.	No change in Tender Conditions. Bidder to comply with tender conditions.
20	78	Watchman's Cabin and Main Entrance Gate	5.2.13	An all-weather main gate with width of at least 6 meter shall be erected at the entrance of the plant site. The Prefabricated Security Cabin of size 3.5 metre x 3.5 metre at the main entrance gate with toilet unit shall be designed in the constructed by the Successful Bidder keeping in view the safety and security of the power plant.	Main entrance gates with a 4m single leaf sliding door or 4m double leaf opening door with an additional wicket gate 1.2m wide shall be provided. 1 nos Portable Pre-fab Security cabin of 2mx2m shall be provided at Plant entrance/exit Gate.	No change in Tender Conditions. Bidder to comply with tender conditions.
21	79	Roads	5.2.14	All remaining road for approaching to inverter room, peripheral roads shall be of WBM. WBM/Asphalt road width shall be of 4m plus shoulder (minimum 750mm both side)	Asphalt Road 5.0m wide including 0.5m shoulders on both sides from main gate to MCR WBM Road 4.0m wide including 0.5m shoulders on both sides from Main Control room to interconnecting between all the inverter rooms Design shall be as per IRC-SP-20. Roller compacted road 3m wide without shoulders along the plant boundary Periphery road	No change in Tender Conditions. Bidder to comply with tender conditions.
22	79	Underground RCC water Tank	5.2.15 (i)	The Contractor has to design as per relevant IS codes, submit and take approval from client / consultant and construct 7.5 lacs liter (3 x 2.5 lacs liter) underground RCC water tank for each 75 MW Project (i.e. (i) 2x2.5 Lacs liter for Plot-A & 2.5 Lacs lit for Plot-B1 (ii) 2.5 Lacs lit for Plot-B2 (iii) 2x2.5 Lacs liter for Plot-C) with silting chamber for filtration of the water before the inlet which will match with invert level of Storm Water drain. Design of RCC water tank shall be such that it shall resist Earth pressure and Water pressure and satisfy all IS codes. Design of water tank shall be done strictly based on Soil Investigation Report with complying all latest IS codes.	Capacity of underground RCC water tank shall be as per requirement of module cleaning.	Please refer Amendment
23	79	Underground RCC water Tank	5.2.15 (ii)	UG TANK:Minimum thickness of structural concrete elements shall be 230mm.	Minimum thickness of structural concrete elements for underground RCC tank shall be 200mm.	No change in Tender conditions. Bidder to comply with tender conditions.

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24	79	Underground RCC water Tank	5.2.15 (iii)	The concrete surface of these structures in contact with soil shall be provided with minimum two coats of bituminous painting of grade 85/25 conforming to IS: 702 @ 1.7 kg/sq.m (minimum) for water / damp proofing.	Bidder provides water proofing plastering in the place of bituminous paint.	No change in Tender conditions. Bidder to comply with tender conditions.
25	80	Underground RCC water Tank	5.2.15 (vi)	Floor slab of water tank shall be designed with due consideration to prevent any possibility of flotation due to upward thrust caused by underground water. Pressure release valves conforming to IS 4558 may be permitted with the specific approval by Owner/ consultant. Special care will also be taken to prevent floatation during construction period. The minimum thickness of the basin slab shall be 300 mm. Below PCC & rubble soling 1000mm thick CNS material shall be provided and compacted to 95% proctor density.	The minimum thickness of the base slab shall be 200 mm. Below PCC of 75mm thk. and soil compacted to 90% proctor density shall be provided.	No change in Tender conditions. Bidder to comply with tender conditions.
26	81	Civil work for Pre-fab Inverter Room/Pre-fab Control cum Conference room	5.2.17	RCC cable trenches with oil painted edge angle of 65mm x 65mm x 6mm and checker plate covers of 8mm thickness	Bidder proposes the 6mm thk chequer plate covers. Can we provide 40X40X3mm angle as the edge angles?	No change in Tender conditions. Bidder to comply with tender conditions.
27	81	Civil work for Pre-fab Inverter Room/Pre-fab Control cum Conference room	5.2.17	Plinth protection shall be given throughout perimeter of width 1.2m for Inverter rooms and Control cum Conference Rooms.	Bidder proposes 750mm wide plinth protection with min. 50mm thickness of PCC (1:3:6) and 200mm with min. 100mm thickness of PCC over well compacted soil of 90% proctor density.	No change in Tender conditions. Bidder to comply with tender conditions.
28	82	Civil work for Pre-fab Inverter Room/Pre-fab Control cum Conference room	5.2.17 (i)	Backfilling material shall be of Laboratory tested Murram or sand. Grade slab shall be laid on 100mm thick PCC. Also, Termite proofing is required before preparation of grade slab and plinth protection. The Control cum Conference Room shall have approved make rolling shutter at the front side and also provision of additional emergency exit door.	Bidder proposes back filling will be done with the excavated soil only.	No change in Tender conditions. Bidder to comply with tender conditions.
29	82	Civil work for Pre-fab Inverter Room/Pre-fab Control cum Conference room	5.2.17 (i)	Provision of sump with suitable capacity pump shall be provided in the cable trench for dewatering purpose. All structural steel shall be painted with three coat of synthetic enamel paint over two coat of primer. HDG 8.8 grade foundation bolts shall be provided for erection of pre-fab structure. After erection and alignment of pre-fab structure, bolt shall be grouted using non shrink grout materials.	HDG 4.6 grade foundation bolts shall be provided for erection of pre-fab structure	No change in Tender conditions. Bidder to comply with tender conditions.
30	83	Civil work for Pre-fab Inverter Room/Pre-fab Control cum Conference room	5.2.17 (ii)	In Control cum Conference room, except control room (where panels are fixed) all other rooms like SCADA cabin, conference room, store, pantry and passage shall have False ceiling that shall consist of 600 x 600 x 20 mm gypsum board with one coat of primer and two or more coat of Acrylic emulsion paint. The suspension system shall consist of 6 mm diameter galvanised steel rods suspended from ceiling supporting by aluminium grid of 38 x 25 x 1.5 mm and cross tie of 25 x 25 x 1.5 mm and aluminium angle of 25 x 25 x 1.5 mm.	Bidder proposes false ceiling shall be provided only for admin/scada room, conference room/meeting room with 600x600x12mm gypsum board.	No change in Tender conditions. Bidder to comply with tender conditions.
31	83	Structural Steel, Insulated Walls and Roof for Pre-fabricated Super structure	5.2.17.1	All structural steel shall be treated with two coats of red oxide and three coats of Oil paint (Asian Paints, Berger, and Durex). The gap between base plate of structural members and concrete top of foundation shall be filled with GP-2 grouting material of reputed make. The material of all J-bolts shall be of 8.8 Class.	The gap between base plate of structural members and concrete top of foundation shall be filled with M40 grade grouting. The steel rods used for foundation bolts and J-bolts shall be of mild steel of tested quality as per IS-432.	No change in Tender conditions. Bidder to comply with tender conditions.

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32	83	Structural Steel, Insulated Walls and Roof for Pre-fabricated Super structure	5.2.17.2	The Insulated panels should be of required size for roof and walls. The insulated wall and roof panels shall be sandwich type. The panels shall be made out with 0.35mm thick pre coated steel sheet on both side of Poly Urethane Foam (PUF) for both wall and roof. The density of PUF shall be 40±2 kg/m ³ and thermal conductivity shall be within range of 0.019-0.021W/m ² K at 10°C. The total thickness of the panels for walls shall be 60mm and for roof is 40mm. The panels shall be joined together by tongue and groove method. The joints of the panels shall be filled with silicon or equivalent filling material.	Wall shall be of 40mm thick of PPGI sheet thickness of 0.5mm and roof shall be of 50mm thick PUF of PPGI sheet thickness of 0.47mm thick for top & 0.4mm thk for bottom with glavalum sheet	No change in Tender conditions. Bidder to comply with tender conditions.
33	84	Structural Steel, Insulated Walls and Roof for Pre-fabricated Super structure	5.2.17.2	Roof panel shall be extended 300mm from the eaves wall and 150mm from Gable walls. Rain water gutter shall be provided throughout the periphery with rain water pipes (CPVC pipes) with proper clamping at regular interval. Provision of future installation of Solar panels on the top of the roof shall be done by I or C section with Small base plate assembly.	Bidder proposes the roof slab will not be projected outside and Rain water gutter shall be provided only one side(at lower slope side).	No change in Tender conditions. Bidder to comply with tender conditions.
34	84	Walls and Roof for RCC Super structure	5.2.17.4	Pre-construction anti-termite treatment shall be done in foundation as well as floor levels.	Bidder proposes foundations will be back filled with excavated soil and above ground level for external surfaces plastering will be done.	No change in Tender conditions. Bidder to comply with tender conditions.
35	84	Structural Steel, Insulated Walls and Roof for Pre-fabricated Super structure	5.2.17.6 (b)	Plastering: External plaster shall be 20 mm thick in CM (1:4) (Two layers of 12 mm and 8 mm thick layer) with mixing of waterproofing compound during second layer plaster of 8mm thick.	Bidder proposes External plaster shall be 18 mm thick cement plaster in two layers with mixing of water proofing compound	No change in Tender conditions. Bidder to comply with tender conditions.
36	85	Structural Steel, Insulated Walls and Roof for Pre-fabricated Super structure	5.2.17.6 (d)	To avoid cracks all concrete /masonry joints shall be fixed with 200mm wide 24 g Chicken wire mesh before plastering.	Bidder proposes plastering will be done without mesh.	No change in Tender conditions. Bidder to comply with tender conditions.
37	85	Structural Steel, Insulated Walls and Roof for Pre-fabricated Super structure	5.2.17.7	Painting: All internal plaster surfaces of wall & ceiling shall be painted using three coats of oil bound distemper over one coat primer of approved make and shade.	Bidder proposes All internal plaster surfaces of wall & ceiling shall be painted using two coats.	No change in Tender conditions. Bidder to comply with tender conditions.
38	85	Structural Steel, Insulated Walls and Roof for Pre-fabricated Super structure	5.2.17.8	Doors, windows, ventilators: All the windows shall have MS Grill. Main door to switchgear room shall be steel door having adequate area to admit switchgear. There shall be minimum two doors to the switchgear room of flush welded steel type.	All windows shall be of sliding type aluminum framed glazed windows.All doors will be of Aliminium frame, half glazed and half opaque of size as below 1. Single Leaf Door- 1m (W) X 2.4m (H) 2. Double Leaf Door- 1.5m (W) X 2.4m (H)	No change in Tender conditions. Bidder to comply with tender conditions.
39	86	Structural Steel, Insulated Walls and Roof for Pre-fabricated Super structure	5.2.17.10	Final finishing over flooring : Entrance Steps: Brickwork and plastering with antiskid tiles.	Bidder proposes instead of anti skid we will provide rough concrete finish surface.	No change in Tender conditions. Bidder to comply with tender conditions.
40	87	Structural Steel, Insulated Walls and Roof for Pre-fabricated Super structure	5.2.17.11	Roof shall be given a slope of minimum 1 in 100 towards the side opposite to auxiliary transformer yard. Roof shall be given APP modified and reinforced (4 mm thick) with Polyester matt-160 grams per sq.mtr. Bitumen waterproofing membrane (4.2 kg/sq.mtr. as per manufacture's) type water proofing treatment as per specifications.	Chemical (asian paint smart care damp proof/equivalent) water proofing to be done on the rcc slab. after appropriate curing. After applying the chemical damp proof coats 40mm thick screed in ratio 1:2:4 to be laid & finished to form final surface of proof.	No change in Tender conditions. Bidder to comply with tender conditions.

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41	4	NOTICE INVITING TENDER (NIT)	Section - 1 (NIT)	Gujarat Industries Power Company Limited (GIPCL) also inviting 75 MW (AC) bid on behalf of Gujarat State Electricity Corporation Limited (GSECL) for Gujarat Solar Park, Charanka and shall carry out technical scrutiny/price bid opening /reverse auction till discovery of successful L1 bidder and intimation/ submission of documents to GSECL. If submitted documents are found/verified to be fake after awarding of LoI, GSECL reserves the right to cancel the same. Gujarat Industries Power Company Limited has decided to appoint an EPC Contractor for development of 2x75 MW (AC capacity) Solar Plant competitive bidding process. Considering the large volume and quantum of work involved, GIPCL/GSECL may award the work to more than one Bidder to facilitate timely supply and completion of the Project. Further, GIPCL/GSECL reserves the right to award the work to single bidder or multiple bidders, without assigning any reason.	Request GIPCL/GSECL to mention the minimum capacity that will be awarded. We believe it will not be less than 75 MW(AC). If GIPCL/GSECL will award contract to multiple bidders then please clarify on the generation guarantee in case of multiple successful bidders.	Please refer Amendment
42	34	General Instructions	3.1.19	The Gujarat Industries Power Company Limited (GIPCL) does not bind itself to accept the lowest Bid and reserves to itself the right to accept the whole or any part of the tender and the Bidder shall be bound to perform the same at the rate quoted in this Tender.	Request GIPCL/GSECL to delete the clause. The quoted price is for the complete scope of work and any change in scope of work will not be acceptable and will obviously have commercial implication.	No change in Tender conditions. Bidder to comply with tender conditions.
43	41	Bank Guarantees & EMD	3.11.5	The EMD shall be forfeited and appropriated by GIPCL as per the discretion of GIPCL as genuine, pre-estimated compensation and damages payable to GSECL for, inter alia, time, cost and effort of GIPCL without prejudice to any other right or remedy that may be available to GIPCL hereunder or otherwise, under the following conditions: (a) If a Bidder engages in a corrupt practice, fraudulent practice, coercive practice, or restrictive practice; (b) In the case of Successful Bidder, if it fails within 7 days from the issue of LoI – (a) to sign the Contract Agreement and/ or (b) to furnish the Security Deposit cum Performance Bank Guarantee within the period prescribed. (c) In case the Successful Bidder, having signed the Contract Agreement, commits any breach thereof prior to furnishing the Security Deposit cum Performance Bank Guarantee.	Request GIPCL/GSECL to provide at least 10 working days for to sign the contract agreement and/or to furnish the SD cum PBG.	Please refer Amendment
44	70	Planning and Designing	5.1.10 (viii)	Planning and Designing: The Owner reserves right to modify the specifications at any state as per local site conditions / requirements and EPC contractor shall comply with modification without any extra cost and time.	Request GIPCL/GSECL to delete the clause. If Owner reserves the right to change then we suggest that such change in specification shall be made through change order and Contractor should be entitled to cost and time arising thereto. Please confirm	No change in Tender conditions. Bidder to comply with tender conditions.

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45	73	ITB	5.1.14 (d)	Terminal Point for the EPC Project: Solar Park Plot will be provided to EPC Contractor as it where it basis and required land development (if any), tree/Vegetation removal, site enabling works etc shall be in EPC Contractor's Scope.	Request GIPCL/GSECL to clearly mention when the site handover/permission to access will be provided. No LD to be levied caused due to delay in site handover or access to site. Please confirm.	No change in Tender conditions. Bidder to comply with tender conditions.
46	173	Timeline (Best Effort Schedule)	6.9.4	The issue of Lol shall be considered as the Zero Date.	Request GIPCL/GSECL to clearly mention when the site handover/permission to access will be provided. No LD to be levied caused due to delay in site handover or access to site. Please confirm.	No change in Tender conditions. Bidder to comply with tender conditions.
47	174	Delay in Execution or Failure to Supply	6.10.2	If the Contractor fails to deliver the plant or fails to start the work within specified time frame after issue of Lol or fails to carry out the work as per agreed schedule or leaves the work site after partial execution of the work, GIPCL/GSECL shall have the right to get the work done through any other agency at the risk and cost of the Contractor. Further to this, GIPCL/GSECL may, without prejudice to the right of the Contractor to recover damages for breach of trust of the Contract, may impose penalties.	Please clarify on imposing on penalties. Contractor should be provided with atleast 21 days notice to cure such issues, failing which only the GIPCL/GSECL may have such right acting reasonably.	No change in Tender conditions. Bidder to comply with tender conditions.
48	177	Liquidated Damages for Delay and Underperformance	6.11.9	(C) Performance Guarantee Test / Final Acceptance Test: If the "Actual Delivered Energy" at metering point(GETCO end sub-station) is less than the Base NEEGG (corresponding to NEEGG quoted for 1st year of O&M) based on the procedure mentioned in the Appendix 15, then the penalty at rate of Rs (2.67x 1.50) per kWh shall be charged for the shortfall. The Bidder / Contractor shall make necessary correction to meet quoted NEEGG. In case contractor fails to pay penalty as above within 15 days, then the entire Performance Bank Guarantee shall be encashed by the Owner and all the remaining payments yet to be made by the Owner to the Contractor shall also be forfeited.	Request GIPCL/GSECL to cap the LD and increase the payment time to 30 days. Please confirm.	Please refer Amendment
49	177	Liquidated Damages for Delay and Underperformance	6.12.2	Penalty for loss of Generation during O & M If for any Contract Year, it is found that the "Actual Delivered Energy" is less than 'Base NEEGG' for the particular year, the Contractor shall pay the compensation to GIPCL/GSECL equivalent to Rs. (2.67 x 1.50) per kWh of under-generation. The same shall be recovered from payment yet to be made by GIPCL/GSECL/GSFC to the Contractor and/ or from the Bank Guarantees available with GIPCL/GSECL/GSFC.	Request GIPCL/GSECL to cap the LD during O&M for loss of generation. Please confirm	No change in Tender conditions. Bidder to comply with tender conditions.
50	182	Breach and Cancellation of the Contract	6.15.2	The Owner may cancel the order or a portion thereof, and if so purchase or authorize purchase of the plant/equipment not so delivered or order Plant/ Equipment of similar description (opinion of the Owner shall be final) at the risk and cost of the Contractor.	Please clarify the meaning of the clause and its intention. Please confirm.	No change in Tender conditions. Bidder to comply with tender conditions.
51	181	Termination for Default	6.14	Termination for Default	Contractor should also have the right to terminate due to prolonged suspension, breach of contract by owner, fore majeure. Please confirm	No change in Tender conditions. Bidder to comply with tender conditions.

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52	195	Warranty/ Guarantee	6.39.3	Defect liability: All plant equipment and components and overall workmanship of the grid solar power plants shall be warranted for a minimum of 5 years except solar PV Modules which shall be warranted for 25 years.	Request GIPCL/GSECL to remove DLP of 25 years for PV Modules as we are providing insurance for the performance. Please confirm	Please refer Amendment
53	197	Arbitration	6.40.1	All matters, questions, disputes, differences and / or claims arising out of and / or concerning, and /or in connection with, and /or in consequence of, and /or relating to this contract which may arise between the parties in connection with the Contract or any matter arising out of or in relation thereto shall be reported to Gujarat Public Work Contract Dispute Arbitration Tribunal and provision of Gujarat Public Work Contract Disputes Arbitration and Tribunal Act 1996 shall be applied as updates time to time.	Please provide the clarity upon selection of arbitrators.	No change in Tender conditions. Bidder to comply with tender conditions.
54	209	Miscellaneous	7.24.3	The Contractor shall take care of all statutory, local clearance, approvals, etc.	Please clarify on the list of Approvals and clearances required to be obtained by Contractor	No change in tender condition. Please refer Tender Condition at Clause No. 5.1.9 (Pg.68 of 297) . It may be noted that at Gujarat Solar Park, EPC Contractor has to take Police Clearance/ Verification of all the Manpower engaged during Construction and O&M phase
55	245	Appendix 15: Format of Financial Proposal (SCHEDULE OF PRICE)	Table 15 A Schedule of Price - A	Payment of Anti-Dumping Duty	Quantifying the Anti-Dumping Duty is impossible since none of us can predict or estimate the duty. We request GIPCL/GSECL to allow for reimbursement of ADD if supply of PV Module is completed within 7 months of LOI.	Please refer Amendment
56	185	GCC	6.23.1	Stoppage of Work: The Owner shall not be responsible and not 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 people	If the work is delayed due to unrest caused by local public, LD shall not be imposed since they are not in the control of Contractor and shall be treated as force majeure. Please confirm	No change in tender condition. Bidder to comply with tender conditions.
57	204	GCC	7.12	Price Escalation: The rate(s) quoted against the work shall remain firm during the entire Contract period.	Price escalation shall be applicable if contract period got extended for no fault of contractor. Please confirm	No change in Tender conditions. Bidder to comply with tender conditions.
58	209	Miscellaneous	7.24.2	Any project manager or member of the Contractor at Site shall be replaced within a period of forty eight (48) hours of intimation by GIPCL / GSECL without assigning any reason thereof.	This is not acceptable. GSECL shall provide valid reason as to why replacement is required. Please confirm	No change in Tender conditions. Bidder to comply with tender conditions.
59	184	Insurance	6.18.6	Comprehensive insurance is to be arranged by the Contractor during the O&M period of the Contract	During O&M period contractor will arrange only WC policy, all other policies shall be arrange by client during O&M. Please confirm.	Please refer Amendment

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60				General	Request GIPCL/GSECL to add the following clause: Notwithstanding anything else contained in the Contract, in no event will any Party be liable for any special, indirect, incidental or consequential damages or damages for loss of profits, savings, revenue or business interruption, that may arise in connection with this contract regardless of whether such claims are based or remedies are sought in contract or tort or otherwise, even if the Party sought to be held liable has been advised of the possibility of such damages.	Not Acceptable. Hence, No change in Tender conditions. Bidder to comply with tender conditions.
61	64	Civil and Other Non-Electrical Work	5.1.5 (v)	Solar PV Module Cleaning System: Cleaning frequency shall be decided by the Bidder to meet the guaranteed generation but the cleaning cycle shall not exceed 15 days. For this, the Contractor shall construct and operate 7.5 lacs liter (3x 2.5 lacs liter) underground RCC water tank for each 75 MW Project (i.e. (i) 2x2.5 Lacs liter for Plot-A & 2.5 Lacs lit for Plot-B1 (ii) 2.5 Lacs lit for Plot-B2 (iii) 2x2.5 Lacs liter for Plot-C) with silting chamber for filtration of the water before the inlet RCC underground water storage tank. For module cleaning, the contractor can provide new tanker with pump; water jet and hose pipe or establish a pipeline network with valves.	2.5 Lakh liters for each 75MW (Considering 2ltrs per module & 15days frequency of cleaning & back up of 5 days, we would suggest 2.5Lakh litres tank is sufficient)	Please refer Amendment
62	93	Module Mounting Structures (MMS)	5.2.22 (ii)	Module Mounting Structures (MMS): The array structure shall be so designed that it will occupy minimum space without sacrificing the output from Solar PV panels at the same time it will withstand severe cyclonic storm with wind speed up to maximum 180 Kmph.	Max wind speed shall be as per the wind zone map of India i.e. 170kmph	No change in Tender conditions. Bidder to comply with tender conditions.
63	64	Civil and Other Non-Electrical Work	5.1.5 (iii)	Prefabricated Structures: Prefabricated Inverter rooms as per design	Outdoor inverters shall be installed in line with the manufacturer's requirements with or without canopy. Indoor inverters shall be installed in pre-fab buildings	The inverters shall have minimum protection to IP 65(Outdoor)/ IP54 (with roof with separate structure)/ IP 21 (indoor) and Protection Class II or higher. Further all inverter (IP65 & IP54) inverters must be installed with proper plinth / platform. Further, all associated equipments like RMU, UPS, ACDB, SCADA Panel shall have suitable IP class and type of installation as per EPC tender.
64	65	Civil and Other Non-Electrical Work	5.1.5 (vi)	Precast Boundary wall (with 4 runs): The Contractor shall provide Precast boundary wall including "L" shape GI angle with 4 nos of barbed wire fencing of the entire plant boundary for each 75 MW (AC) plant sites	Alternatively, pre-cast fence with 2 runs of barbed wire on top is proposed The boundary wall shall be complete with M-30 grade concrete pre-cast columns OPC 43 or 53 grade of cement shall be used considering availability at surroundings of site	No change in Tender conditions. Bidder to comply with tender conditions.
65	65	Civil and Other Non-Electrical Work	5.1.5 (vii)	Approach / Internal Roads and Pathways: The Contractor shall provide internal roads and approach roads / pathways of asphalt type for all 4 plant sites. All peripheral roads shall be of WBM type	Approach Roads Shall be of WBM Type & Internal & Periphery shall be of Murum Roads	No change in Tender conditions. Bidder to comply with tender conditions.
66	65	Site Levelling	5.1.6	Site Levelling: The Contractor shall level the site, as required, so as to compact the plant in minimum possible area and also minimize shading losses because of solar PV module structures. Removal of debris and bush-cutting is mandatory. Levelling of the site is to be done if required by client before starting of Operation and Maintenance period	Natural Contour shall be followed for installing of Tables / Arrays. Levelling shall be done in case of inverter room / control rooms	No change in Tender conditions. Bidder to comply with tender conditions.

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67	65	Communication	5.1.7	Communication: The Contractor shall provide complete plant SCADA (Software based) with SCADA server having string level monitoring capabilities over remote server. Contractor shall lay the cable in appropriate cable trench, connect with suitable connectors and terminate to the SCADA server inside control room. The Contractor shall also provide necessary internet connection through GPRS enabled modem along with LAN connectivity for data communication over remote server and shall bear the cost of the same during the Contract period including O&M. The Contractor shall provide 4 nos. of Web Client License for remote monitoring per Project. The Contractor shall provide necessary provision of RTU for communication with SLDC. The Contractor shall submit the below mentioned Technical Data Sheet for String RTU, TCP String, Central RTU in the prescribed format.	Proposed Zone monitoring	No change in Tender conditions. Bidder to comply with tender conditions. However it is allowed to connect two strings with 'Y' connector.
68	69	Approval of Designs / Drawings	5.1.11 (vi)	Approval of Designs / Drawings: The Bidder/EPC Contractor shall submit the drawing as per Tender specifications. Any revision in drawing based on Owner's Comments/observations, in case not confirming to tender specification, then revised document shall be submitted within 03 days. In normal circumstances approval of final drawings will be given by Owner within 10 days from date of submission of revised drawings by Bidder	Reply to comments / Approval by Owner shall be with 3 days from the submission	No change in Tender conditions. Bidder to comply with tender conditions.
69	73	Terminal Point for the EPC Project	5.1.14	Terminal Point for the EPC Project : ROW Charges	Please confirm ROW Scope for Transmission/ Underground line	As Project is within Solar Park, No RoW is applicable. However, Bidder to follow GETCO/GPCL guidelines. No change in Tender conditions. Bidder to comply with tender conditions.
70	65	Solar PV Module Cleaning System	5.1.5 (v)	Solar PV Module cleaning System: Cleaning frequency shall be decided by the Bidder to meet the guaranteed generation but the cleaning cycle shall not exceed 15 days.	Module cleaning frequency - twice in month	No change in Tender conditions. Bidder to comply with tender conditions.
71	76	Storm Water Drainage System	5.2.9	Storm Water Drainage System	Internal & External drains shall be of Trapezoidal Earth excavated drains instead of Brick Masonry drains	Earthen drains are not envisaged for internal drains as per EPC tender. Lining shall be brick / stone pitching as per EPC Tender. Drainage network shall be as per EPC Tender. However, Drainage system shall be optimised based on terrain, outlet, array layout, road layout and washing system during detailed engineering.
72	83			Shadow free installation from 08:00 AM to 06:00 PM Time period in any part of the year	3.5m interrow spacing has been considered which is 28° Sunagle to optimize the space & better generation	Bidder's query related wording " Shadow free installation from 08:00 AM to 06:00 PM Time period in any part of the year" is not found in the Tender. However, Bidder is free to utilise available land to optimise NEEGG.
73	99	Junction Box / Combiner Box	5.3.2 (iv & xii)	All junction/ combiner boxes including the module junction box, string junction box, array junction box and main junction box should be equipped with appropriate functionality, safety (including fuses, grounding, etc.), string monitoring capabilities, and protection. Adequate capacity solar DC fuses & isolating disconnectors should be provided	Strings fuses on positive pole as negative is grounded.	No change in Tender conditions. Bidder to comply with tender conditions.
74	131	Circuit Breaker (66 kV)	5.3.18 (xix)	General Parameters of SF6 Insulated Ring Main Unit (RMU)	Creepage distance : 25mm/kV. At inverter stations, standard RMU is proposed which is fixed type. Short circuit withstand capacity shall be as per the fault level calculation. Control voltage shall be derived from 230V ac or with internal power packs. Short time rating of CT shall depend on the rating of CT.	Acceptable subject to submission of design calculation and approval by Owner.
75	77	Area Lighting	5.2.11	Area Lighting: Area lighting arrangement shall be made to illuminate the entire site at an appropriate lux level for night hours or bad light hours. Road and Perimeter LUX level min 10 and rest area as per NBC 2016. Area lighting arrangement shall have adequate numbers of lights poles on the sides of roads, periphery, etc.	5 lux average shall be maintained at the perimeter roads. No array yard lighting is proposed.	Bidder's understanding is correct. No array yard lighting is envisaged. Further "Road and Perimeter LUX level min 10 and rest area as per NBC 2016."

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76	77	Area Lighting	5.2.11	The light pole shall be fixed in separate foundation. The lighting poles shall be concreted with 600 mm coping above ground level for pole protection and 1 mtr below ground with minimum reinforcement as per IS requirement.	No Reinforcement shall be provided for the pole as the pole is inserted inside the foundation	Only direct embeded Lighting poles (minimum 1 meter below NGL) shall be allowed without reinforcement.
77	81	Water supply	5.2.15 (x)	The water tank shall be so designed that it can be used during construction phase of solar plant and can also meet all other water requirements of the solar plant during O&M Stage. The extension of existing pipe line from terminal point by SPIA/GPCL to underground water tank including supply and laying of pipeline shall be in the scope of contractor.	Pipe line for for the Intake water from GIPCL from the plant boundary limit shall be in Bidder Scope. No piping system considered for PV plant	No change in Tender conditions. Bidder to comply with tender conditions.
78	64	Civil work for Pre-fab Inverter Room/Pre-fab Control cum Conference room	5.2.17	8mm thk chequered plates	5mm thk chequered plates	No change in Tender conditions. Bidder to comply with tender conditions.
79	64	Civil work for Pre-fab Inverter Room/Pre-fab Control cum Conference room	5.2.17	65x65x6 Edge angle	50x50x6 Edge angle	No change in Tender conditions. Bidder to comply with tender conditions.
80	64	Civil work for Pre-fab Inverter Room/Pre-fab Control cum Conference room	5.2.17	Flooring	The flooring has to be provided with the 75mm thk M20 grade RCC slab on the slurry above the back filling of available soil.	No change in Tender conditions. Bidder to comply with tender conditions.
81	72	Civil work for Pre-fab Inverter Room/Pre-fab Control cum Conference room	5.2.17	Brickwork/RR masnory	Earth excavated drains	No change in Tender conditions. Bidder to comply with tender conditions.
82	82			Minimum height of foundation from ground level 200mm	Minimum height of foundation from ground level 150mm	Minimum height of foundation (Pile Cap) of Module Mounting Structure (MMS) shall be 150 mm from ground level.
83	94	Module Mounting Structures (MMS)	5.2.22 (vi)	The Contractor has to plan for pile load test like pull out, lateral and compression of minimum 10,10,3 are required to be conducted for each floor at strategic location, immediately after receiving LoI. Based on the results of above-mentioned tests, final approval for design of pile shall be provided.	Can you please clarify floor here? We normally test one set of piles Axial, compression & Lateral (3 per 10MWp)	Please refer Amendment
84	94	Module Mounting Structures (MMS)	5.2.22 (vii)	Modules shall be mounted on a non-corrosive support structures (EPDM rubber gasket is to be provided as separator) which is mandatory.	Aluminum is non corrosive, Galvalume has a better corrsion resistance& SS bolts are used to connect the module & purlins. Risk of corrosion is very minimal as per galvanic corrosion chart. Hence we would request you to give waiver on EPDM Rubber Gasket	EPDM sheet is not required if bidder use star washer / serrated washer for module to module earthing.
85	94	Module Mounting Structures (MMS)	5.2.22 (xi)	Module to module earthing is mandatory	We use serrated washer to get the continuity for module grounding	star washer / serrated washer for module to module earthing is acceptatble.
86	94	Module Mounting Structures (MMS)	5.2.22 (viii)	In case of galvanization of structures, specific requirement for thickness of galvanization should be at least minimum 80 microns at any point of the galvanized structure.	Galvanization thickness is 80 microns & 65 microns & coating measurement is as per ASTM A 123	No change in Tender conditions. Bidder to comply with tender conditions.
87				Irrespective of design requirements, minimum thickness of cold form sheet shall be 2.0 mm for columns and bracings, 1.6mm for rafters and 1.2mm for purlins.	The sections chosen will be a optimized as per the design loads. We request waiver of the minimum thickness requirements as already relevant safety factors are part of the code.	Details referred by Bidder are not found in EPC Tender document.
88	107	Cables and Wires	5.3.4 (iii)	All cables shall be supplied in the single largest length to restrict the straight-through joints to the minimum number. Only terminal cable joints shall be accepted. No cable joint to join two cable ends shall be accepted	Cable joints shall be restricted to minimum numbers but cannot be avoided	No change in tender condition. Bidder to comply with tender conditions. However, Bidder shall assure minimum number of straight joints for cables. No joints shall be allowed from cable between Array to SJB/SMU.
89	112	Cables and Wires	5.3.4 (v)	OFC cable shall be laid in DWC conduits	OFC cables are armored cables, shall be buried directly in the ground	No change in Tender conditions. Bidder to comply with tender conditions.

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90	112	Technical Specification of HT XLPE Cables	5.3.6 (xiv)	All cable/wires shall be provided with Punched Aluminium tags only. The marking on tags shall be done with good quality letter and number ferrules of proper sizes so that the cables can be identified easily.	Request you to consider use of polycarbonate cable tags.	No change in Tender conditions. Bidder to comply with tender conditions.
91	118	AC Network	5.3.11 (ii)	Outdoor inverter & RMU panel with IP65 or above are acceptable.	Outdoor Inverter & RMU panels shall be of IP54	The inverters shall have minimum protection to IP 65(Outdoor)/ IP54 (with roof with separate structure)/ IP 21 (indoor) and Protection Class II or higher. Further all inverter (IP65 & IP54) inverters must be installed with proper plinth / platform. Further, all associated equipments like RMU, UPS, ACDB, SCADA Panel shall have suitable IP class and type of installation as per EPC tender.
92	122	Technical Data of Inverter Transformer	5.3.13.1	Table 5 -9 Rating and electrical characteristics of Inverter Transformer: On load taps on H.V. Side (for H.V. Variation) + 5 to – 10.0 % (in steps of 2.5%)	Inverter transformer shall be provided with OCTC & tapa Range of +5 to -5% in steps of 2.5% as these taps are not required to be changed on line.	Accepted.
93	132	Circuit Breaker (66 kV)	5.3.18 (xix)	Table 5-15 General Parameters for SF6 Type RMU:	Alternatively can we consider Air Insulated Switchgear panel with VCB	No change in Tender conditions. Bidder to comply with tender conditions.
94	133	Protective Relays	5.3.19 (i)	The Solar PV system and the associated power evacuation system interconnections should be protected as per IEC 61727 Ed.2, norms. Over current relays, reverse power relays, differential protection relays and earth fault relays have to be essentially provided	Inverter station transformer protection provided with only over current & earthfault relays. 11/66, 33/66kV power transformers shall be provided with over current ,earth fault & differential protection relays	Inverter station transformer protection provided with only over current & earthfault relays as maximum rating allowed for Inverter transformer is restricted to 5 MVA. Any rating 6MVA and above shall be with differential protection relays.
95	133	Protective Relays	5.3.19 (iii)	The operating voltage of the relays shall be 110 V DC/220 V DC as per battery bank rating	Inv Stn switchgear relays auxilliary supply shall be 24V DC with in-built power pack	No change in Tender conditions. Bidder to comply with tender conditions.
96	141	Control & Relay Panel Specifications for 415 V TP&N Power Control Centre (PCC)	5.3.26 (iii)	Control Circuit: Control supply for breaker closing / tripping - 110V DC	Can we consider Control supply for all LT panels @ 230V AC?	No change in Tender conditions. Bidder to comply with tender conditions.
97	147		5.3.31 (xxxviii)	The Contractor shall provide 66 kV Under Ground Cable along with bay and metering on Turnkey basis as per client's requirement at Charanka GETCO ubstation. The Bidder shall confirm the same in the Bid.The Underground cable shall also be approved registered supplier in GETCO for Gujarat Solar Park at Charanka, Gujarat.	In some cases it is written as Transmission line also, pls cofirm UG Cable / TL	Bidder can visit the plots and GETCO s/s to find out the details. Bidder shall opt under ground or Transmission line as per site feasibility. Please refer EPC Tender, Clause 5.1.
98	106	Inverter and Power Conditioning Unit (PCU)	5.3.3 (xxiii)	Display: Thermal loading (percentage)	Not possible In the display	Display: Thermal loading (percentage) shall be as per Inverter OEM.
99	5	Important Dates (NIT)	Table - A (v)	Bid Submission Date: Physical receipt of Bid with all the relevant documents last date (By RPAD or Speed Post or By Personal Messenger) {This is mandatory}: Date: 16.01.2018 Time: 15:00 hours (IST) Venue: GIPCL Corporate Office, PO: Petrochemicals - 391 346, Dist. Vadodara.	because of year end holidays it is difficult to get Emd by 15th Jan , request you to kindly extend bid submisison by 15 days.	Bidders are requested to refer www.gipcl.nprocure.com or www.gipcl.com regularly for any time extension if any.
100	9	Important Amounts (NIT)	Table - B (iv)	O&M Bank Guarantee: 5% of EPC Contract Price, to be submitted upon completion and acceptance of Performance Guarantee Test as per Clause No. xi of Table A (Important Dates) above for a period of five (5) years, and 2.5% of the EPC Contract Price from the start of the sixth (6th) year of O&M Period to the 90 days beyond completion of the O&M Period mentioned in Clause No. xii of Table A (Important Dates) above. This O&M BG shall cover the risk against extended warrantee for equipment up to O&M Period and recovery towards shortfall in NEEGG during O&M Period. The O&M Bank Guarantee shall be valid 90 days beyond the O&M Period.	This is effectively 50 % O&M Price , which is very high . Request you to kindly make it 2% of the EPC price or 15% of the expected O&M Revenue .	No change in Tender conditions. Bidder to comply with tender conditions.
101	42	Bank Guarantee & EMD	3.11.6 (ii)	O&M Bank Guarantee: 2.5% of EPC Price	This is effectively 50 % O&M Price , which is very high . Request you to kindly make it 1% of the EPC price or 7.5% of the expected O&M Revenue .	No change in Tender conditions. Bidder to comply with tender conditions.
102		Table - B (v)	10	Insurance or Performance Bank Guarantee (PBG) Against PV Module Waranty : 25 lakh Per MWp	Request you to waive off as there is already a BG for shortfall in Generation .	No change in Tender conditions. Bidder to comply with tender conditions.

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103		Table - B (vi)	10	Bank Guarantee for shortfall at the time of PG test (To whomsoever it is applicable) : Rs. 26.88 per kWh	Request you to waive off as there is already a BG for shortfall in Generation .	No change in Tender conditions. Bidder to comply with tender conditions.
104	161	VENDOR LIST	5.3.39	<p>Equipment:</p> <p>PCU / Inverter :</p> <p>PV Modules :</p> <p>HT Panel /HT Breaker :</p> <p>LT Switchgear component :</p> <p>Power Transformer :</p> <p>Inverter Transformer :</p> <p>Auxiliary Transformer (Dry Type) :</p> <p>Solar Cable and DC Cable :</p> <p>AC Cable (Up to 33 kV) :</p> <p>Earthing Pit Materials :</p> <p>SJB :</p> <p>Batteries :</p> <p>UPS :</p> <p>Battery Charger :</p> <p>Lightning Arrestor (ESE type) :</p> <p>HT CT & PT (Upto 66 kV Oil Filled) :</p> <p>Disc and post insulator :</p> <p>Numerical Relay :</p> <p>Lighting fixture / system :</p> <p>CCTV Camera & Monitoring System :</p>	<p>Make Proposed:</p> <p>Sungrow, TMEIC</p> <p>JA Solar, CSI,BYD, Jinko</p> <p>System house (ABB/ Schneider/Siemens)</p> <p>System house (ABB/ Schneider/Siemens)</p> <p>Raychem, Prime Maiden</p> <p>Silchar, ESSENNAR, PETE</p> <p>Kalpa</p> <p>Leoni, Polycab</p> <p>Polycab</p> <p>Green Wire , JEF</p> <p>Solaris, Raychem</p> <p>Amarraja, HBL</p> <p>Numeric, APC</p> <p>Amarraja, Naren Electronics, Accutech Power systems</p> <p>JEF, ABB, AEGIS</p> <p>Siemens, Mehru</p> <p>saravana</p> <p>ABB,Schneider,CGL</p> <p>Wipro</p> <p>CP plus</p>	For approval of any other vendor please refer notes at page No : 165 of EPC Tender.
105	181	Defect Liability	6.13.11 & 6.13.12	<p>Clause No. 6.3.11: Upon correction of the defects in the Facilities or any part thereof by repair/ replacement, such repair/ replacement shall have the defect liability period of eighteen (18) months from such replacement.</p> <p>Clause No. 6.13.12: In addition, the Contractor shall also provide an extended warranty for any such component of the Facilities and for the period of time. Such obligation shall be in addition to the Defect Liability Period specified under Clause 6.13.</p>	The warranty of the component shall stand till the time asked in clause 6.39.3. DLP shall be capped and shall not be extended beyond the time line mentioned in the clause 6.39.3. Kindly amend and confirm the same.	No change in Tender Conditions. Further Defect liability for All plant equipment and components and overall workmanship of the grid solar power plants shall be warranted for a minimum of 5 years except solar PV Modules for which product warranty shall be for 10 years and performance warranty shall be for 25 years.
106	181	Termination for Default	6.14	Termination for Default	All the clauses talk about default by contractor but not by developer. The Clause is not balance.	No change in Tender conditions. Bidder to comply with tender conditions.
107	184	Insurance	6.18.6	Comprehensive insurance is to be arranged by the Contractor during the O&M period of the Contract.	As per standard industry practice EPC contractor takes insurance till EPC / execution of the project. During O&M the same shall be in the scope of developer.	Please refer Amendment
108	201	Limitation of Liability	6.49.1	The total liability of the Contractor under or in connection with this Tender and the consequent Contract shall not exceed the full EPC Contract Price inclusive of taxes and duties.	The total liability shall be capped at 10% of the total contract value.	No change in Tender conditions. Bidder to comply with tender conditions.
109	42	Bank Guarantee & EMD	3.11.6 (iii)	Bank Guarantee against PV Module Warranty: In case the PV module fails to provide power output as per its performance warranty, and if the Contractor fails to rectify, replace or repair the PV module, then the Owner shall carry out the necessary recification, repair or replacement at its own discretion at the risk and cost of the Contractor. The cost of such rectificaion, repair or replacement shall be encashed from the Bank Guarantee against PV Module Warranty. The same shall be replenished by the Contractor within thirty (30) day, failing which the entire Bank Guarantee amount shall be encashed and all pending payment shall be withheld by the Owner till such amount is replenished by the Contractor.	This is leading to unlimited liability as the BG is to be replenished again and again in case of encashment and is creating high risk perception. We request GIPCL to limit the complete risk/LD/Liability arising in the complete project to 10% of total contract value.	No change in tender condition. Bidder to comply with tender conditions. Limiting to 10% is not acceptable. This Clause is applicable if the Contractor has not provided Insurance for the PV modules.

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110	60	General Scope of Work	5	The Tender is invited for 2 x 75 MW (150 MW) (AC) Solar PV project distributed in four plots {i.e. Plot-A & Plot-B1 [75MW (AC)], Plot-B2 & Plot-C [75 MW (AC)] }	(1) Given plant layout in page number 270 of 297 is not visible/readable, so provide AUTOCAD & Contour map for all four plots enabling us to estimate cost. (2) Provide tentative cable route distance between plot B & C .	(1) AUTOCAD drawing of each plot is attached. (2) Tentative cable route distance from each plot to GETCO end S/s is attached.
111	60	General Scope of Work	5	Termination at GETCO end shall be in two separate evacuation bays for each 75 MW (AC) project	Kindly confirm whether (for each plot) 66KV Bay are available at GETCO sub station or have to be constructed by EPC contractor?	66kV Bay (s) are available at GETCO end substation. Further, Refer Amendment for GETCO Charges.
112	62	Evacuation of Power & Metering Point	5.1.1	Scope of work shall also include 66 kV Overhead /Under Ground cable work from Plot-A, Plot-B1, Plot-B2 & Plot-C solar plant substation to Charanka 400/220/66 kV substation as per GETCO's guidelines. For each plot (i.e. Plot-A, Plot-B1, Plot-B2 & Plot-C), 4 nos. of 66 kV underground cables (three-phase plus one spare) are required for evacuation considering maximum current capacity and voltage drop criteria for each evacuation line, minimum two power evacuation line shall be considered for each 75 MW plant, maximum power that can be evacuated from single circuit shall be as per GETCO guidelines	(1) Provide tentative cable route length from each plot to GETCO sub station. (2) Kindly provide cable specification.	(1) Tentative cable route distance from each plot to GETCO end S/s is attached. (2) 66 kV cable specification shall be as per GETCO and details shall be provided during detailed Engineering stage.
113	65	Civil and Other Non-Electrical Work	5.1.5 (v)	Solar PV Module Cleaning System: Cleaning frequency shall be decided by the Bidder to meet the guaranteed generation but the cleaning cycle shall not exceed 15 days. For this, the Contractor shall construct and operate 7.5 lacs liter (3x 2.5 lacs liter) underground RCC water tank for each 75 MW Project (i.e. (i) 2x2.5 Lacs liter for Plot-A & 2.5 Lacs lit for Plot-B1 (ii) 2.5 Lacs lit for Plot-B2 (iii) 2x2.5 Lacs liter for Plot-C) with silting chamber for filtration of the water before the inlet RCC underground water storage tank. For module cleaning, the contractor can provide new tanker with pump; water jet and hose pipe or establish a pipeline network with valves.	As per bidder understanding require water capacity for each 75MW Project(7.5Lac liter) is on higher side & not require. Find below calculation from our side is for reference & consideration- Approx. Quantity of PV Module (Assuming 20% loading on DC side) -281250 Numbers (320Wp) Approx. water require for each Module(2mX1m) -4 Liter Total Water Require for 15 days (one cycle) - 843750 Liter Module Cleaning Cycle - 15 days Require Tank Capacity(1 Day) - 56250 Liter So considering water storage for 5 days, we should have tank of capacity 281.25 KL in place of 750 KL.	Please refer Amendment
114	65 & 67	Communication	5.1.7	5.1.7 Communication: The Contractor shall provide complete plant SCADA with SCADA server having string level monitoring capabilities over remote server. 1 String Monitoring / Array Monitoring-Each PV string needs to be monitored Through Communication through Communication with SJB PLC/Card	For optimization of project cost & reducing system complexity, we suggest removal of all type of monitoring at each SMU & allow zone wise monitoring at each Inverter DC side as below- (1)Monitor the current of individual DC Input. (2)The voltage will be single & power will be the total DC power Such type of arrangement is cost effective & now acceptable by M/s NTPC in all running projects (Project detail- 1000MW Pavgada Karnataka, 50MW NSPCL Salem Tamilnadu, 25MW NSPCL Kulti W.B). So kindly allow String Combiner Box(SCB) in place of SMU mention in tender document.	No change in Tender conditions. Bidder to comply with tender conditions.
115	76	Storm Water Drainage System	5.2.9	All the internal storm water drains i.e. on both side of main central road, approach road to all inverter rooms, control room, switchyard shall be of brick/ stone pitching which is backed up by cement mortar bed which is backed by PCC on side slope and at bottom of drain and all joints of Brick/Stone masonry are to be filled up.	As per Solar Plant standard, drain is required at one side of road only instead of both sides as mentioned in tender document. So kindly amend the same.	Drainage network shall be as per EPC Tender. However, Drainage system shall be optimised based on terrain, outlet, array layout, road layout and washing system during detailed engineering.

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116	79	Civil Work	5.2.14	<p>Roads: (1) All the roads connecting the main gate to control room, switch yard shall be accessed by Asphalt road with sufficient base courses like Sub grade, GSB, WBM layer, Wet Mix Macadam layer, DBM layer and at top Seal Coat etc</p> <p>(2) All remaining road for approaching to inverter room, peripheral roads shall be of WBM. WBM/Asphalt road width shall be of 4m plus shoulder (minimum 750mm both side) and with sufficient thickness to access heavy equipment like transformers/inverters/ switchyard equipment transportation.</p>	<p>As per bidder understanding required road specification is on higher side & usually not applicable in Solar Plant. So we request to amend as same as below-</p> <p>(1)Roads connecting the main gate to control room, switchyard shall be - 3m width with 1m shoulder on both side,GSB 250mm thick Garde I, WBM 100mm thick Garde II, WBM 100mm thick Garde III, Wearing coarse 20mm thick Premix carpet in place of WMM road as mention.</p> <p>(2)The peripheral road shall be made of minimum 250mm thick well compacted murrum, suitable for road construction. These roads shall be minimum 150mm above NGL. Peripheral road shall be min 2 meter wide</p>	No change in Tender conditions. Bidder to comply with tender conditions.
117	81	RCC or Pre-fab Inverter/RCC or Pre-fab Control cum Conference Room Clause Number	5.2.17	Civil work for Pre-fab Inverter Room/Pre-fab Control cum Conference room	<p>(1) As per bidder understanding control cum conference room might be RCC type. Pre feb building is only mandatoty for Inverter Room. Kindly confirm.</p> <p>(2) Kindly also allow fully type tested Outdoor Container Based Inverter(SUNGROW/TBEA 2.5MW) & all related equipment like UPS,ACDB,Battery & Charger outdoor type .</p>	<p>(1) Both options are open i.e RCC or Pre-fabricated for Control room cum Conference room.</p> <p>(2) Bidder shall allow only fully typed Outdoor Container based inverter except all related equipment like RMU, UPS, ACDB, SCADA panel, Battery & Charger outdoor type. Hence, Bidder to provide a pre-fab type room for all related equipment like RMU, UPS,ACDB, SCADA panel, Battery & Charger,etc.</p>
118				Type of PV Module	As per bidder understanding PV Modules are in Open Category (Non DCR-Both Cells & Module might be imported). Kindly confirm the same.	Bidder's understanding is correct. Please refer Tender Condition at Clause 5.3.39.
119	97	Photovoltaic Modules	5.3.1 (xii)	All materials used for manufacturing solar PV module shall have a proven history of reliability and stable operation in external applications. It shall perform satisfactorily in relative humidity up to 100% with temperature between -40°C to +85°C and shall withstand adverse climatic conditions, such as high speed wind, blow with dust, sand particles, saline climatic / soil conditions and for wind 180 km/hr on the surface of the panel.	Supplied Modlues require parameters like temperature, humidity as well as wind speed shall be as per IEC 61215 standard test condition. Kindly amend & confirm.	Please refer Amendment
120	100	Junction Box / Combiner Box	5.3.2 (xii)	Adequate capacity solar DC fuses & isolating disconnectors should be provided. Fuses and monitoring facility for each string/ input including spare terminals shall be provided.	As per bidder understanding as well as Inverter manufacture recommendation, for negative grounded Inverter have to consider DC Fuses only at positive side of SCB. Kindly confirm.	No change in tender condition. Bidder to comply with tender conditions.
121	101	Inverter and Power Conditioning Unit (PCU)	5.3.3 (x) & (xv)	<p>(1) The up-time of Inverters should be of 99% in a year.in case of failing to achieve this due to failure of any component of inverter the Contractor shall either replace the inverter or the componentat his own cost.</p> <p>(2) The inverters shall have minimum protection to IP 65(Outdoor)/ IP 21(indoor) and Protection Class II or higher.</p>	<p>(1) Inverter efficiency shall be as per Inverter Manufacturer standard but overall plant time shall be maintained. Kindly amend & confirm.</p> <p>(2) Kindly also allow fully type tested Outdoor Container Based Inverter(SUNGROW/TBEA 2.5MW) and protection class IP54/55.</p>	<p>(1) No change in Tender conditions. Bidder to comply with tender conditions.</p> <p>(2) Fully out door type tested Container Based Inverters and protection class IP54/55 are acceptable subject to fullfiling the tender conditions and approval by owner.</p>
122	106	Cables and Wires	5.3.4 (i)	All cables and connectors for use for installation of solar field must be of solar grade which can withstand harsh environment conditions 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 for service life expectancy of 25 years)	As per bidder understanding the said clause is applicable for only TUV certified DC Solar Cable (4/6 Sqmm) from PV Module to Junction box. Kindly confirm.	Bidder's understanding is correct. But life of the cable must be 25 years and accordingly cable laying to be done by the successful contractor.
123	107	Cables and Wires	5.3.4 (ix)	All LT XLPE cables shall confirm to IS: 7098 Part I & II. All HT XLPE Cables (up to 33kV) Shall confirm IS: 7098 PART-3 & IEC -60287, IEC-60332	Please note that IS:7098 Part I is only applicable for LT Cable(1.1KV). IS:7098 Part II is applicable above 1.1KV to 33KV(E)grade cable & IS:7098 Part III is applicable for 66 & above grade cable. So kindly amend & confirm.	Bidder's understanding is correct and accepted.

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124	111	Technical Specification of HT XLPE Cables	5.3.6 (E)	Insulation Screen: (e) The metallic part shall consist of a copper tape helical applied with a 30% overlap over the water barrier tape/blocking tape. A binder tape of copper shall be applied over the copper wire metallic screen	As per cable manufacturer's standard for type tested design; maximum overlapping will be between 10-15% (which is as per IS standard) in place of 30% mention in tender specification. Kindly amend & confirm.	Please refer Amendment
125	118	AC Network	5.3.11 (ii)	It shall have provision to measure bus voltage, current and power of the transformer. Outdoor inverter & RMU panel with IP65 or above are acceptable.	Please note that as per manufacture standard minimum IP65 protection is not possible for Outdoor Inverter & RMU. Possible degree of protection for both equipment will be as below- (a)For Outdoor Inverter - IP55(Electronics) /IP43 (Outdoor with Canopy) (b)For Outdoor RMU - SF6 Tank -IP67, Front Cover-IP2X Cable Cover-IP3X Enclouser -IP54 So kindly amend & confirm the same.	No change in Tender conditions. Bidder to comply with tender conditions.
126	119	Step-Up Transformer	5.3.12 (i)	The Contractor shall provide the complete turnkey design, supply, erection, testing and commissioning of transformers and transformer substation to first step-up the output of the inverter to HV at the location of the inverter. Inverter Transformer must be protected with HV VCB Panel / RMU Capacity of each inverter block. Capacity of LCR (Inverter Block) shall not exceed more than 5 MW. Hence, total 75MW capacity of the solar plant with provision of rated 11kV or 33 kV HV Vacuum Circuit Breaker panel shall be connected upto 66 kV substation of the plant.	For optimization of project cost, kindly allow more than 5 MW block.	Please refer Amendment
127	122	Technical Data of Inverter Transformer	5.3.13.1	Vector Group Dy5/ Dy11	We understand given vector group in technical specification is only for reference. Final vector group will based on Inverter selection as well as manufacture recommendation. Kindly confirm.	Bidder's understanding is correct as per design.
128	133	Protective Relays	5.3.19 (i)	The Solar PV system and the associated power evacuation system interconnections should be protected as per IEC 61727 Ed.2, norms. Over current relays, reverse power relays, differential protection relays and earth fault relays have to be essentially provided.	We understand Transformer Differential protection is require for 66/11KV Evacuation Power Transformers only. Kindly confirm.	Any rating 6MVA and above shall be with differential protection relays.
129	161	Vendor List	5.3.39	PCU / Inverter HT Panel /HT Breaker Power Transformer Inverter Transformer SCADA System HT CT & PT (Upto 66 kV Oil Filled Type)	Kindly also allow additional make - (1)DELTA(2)SUNGROW(3)TBEA(4)HUAWEI Kindly also allow authorised system house(ABB,Schneider,Siemens) Kindly also allow additional make - (1)Kirloskar(2)Raychem(3)Essenar (4)Pete Kindly also allow additional make - (1)Kirloskar(2)Raychem(3)Essenar (4)Pete Kindly also allow additional make - (1)GE(2)ABB Kindly also allow additional make - (1)Mehru(2)Vishal Transformer	For approval of any other vendor please refer notes at page No : 165 of EPC Tender.
130		Details of Land for the Project		There are three plots at Gujarat Solar Park where the solar PV power plant is been proposed i.e. Plot A, Plot B (Plot B1 & Plot B2) and Plot C. Plot A-188 Acre , Plot B1-132, Plot B2-100 & Plot C-221.6	As per Solar Power Plant standard minimum require land 4.5Acre/MWp means for 150MW require land capacity is 675Acre. For achieving require PR, might be increase plant DC capacity so confirm additional land availaibity for the same.	Revised Plot Plan along with area and autocad drawing is attached. This shall be considered for Bidding Purpose.
131					Value of Performance Guarantee is too high. It may be kept as maximum 5% of construction price and for a period of 1 years defects liability period.	No change in Tender conditions. Bidder to comply with tender conditions.
132					For O&M Period, the BG shall be fixed as equivalent to one years o&M cost, quoted by the bidder, not as 5% of EPC contract Price.	No change in Tender conditions. Bidder to comply with tender conditions.

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133					Turnover consideration are to assess the capacity of bidder at present level. It is therefore more appropriate to decide the same by evaluating highest turnover among the latest three financial years and keeping the qualifying turnover as 30% of the estimated construction cost of 75 KW plant for eligibility of allocation of 75 MW and 30% of estimated cost of 150 MW for eligibility of 150 MW package.	Please refer Amendment
134					Indian Overseas Bank is not mentioned in the list of Banks Kindly include	No change in Tender conditions. Bidder to comply with tender conditions.
135					Please clear the term insurance of PBG against PV Module Warranty, we understand that this will be a part of 5% PBG	No change in Tender conditions. Bidder to comply with tender conditions. Please refer Tender Condition at Clause 3.11.6 (iii)
136	177	Penalty / Incentive for Generation during Operation & Maintenance (O&M) (A) Penalty for loss of Generation during O & M	6.12.2	If for any Contract Year, it is found that the "Actual Delivered Energy" is less than 'Base NEEGG' for the particular year, the Contractor shall pay the compensation to GIPCL/GSECL equivalent to Rs. (2.67 x 1.50) per kWh of under-generation.	We request GIPCL to Cap the penalty for loss in generation to 10% of the Contract value.	No change in Tender conditions. Bidder to comply with tender conditions.
137	177	Penalty / Incentive for Generation during Operation & Maintenance (O&M) (A) Penalty for loss of Generation during O & M	6.12.3	In case of any defect in the system after Commissioning, the Contractor shall repair it within forty eight (48) hours. After 48 hours, penalty shall be charged and the same shall be deducted / recovered from payments yet to be made by GIPCL/GSECL to the Contractor and / or from the Bank Guarantee submitted to GIPCL/GSECL. A penalty at the rate of Rs. (2.67 x 1.50) per kWh shall be charged by the Owner for the loss of generation due to that effect post 48 hours. The loss of generation shall be calculated with respect to the NEEGG of that particular year based on the actual radiation.	Since the bidder is already liable to meet the NEEGG and penalty is being levied in case the bidder is not meeting the guaranteed generation. We request GIPCL to remove this clause.	Please refer Amendment
138	205	Taxes and Duties	7.13.3 (A)	Statutory variations during original contractual completion period : (i) If any increase takes place in taxes and duties due to statutory variation, then GIPCL/GSECL shall admit the same on production of documentary evidences.	Since Anti-dumping duty (ADD) is futuristic event and predicting the ADD may not be accurate and also, it will not create level playing field for all the bidders. As per clause 7.13.3 (A), change in duties will be to GIPCL account. So we request GIPCL to remove the ADD for Solar PV modules clause from Schedule of Price-A	Please refer Amendment : Payment of Anti-Dumping duty
139	245	Appendix-15	TABLE 15A: Schedule of Price A (Payment of Anti-Dumping duty)	a) If antidumping duty is imposed and becomes applicable before supply of PV Modules which shall be completed within maximum 7 months from the date of LOI in such case, GIPCL/GSECL shall reimburse Anti dumping duty on actual basis based on supporting documents/payment receipt by contractors or anti-dumping duty mentioned at "F" whichever is lower. If it is not mentioned in Colum (F), it will be considered as zero.		
140		General		No clarity on %GST	We request GIPCL to determine the %GST to be considered in the bid to create level playing field for all the bidders.	No change in Tender conditions. Bidder to comply with tender conditions.
141	56	Evaluation of Bid and selection of Bidder	4.12.11	For Bid Evaluation purpose, O&M period will be considered as 10 years. However, O&M period will be 5 years after COD with GEDA / GUVNL& completion of all works as per RFP, whichever is later and GIPCL/GSECL at its discretion may extend O&M period for another 5 years.	In the event of O&M period is only 5 years then accordingly the NEEGG also to be reduced to 5 years instead of 10 years. However 10 years is a very long term, instead of having such a long O&M period and NEEGG, we request GIPCL to reduce the O&M and NEEGG period to 5 years from plant commissioning.	No change in Tender conditions. Bidder to comply with tender conditions.
142	45	Net Electrical Energy Generation Guarantee (NEEGG)	3.14.2	Bidders are expected to undertake their own study of solar profile and other related parameters of the area and make sound commercial judgment about power output i.e. Net Electrical Energy Guaranteed Generation. The Site information and solar data provided in this Tender except the reference radiation for the twelve months is only for preliminary information purpose. No claim or compensation shall be entertained on account of this information.	Providing generation/CUF guarantees are based upon solar radiation/insolation, ambient temperature, grid availability, etc. and these are beyond to the control of any EPC contractor. Also, as per Appendix-16, Part-C solar radiation and grid availability not to the scope of bidder. Request GIPCL to remove this clause.	No change in Tender conditions. Bidder to comply with tender conditions.

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143	97	Photovoltaic Modules	5.3.1 (xii)	All materials used for manufacturing solar PV module shall have a proven history of reliability and stable operation in external applications. It shall perform satisfactorily in relative humidity up to 100% with temperature between 40°C to +85°C and shall withstand adverse climatic conditions, such as high speed wind, blow with dust, sand particles, saline climatic / soil conditions and for wind 180 km/hr on the surface of the panel.	As per IEC 61215, modules shall withstand relative humidity up to 85%. Kindly accept	Please refer Amendment
144	4	NOTICE INVITING TENDER (NIT)	Section - 1 (NIT)	Gujarat Industries Power Company Limited (GIPCL) also inviting 75 MW (AC) bid on behalf of Gujarat State Electricity Corporation Limited (GSECL) for Gujarat Solar Park, Charanka and shall carry out technical scrutiny/price bid opening /reverse auction till discovery of successful L1 bidder and intimation/ submission of documents to GSECL. If submitted documents are found/verified to be fake after awarding of LoI, GSECL reserves the right to cancel the same. Gujarat Industries Power Company Limited has decided to appoint an EPC Contractor for development of 2x75 MW (AC capacity) Solar Plant competitive bidding process. Considering the large volume and quantum of work involved, GIPCL/GSECL may award the work to more than one Bidder to facilitate timely supply and completion of the Project. Further, GIPCL/GSECL reserves the right to award the work to single bidder or multiple bidders, without assigning any reason.	Kindly Confirm if the owner will award to single bidder the entire Capacity for 2 x 75 MW	Please refer Amendment
145	9 & 43	Important Amounts (NIT)	Table - B (iv)	O&M Bank Guarantee (O&M BG): 5% of EPC Contract Price, to be submitted upon completion and acceptance of Performance Guarantee Test as per Clause No. xi of Table A (Important Dates) above for a period of five (5) years, and 2.5% of the EPC Contract Price from the start of the sixth (6th) year of O&M Period to the 90 days beyond completion of the O&M Period mentioned in Clause No. xii of Table A (Important Dates) above. This O&M BG shall cover the risk against extended warranty for equipment up to O&M Period and recovery towards shortfall in NEEGG during O&M Period. The O&M Bank Guarantee shall be valid 90 days beyond the O&M Period.	We request Employer to take O&M Bank guarantee not on overall EPC Price but on O&M price. Further, there seems to be contradiction in validity of BG, kindly confirm the BG validity will be 90 days beyond O&M period or 45 days beyond O&M period.	No change in Tender conditions. Bidder to comply with tender conditions. Further The O&M Bank Guarantee should be valid upto 90 days beyond the due date of completion of O&M year.
146	10	Important Amounts (NIT)	Table B (v)	Insurance or Performance Bank Guarantee (PBG) Against PV Module Warranty: Rs. 25 Lacs per MW of PV Module (DC Capacity) valid for 25 years required to be submitted prior to submission of SD/PBG.	We request the employer to make this PBG as 10 Lacs per MW AC for 25 years as a prudent industry practise. Having this huge PBG will lead to financial consideration of the bidders thereby increasing project cost.	No change in Tender conditions. Bidder to comply with tender conditions.
147	41	Bank Guarantee & EMD	3.11.4	The EMD shall be released to bidders in the following manner. The EMD of the Successful Bidder shall be converted to Security Deposit cum Performance Bank Guarantee.	Bidders is already submitting Security Deposit cum Performance Bank Guarantee and PBG for O&M as security Deposit as per Table B, Pg 9 of 397. Conversion of EMD as Security will lead to double implicacy as the required BG are already submitted by the Bidders	EMD of Successful bidder shall be released after submission of Security Deposit cum Performance bank Guarantee.
148	177	Liquidated Damages for Delay and Underperformance	6.11.9	(C) Performance Guarantee Test / Final Acceptance Test: If the "Actual Delivered Energy" at metering point (GETCO end sub-station) is less than the Base NEEGG (corresponding to NEEGG quoted for 1st year of O&M) based on the procedure mentioned in the Appendix 15, then the penalty at rate of Rs (2.67x 1.50) per kWh shall be charged for the shortfall. The Bidder / Contractor shall make necessary correction to meet quoted NEEGG. In case contractor fails to pay penalty as above within 15 days, then the entire Performance Bank Guarantee shall be encashed by the Owner and all the remaining payments yet to be made by the Owner to the Contractor shall also be forfeited.	In case of shortfall of generation bidders is already paying the mentioned penalty, there may be few undefined reasons which may take more than 15 days for making correction in NEEGG, encashment of entire bank guarantee and no payment to be made by the owner is unfair. kindly also define the maximum penalty for this event. Further, since the bidder will already have made the payment for generation shortfall and have submitted the BG for generation shortfall for 9 years, we request the owner to consider the derived generation calculated after the LD payment to be the base NEEGG for next consecutive years.	Please refer Amendment.

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149	177	Penalty for Loss of Generation during O&M	6.12.3	In case of any defect in the system after Commissioning, the Contractor shall repair it within forty eight (48) hours. After 48 hours, penalty shall be charged and the same shall be deducted / recovered from payments yet to be made by GIPCL/GSECL to the Contractor and / or from the Bank Guarantee submitted to GIPCL/GSECL. A penalty at the rate of Rs. (2.67 x 1.50) per kWh shall be charged by the Owner for the loss of generation due to that effect post 48 hours. The loss of generation shall be calculated with respect to the NEEGG of that particular year based on the actual radiation.	Practically Few major repairs may not be possible for getting repaired within stipulated 48 Hours, Further, the contractor is already liable for loss of penalty for under generation, hence, this clause leads to double implication of penalty, we request the employer to remove this clause to maintain the parity.	Please refer Amendment
150	181	Defect Liability	6.13.11	If the Facilities or any part thereof cannot be used by reason of such defect and/ or making good of such defect, the Defect Liability Period of the Facilities or such part, as the case may be, shall be extended by a period equal to the period during which the Facilities or such part cannot be used by the Company because of any of the aforesaid reasons. Upon correction of the defects in the Facilities or any part thereof by repair/ replacement, such repair/ replacement shall have the defect liability period of eighteen (18) months from such replacement.	kindly specify the period of DLP, as a standard industry practise the DLP should be 1 year from Commissioning.	No change in Tender conditions. Bidder to comply with tender conditions.
151	185	Right of the Company to Make Change(s) in Design	6.26.2	The Owner shall have the right to make any change in the design, which may be necessary in the opinion of GIPCL/GSECL to make the plant and materials conform to the provisions and contents of the specification without extra cost to GIPCL/GSECL	This clause will lead to uncertainty in the contract price offered by the contractor. The cost of any additional modifications in design by the GIPCL/GSECL out of specification mentioned in the tender should be paid by GIPCL/GSECL at actual at extra.	No change in Tender conditions. Bidder to comply with tender conditions. Bidder shall submit and get approval of design documents as per EPC Tender specification.
152	193	Terms of Payment	6.37	Terms of payment for O&M for first 5 years and extendable for further 5 years as per discretion of GIPCL/GSECL	Kindly confirm if the O&M initial period will be 10 years or 5 Years.	No change in Tender conditions. Bidder to comply with tender conditions. Please refer Tender Condition at Clause 2.2.1
153	203	Mode of execution	7.7.2	The entire work shall be executed on turnkey basis. Any minor item(s) not included in the schedule but required for completion of the work shall have to be carried out/ supplied without any extra cost. Such works, not listed in the schedule of works but elaborately described to perform or to facilitate particular operation(s) required for completion of the project shall be deemed to have been included in the scope of this work and the Contractor shall supply, install the same without any extra cost	Kindly confirm if the owner will sign Supply Contract, Erection Contract and Civil Work Contracts, O&M Contract (Appendix 19)	Owner may consider signing of separate agreements/contracts as per mutual understanding with successful bidder.
154	203	Mode of execution	7.13	Taxes and duties	As per this clause we infer that statutory variation is not applicable for inout items , i.e Raw materials but will be applicable for bought out items including Anti Dumping Duty.	Refer Amendment
155	206	Power and water supply during construction	7.18	Cost of power and cost of water	kinldy provide the tariff of power and cost water to be taken into consideration	No change in Tender conditions. Bidder to comply with tender conditions. Please refer Tender Condition at Clause 7.18.1, 7.18.2 & 7.18.3
156	271 & 296	7.11 & SI 33	7.11	Gujarat Solar Park -Annual O&M Charges including water charges to GPCL will be paid by GIPCL/GSECL. All other charges / cost are in the scope of Bidder / EPC Contractor.	We infer that the contractor has to make necessary arrangement for water during construction period only. Kinldy confirm.	Bidder's understanding is correct. No change in Tender condition. Bidder to comply with tender conditions.
157	207	Labour Engagement	7.19.5	65% of the jobs that will be created due to the projected in the supervisory and managerial cadres and 80% of the jobs that will be created in other cadres due to the project shall be filled in by employing the local persons. The expression "local person" shall mean a person domicile in Gujarat state for a minimum period of 15 years prior to applying for employment to bidder.	The given % is mentioned is very high as it may not be possible to have the expert/experienced local person , keeping the restriction on the % of the Cadres will hamper the Quality of the project, we request the Owner to remove the % of the local person , however, contractor shall try to ensure that major of the employment is done from local persion	No change in Tender conditions. Bidder to comply with tender conditions.
158	222	Appendix 6: Bid Evaluation Criteria (BEC)		EBV calculation	There seems to be error in EBV calculation w.r.t land cost , the land cost may not be multified by No. of MW, it should be fixed at 114 Crs for total 2x75 MW Capacity	Bidder's understanding is correct. Bidder shall consider fixed land cost of rupees 114 Cr. for 150 MW (AC) (i.e 150 MW x Rs. 76 Lacs)

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159				Reimbursement of statutory fees for approvals	Kindly confirm if the owner will reimbursed statutory fees for approvals and clearance as per actuals against documentary proof at Actual at extra	Refer Amendment
160	144	Termination for default	6.14	Termination of contract	Termination for delay beyond 10 months shall be applicable only in the event that such 10 months of delay is solely attributable to the Contractor. Kindly accept	No change in Tender conditions. Bidder to comply with tender conditions.
161	245	Appendix 15: Format of Financial Proposal (SCHEDULE OF PRICE)	Table 15 A Schedule of Price - A	Payment of Anti-Dumping Duty	As on date there is no clarity on Anti Dumping duty rate, we request the owner to exclude ADD for evaluation of bid this will bring the EBV at parity.	Please refer Amendment
162	42	Bank Guarantee & EMD	3.11.6 (i)	Security Deposit cum Performance Bank Guarantee (SD/PBG) :The period for Performance Guarantee Test shall begin from the date mentioned in NIT of this Tender and shall continue till next one (1) year.	The Performance Guarantee Test shall be within a period of one (1) month after successful Commissioning and, there will be continuous monitoring of the performance for 30 days as per Appendix 16.	No change in Tender conditions. Bidder to comply with tender conditions.
163	60	General Scope of Work	5.1	Indicative length of cable corridor from each Plot shall be provided during pre- bid meeting/or earlier.	Kindly provide the same.	Tentative cable route distance from each plot to GETCO end S/s is attached.
164	60	General Scope of Work	5.1.1 (G)	Indicative length of cable corridor from each Plot shall be provided during pre- bid meeting/or earlier.	The given diagram is not clearly visible / readable , kindly provide readable file.	AUTOCAD drawing of each plot is attached. Further it is clarified that , Cable length indicated in both the options are indicative and approximate however any increase or decrease in actual Cable Length shall be in Contractor's Account.
165	62	Evacuation of Power & Metering Point	5.1.1	Minimum two power evacuation line shall be considered for each 75 MW plant, maximum power that can be evacuated from single circuit shall be as per GETCO guidelines.	We request to share the GETCO guidelines regarding maximum power that can be evacuated from single circuit.	Already clarified at Sr. No 97
166	62	Evacuation of Power & Metering Point	5.1.1	Bidder has to quote for 66 kV underground cable for power evacuation from each 75 MW (AC) project However, in case overhead transmission line feasibility is established and permitted by GETCO & GPCL, Owner shall prefer overhead line and pay GETCO approved charges for transmission line to successful bidder instead of quoted cost of 66 kV underground cable works.	We request to take the unit rate for both underground and overhead line and pay as per quoted rate based on final discission and approval during project execution stage. Also request to mention the length for underground cable/ transmission line to be considered for bid evaluation as per unit rate quoted by bidder	Bidder shall quote total price for 66kV underground cable from each plot to 66kV GETCO end S/s as per Schedule of Price-A, Sr.No. 5. Tentative cable route distance from each plot to GETCO end S/s is attached.
167	62	Evacuation of Power & Metering Point	5.1.1	For the purpose of this project, the evacuation voltage shall be at 66 kV AC (three phase) wherein evacuating point cum metering point shall be installed at 66 kV switchyard within the boundary of solar plant. Scope of work shall also include 66 kV Under Ground cable work from Plot-A, Plot-B1, Plot-B2 & Plot-C solar plant substation to Charanka 400/220/66 kV substation as per GETCO's guidelines.For each plot (i.e. Plot-A, Plot-B1, Plot-B2 & Plot-C), 4 nos. of 66 kV underground cables (three-phase plus one spare) are required for evacuation considering maximum current capacity and voltage drop criteria for each evacuation line, minimum two power evacuation line shall be considered for each 75 MW plant, maximum power that can be evacuated from single circuit shall be as per GETCO guidelines.	Please clarify Power Evacuation point fault level and what will be no. of Run of HT cable required from inside of Solar Plant boundary to the termination end(66/11kV SS end).	No change in tender condition. Bidder to comply with tender conditions. Please refer Tender Condition at Clause 5.1 Further, fault level shall be as per GETCO /Owner requirements and same decided during detailed engineering without any commercial implication to GIPCL/GSECL/GSFC.
168	64	Evacuation of Power & Metering Point	5.1.1	Pre-fabricated Control room cum Conference room with Toilet and Pantry (based on final switchyard configuration & evacuation plan)	Bidder request to mention the required area for Control Room/ Conference Room, Pantry, Toilet, SCADA Room for better understanding	No change in tender condition. Bidder to comply with tender conditions and Shall be finalised during Detailed Engineering without any commercial implication to GIPCL/GSECL/GSFC.
169	67		5.1.7 & 5.3.2 (x)	String Monitoring / Array Monitoring: Each PV string needs to be monitored. & Based on proven practice / design bidder may consider interconnection of maximum two strings with " Y " connector and accordingly solar cable sizing shall be designed.	Both the clauses contradicting each other. Bidder requests to allow combined double string monitoring at SMU input level	No change in Tender conditions. Bidder to comply with tender conditions. However it is allowed to connect two strings with 'Y' connector. Two strings after Y connectors shall be treated as single string.

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170	74	Civil Work	5.2.22(i)	Topographical Survey: Topographical survey shall have to be done by the Contractor of the proposed site at 10 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/Soft Copy 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.	Please share HFL data of proposed site.	No change in Tender conditions. Bidder to comply with tender conditions. Bidder shall visit site for required information.
171	74	Module Mounting Structures (MMS)	5.2.22 (iii)	MMS - The material of construction, structural design and workmanship shall be appropriate with a factor of safety of not less than 1.5.	As per standard solar practice, factor of safety 1 is generally considered for Module mounting structure, same please allow.	No change in Tender conditions. Bidder to comply with tender conditions.
172	76	Civil Work	5.2.8		Land Development and Cleaning: water logged/Depression area of the site.	No change in Tender conditions. Bidder to comply with tender conditions. Bidder shall visit site for required information.
173	76	Civil Work	5.2.9	Storm Water Drainage System: Drainage – All the internal storm water drains i.e. on both side of main central road	Drain on one side of internal roads are sufficient to carry storm water & will be designed properly to ensure no water logging inside the plant.	Already clarified at Sr. No 17
174	77	Civil Work	5.2.11	Area Lighting: Area lighting arrangement shall be made to illuminate the entire site at an appropriate lux level for night hours or bad light hours. Road and Perimeter LUX level min 10 and rest area as per NBC 2016. Area lighting arrangement shall have adequate numbers of lights poles on the sides of roads, periphery, etc.	Bidder understands, lighting arrangement only to be provided in the roads and critical areas like Control Room, Inverter Room, Switchyard, but not on the entire PV Yard. Please clarify.	Already clarified at Sr. No 75
175	78	Civil Work	5.2.12	Boundary Wall (Fencing): The contractor shall provide and install smooth finish and uniform shape & size Precast compound wall of concrete grade M30 with use of OPC 53 Grade of GIPCL/GSECL approved brand cement, reinforced with 3mm wiron (Phosphorous Carbon steel) of TATA Make.....Separate boundary wall shall be provided between B1 & B2 plot.	The given Annexure-4A is not readable. Kindly provide the readable diagram. We also request you to to remove the restriction of rainformecent of TATA Make only and allow the bidders to opt for equivalent brand adhering to the given Technical Specification in the RFP. kKndly confirm if common fencing can be done for plots sharing the comon boundary.	No change in Tender conditions. Bidder to comply with tender conditions.
176	79	Civil Work	5.2.14	Roads: All the roads connecting the main gate to control room, switch yard shall be accessed by Asphalt road with sufficient base courses like Sub grade, GSB, WBM layer, Wet Mix Macadam layer, DBM layer and at top Seal Coat etc. All remaining road for approaching to inverter room, peripheral roads shall be of WBM. WBM/Asphalt road width shall be of 4m plus shoulder (minimum 750mm both side)	Bidder requests to allow WBM/Asphalt road width shall be of 3m plus shoulder (minimum 500mm both side) in place of WBM/Asphalt road width shall be of 4m plus shoulder (minimum 750mm both side).	No change in Tender conditions. Bidder to comply with tender conditions.
177	79	Civil Work	5.2.15	Underground RCC water Tank:	Instead of RCC tanks, PVC tanks of reputed make (nos. Will be calculated during detail engineering) can be installed at project site strategic locations to ensure satisfactory day to day water requirement.	No PVC Tanks are acceptable. Regarding Capacity and Quantity of underground RCC water tank the clarification already made.
178	81	RCC or Pre-fab Inverter/RCC or Pre-fab Control cum Conference Room	5.2.17.10	Flooring: The entire control room and Inverter rooms flooring shall be provided with 100mm thick M20 grade RCC slab on 75mm thick PCC (1:4:8) with sub-base below of 230mm rubble soling over 600mm compacted CNS filling/available soil.	Cns filling thickness should be as per geotechnical investigation & recommendation instead of 600 mm.	No change in Tender conditions. Bidder to comply with tender conditions. Refer Clause no. 5.1.5 (ii). However thickness shall be decided at the time of Detailed Engineering.
179	81	RCC or Pre-fab Inverter/RCC or Pre-fab Control cum Conference Room	5.2.17	RCC cable trenches with oil painted edge angle of 65mm x 65mm x 6mm and checker plate covers of 8 mm thickness	6 mm thk. Chequered plates are sufficient to cover the open areas above cable trenche instead of 8mm thk.	No change in Tender conditions. Bidder to comply with tender conditions.
180	83	RCC or Pre-fab Inverter/RCC or Pre-fab Control cum Conference Room	5.2.17.2	The Insulated panels should be of required size for roof and walls. The insulated wall and roof panels shall be sandwich type. The panels shall be made out with 0.35mm thick pre coated steel sheet on both side of Poly Urethane Foam (PUF) for both wall and roof. The density of PUF shall be 40±2 kg/m ³ and thermal conductivity shall be within range of 0.019-0.021 W/m ^{°K} at 10°C. The total thickness of the panels for walls shall be 60mm and for roof is 40mm. The panels shall be joined together by tongue and groove method	Minimum thickness of puf for side wall is 40 mm sufficient.	No Change in EPC Tender. Bidder to comply with tender conditions.

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181	88	Quality Control Laboratory	5.2.19	Quality control lab at site	This is a no standard requirement by the employer and may not be feasible to have all testing equipments at site. Kindly delete this requirement.	No change in Tender conditions. Bidder to comply with tender conditions.
182	97	Photovoltaic Modules	5.3.1 (xii)	All materials used for manufacturing solar PV module shall have a proven history of reliability and stable operation in external applications. It shall perform satisfactorily in relative humidity up to 100% with temperature between -40°C to +85°C and shall withstand adverse climatic conditions, such as high speed wind, blow with dust, sand particles, saline climatic / soil conditions and for wind 180 km/hr on the surface of the panel	As per IEC 61215 the relative humidity is upto 85%. Kindly amend.	Please refer Amendment
183	98	Junction Box / Combiner Box	5.3.2 (iii)	Outdoor Junction Box : IP 65 or above, with canopy	Please allow Outdoor Junction Box : IP 65 or above without canopy and installed below or on MMS structure. This will reduce the project cost without compromising the Quality Standard.	No change in Tender conditions. Bidder to comply with tender conditions.
184	93	Module Mounting Structures (MMS)	5.2.22 (iii)	The array structure shall be so designed that it will occupy minimum space without sacrificing the output from Solar PV panels at the same time it will withstand severe cyclonic storm with wind speed up to maximum 180 Kmph.	Please allow wind velocity as per is: 875 part – iii 2015.	No change in Tender conditions. Bidder to comply with tender conditions.
185	93	Module Mounting Structures (MMS)	5.2.22 (xiii)	The material of construction, structural design and workmanship shall be appropriate with a factor of safety of not less than 1.5.	Please allow structural design with factor of safety 1.0 because of MMS is light weight structure and height also very less.	No change in Tender conditions. Bidder to comply with tender conditions.
186	99	Junction Box / Combiner Box	5.3.2 (V)	The Array Junction Box shall also have suitable type-II surge protection device. In addition, over voltage protection shall be provided between positive and negative conductor and earth ground such as Surge Protection Device (SPD) or on-load DC disconnectors with shoes. All incoming & outgoing cables must be terminated in junction boxes with polyamide glands or PV connector receptacles. The rating of the Junction Boxes shall be suitable with adequate safety factor to inter connect the Solar PV array.	Request to allow MC4 connectors at input side of Array junction box for connecting string to array junction box. Please confirm.	No change in Tender conditions. Bidder to comply with tender conditions. MC4 connectors at input side of Array Junction Box /SJB/SMU is not envisaged.
187	99	Junction Box / Combiner Box	5.3.2 (V)	Junction Box / Combiner Box	Request to allow Y-connector .In case of Y-connector, we combine two strings.Hence, Combined string parameters can be monitored. But individual string parameters cannot be monitored as output of Y-connector is going to connect in SMU. please confirm.	Already clarified at Sr. No 169
188	100	Junction Box / Combiner Box	5.3.2 (xii)	The String Junction Box must have adequate space for maintenance and spare input terminals. For SJB with upto 25 inputs 2 inputs shall be kept in spare, for SJB with more than 25 inputs 3 inputs shall be kept in spare.	We request you to allow 1 spare terminal upto 14 input SMU as this may vary on the design. Further, extra inputs as per clause will not be of any use for GSECL/GIPCL	No change in Tender conditions. Bidder to comply with tender conditions.
189	100	Inverter and PCU	5.3.3 (i)	Only those PCUs/ Inverters which are commissioned for more than 100 MW capacity (1000V DC) or 50 MW capacity (1500V DC) in other solar PV projects till date shall be considered for this project.	For 1500 V DC system inverters commissioned for 50 MW is very stringent. Kindly relax this clause for the inverter manufacturer to have commissioned for more than 100 MW For both 1000 V DC System and 1500 V DC System	No change in Tender conditions. Bidder to comply with tender conditions.
190	101	Inverter and PCU	5.3.3 (xv)	The inverters shall have minimum protection to IP 65(Outdoor)/ IP 21(indoor) and Protection Class II or higher	Bidder requests to allow Outdoor Contaminated Inverter Solution with IP 54 (Outdoor) rating for this project	Already clarified at Sr. No 2
191	106	Cables and Wires	5.3.4 (i)	All cables and connectors for use for installation of solar field must be of solar grade which can withstand harsh environment conditions 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 for service life expectancy of 25 years)	Cables from SCB to inverter shall be of Aluminium.	Armoured Aluminium Cables from SCB to Inverter is acceptable subject to fulfilling tender specifications and conditions.
192	107	Cables and Wires	5.3.4 (iii)	All cables shall be supplied in the single largest length to restrict the straight-through joints to the minimum number. Only terminal cable joints shall be accepted. No cable joint to join two cable ends shall be accepted.	Looking into the capacity of the project and distance between Inverter Room and Control Room, bidder requests to allow straight-through cable joints or cable termination box for the project	Already clarified at Sr. No 88

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193	107	Cables and Wires	5.3.4 (iii)	All cables shall be supplied in the single largest length to restrict the straight-through joints to the minimum number. Only terminal cable joints shall be accepted. No cable joint to join two cable ends shall be accepted.	Request to allow HT cable joints for a route length more than 1000 / 750 meters for single core and three core respectively.	Already clarified at Sr. No 88
194	118	AC Network	5.3.11 (i)	AC converted by the inverter is transmitted through the appropriate cables from the Inverter to appropriately sized Inverter transformer. In case of more than one Inverter transformer in a block, RMU shall be provided.	Bidder request to allow Metal Clad Breaker Panel of IP55 rating for outdoor installation as breaker panel is more reliable than RMU	No change in Tender conditions. Bidder to comply with tender conditions.
195	119	Step-Up Transformer	5.3.12 (i)	Inverter Transformer must be protected with HV VCB Panel / RMU Capacity of each inverter block. Capacity of LCR (Inverter Block) shall not exceed more than 5 MW. Hence, total 75MW capacity of the solar plant with provision of rated 11kV or 33 kV HV Vacuum Circuit Breaker panel shall be connected upto 66 kV substation of the plant.	Bidder requests to allow >5MW block for 1500V System and with 5 Winding Inverter Transformer	Please refer Amendment
196	120	Step-Up Transformer	5.3.12 (iii)	Each 75 MW (AC) plant shall have minimum 2 nos. (50MVA & 25MVA) of 66 kV power transformer, For 50 MW capacity minimum capacity of transformer shall be 36/60 MVA of ONAF and for 25 MW capacity minimum capacity of transformer shall be 18/30 MVA of ONAF cooling for temperature rise of 55 Degree Celcius / 65 Degree Celcius as a temperature rise units.	There seems to be error in minimum transformer capacity, for 50 MW and 25 MW.	No change in Tender conditions. Bidder to comply with tender conditions.
197	144	Earthing	5.3.30 (1)	All ACBs shall be 4 pole, electrically operated, draw-out type, with closing coil, spring charge motor, trip coil, TNC switch for close and trip, manual closing and tripping push buttons, door I/L, test and service position micro switches, emergency P.B., safety shutters, etc. The circuit breaker shall be provided with anti-pumping feature.	In PCU AC side ACB will be fixed type and 3Pole, so there will be no indication of TEST, SERVICE. And also the ACB will be mechanically/Electrically operated. Please clarify.	Integral ACB for PCU/Inverter (Fixed or Drawout type) is acceptable. However, ACB must be electrically and mechanically operated.
198	161	Fire Alarm System	5.3.38	Monitor, Control Modules & Fault Isolators: UL listed, modules complete with mounting arrangement on North American junction box as per requirements of contract works	Bidder request to allow junction box as per industry standard and approved by CFO (Chief Fire officer)	No change in Tender conditions. Bidder to comply with tender conditions.
199	161	VENDOR LIST	5.3.39	Vendor List	Bidder request to allow approved system houses of parent company	For approval of any other vendor please refer notes at page No : 165 of EPC Tender.
200	101	Inverter and PCU	5.3.3 (xvii)	(Grid Connectivity) Relevant CERC/GERC regulations and grid code as amended and revised from time to time shall be complied. The system shall incorporate a uni-directional inverter and should be designed to supply the AC power to the grid at load end. The power-conditioning unit shall adjust the voltage & frequency levels to suit the Grid	Continious change in regulations cannot be incorporated in the inverters, or the system. Only those regulations shall be considered that are applicable as on date of bidding. New changed made in the regulations cannot be implemented in the Inverter thereafter. Please confirm	No change in Tender conditions. Bidder to comply with tender conditions.
201	101	Inverter and PCU	5.3.3 (xxviii) (h)	Inverter must be provided with -Ve earthing for protection of PV modules against possible "Potential Induced Degradation".	Inverter -Ve grounding and insulation monitoring for earth leakage faults cannot function at the same time simultaneously.	No change in Tender conditions. Bidder to comply with tender conditions.
202	104	Inverter and PCU	5.3.3 (xxxii)	It shall have bus communication via interface for integration, remote control via telephone model or mini web server, integrated protection in the DC and three phase system, insulation monitoring of PV array with sequential fault location. Alternatively, the same can be provided through SCADA	Insulation Monitoring - Possible, Sequential Fault Location - Not possible (Inverter Vendors donot have sequential fault locators)	No change in Tender conditions. Bidder to comply with tender conditions.
203	102	Inverter and PCU	5.3.3 (xxiii)	PCU front panel shall be provided with display (LCD or equivalent) to monitor the following <ul style="list-style-type: none"> • Instantaneous DC power input • DC input voltage • DC Current • Instantaneous active AC power output • Instantaneous reactive AC power output • AC voltage (all the 3 phases and line) • AC current (all the 3 phases and line) • Power Factor • kWh Produced during entire day • Total kWh produced during its life time • Thermal loading (percentage) 	AC Voltage/Current (All three phases and Line) and thermal loading are available with Inverter vendore and shall be removed	No Change in Tender condition. Also refer clarification given at Sr. No 98.
204	103	Inverter and PCU	5.3.3 (xxvii) (g)	Heat Transfer / Cooling / Built in Ventilation Systems must be provided with 20% Spare capacity. Bidders to Submit Heat Rejection / Transfer calculation for Air Conditioning of Inverter Room	Inverter Manufacturer are not confirming to this clause.	Already clarified at Sr. No 3

<u>Sr No.</u>	<u>Page No.</u>	<u>Description</u>	<u>EPC tender Clause</u>	<u>Details as per EPC Tender (GIPCL/ Solar/EPC/2017/2x75 MW (AC) Solar PV/ Rev. 1.0)</u>	<u>Bidder's Query</u>	<u>Owner (GIPCL/GSECL/GSFC) reply / clarification to Pre Bid Queries</u>
205	250	Performance Ratio (PR) - Test Procedure	Appendix 16: Procedure for Performance Testing	Performance Ratio (PR) = YA / YR	PR Formula: Request to allow following PR formula for calculations of Performance Ratio $PR = \{YA/YR\} * [1 - \alpha * (T_{cell\ avg.} - T_{cell})]$ Where, YA = Eac/Pinst ,Eac = AC energy injected into the grid during a clearly specified amount of time (kWh), Pinst = Installed nominal peak power of modules (Flash test rating at STC) (kWp), YR = IR Site / IR STC, IR Site = Irradiation on the module plane of array during a clearly specified amount of time (measured with a pyranometer installed on the array plane) (kWh/sq. mtr) IR STC = Irradiance at STC (kW/sq. mtr) T Cell avg. = Average cell/module temp (°C), Tcell = STC cell/module temp (°C) α = Temperature coefficient of power (negative in sign) corresponds to the installed module (%/°C) • The Generation shall be factored accordingly depending upon the o Actual plant availability & grid availability o Actual radiation and temperature at site and the same will be corrected with respect to PVSYST computed radiation and temperature. Please accept the same.	No change in Tender conditions. Bidder to comply with tender conditions.
206	270	Details of land		Plot layout	The given plot is not clearly visible / readable , kindly provide the autocad layout of your plot or readable file	AUTOCAD drawing of each plot is attached.
207		Tree Cutting	Tree Cutting	Site	As per outr site visit tree are found in the park, we request the Owner to cut and remove the trees and then handover the plant	No change in Tender conditions. Bidder to comply with tender conditions.
208	6	Important Dates (NIT)	Table A (ix)	Target date for Commissioning of Project: 365 days from date of Letter of Intent (LoI)	We kindly request you to link all milestones to LOA (Letter of Award) or Receipt of advance amount whichever is later	No change in Tender conditions. Bidder to comply with tender conditions
209	9	Important Amounts (NIT)	Table - B (iv)	O&M Bank Guarantee (O&M BG) : 5% of EPC Contract Price, to be submitted upon completion and acceptance of Performance Guarantee Test as per Clause No. xi of Table A (Important Dates) above for a period of five (5) years, and 2.5% of the EPC Contract Price from the start of the sixth (6th) year of O&M Period to the 90 days beyond completion of the O&M Period mentioned in Clause No. xii of Table A (Important Dates) above. This O&M BG shall cover the risk against extended warrantee for equipment up to O&M Period and recovery towards shortfall in NEEGG during O&M Period. The O&M Bank Guarantee shall be valid 90 days beyond the O&M Period.	Validity of O&M Bank Guarantee should be one (1) year renewal every year for total period of five (5) years.	Already clarified at Sr. No 145
210	10	Important Amounts (NIT)	Table B (v)	Insurance or Performance Bank Guarantee (PBG) Against PV Module Warranty : Rs. 25 Lacs per MW of PV Module (DC Capacity) valid for 25 years required to be submitted prior to submission of SD/PBG.	Insurance or performance Bank Guarantee (PBG) against PV Module Warranty to be submitted at the time of start of O&M Period.	No change in Tender conditions. Bidder to comply with tender conditions.
211	10	Important Amounts (NIT)	Table B (vi)	Bank Guarantee for shortfall at the time of PG test (To whomsoever it is applicable) : Rs. 26.88 per kWh	Rs. 26.88 per kWh is too high. It should be reduced as per PPA rate only.	No change in Tender conditions. Bidder to comply with tender conditions.
212	33	General Instructions	3.1.15	The entire site for the work shall be made available along with LoI.	In case of delay in handing over of site/land, time extension should be provided in completion period.	No change in Tender conditions. Bidder to comply with tender conditions.

<u>Sr No.</u>	<u>Page No.</u>	<u>Description</u>	<u>EPC tender Clause</u>	<u>Details as per EPC Tender (GIPCL/ Solar/EPC/2017/2x75 MW (AC) Solar PV/ Rev. 1.0)</u>	<u>Bidder's Query</u>	<u>Owner (GIPCL/GSECL/GSFC) reply / clarification to Pre Bid Queries</u>
213	34	Pre-Qualifying Requirements (PQRs)/ Eligibility Conditions	3.2.2 (i)	<p>Pre-Qualifying Requirements (PQRs)/ Eligibility Conditions : TECHNICAL:- i. The Bidder shall have an experience of design, supply, installation, commissioning and operation or plant installation of cumulative installed capacity of 100 MW or above in India from 1 April 2013 as on the Deadline for Submission of Bid, with a minimum megawatt scale (1 MW or above) of plant. ii. Out of the above-mentioned 100 MW, cumulative 50 MW solar PV power plants shall have been commissioned and in operation in India. iii. Out of the above-mentioned 100 MW, there must atleast one solar PV power plant of 40MW capacity.</p>	As per Annexure-1 : Details of Land for the Project, there are three plots at Gujarat Solar Park where the Solar PV Power plant is been proposed, the maximum size is of plot C 221.6 Acre which can accommodate maximum of 50MW capacity & as per Terms of Payment for Supply & for Installation Works funds will be release based on completion of 5MW or above size block implying that the Contractor has to replicate the block pattern for completion of project & getting the payment. Considering the above, we kindly request you to consider pre-qualification for 50 MW capacity (according to individual plot size) in terms of technical as well as commercial qualification. Considering the above, we kindly request you to consider pre-qualification for 50 MW capacity (according to individual plot size) in terms of technical as well as commercial qualification. We request Purchaser to keep the cumulative installed capacity of 30MW with a single unit of 10MW at a single location for technical qualification. Above is also in line with the contemporary tenders released by Govt PSU/Departments for EPC works of similar nature.	No change in Tender conditions. Bidder to comply with tender conditions.
214	35	Pre-Qualifying Requirements (PQRs)/ Eligibility Conditions	3.2.3 (i)	<p>Pre-Qualifying Requirements (PQRs)/ Eligibility Conditions : FINANCIAL:- Cumulative Turnover of the Bidder for last three (3) financial years shall be at least Rupees Five Hundred Forty Crore Only (Rs. 540,00,00,000/-).</p>	Bidder propose the following: Cumulative Turnover of the Bidder for last three (3) financial years shall be at least Rupees Four Hundred Fifty Crore Only (Rs. 450,00,00,000/-).	No change in Tender conditions. Bidder to comply with tender conditions.
215	42	Bank Guarantees & EMD	3.11.6 (iii)	<p>Bank Guarantee against PV Module Warranty: The Successful Bidder who is not able to provide insurance of PV modules as specified in the Tender Clause No. 6.39.10 (a) shall submit a Bank Gurantee of Rs. 25 Lakh per each megawatt of PV modules (i.e. DC capacity), which shall be valid for a period of twenty five (25) years and 90 days . The minimum validity of the Bank guarantee shall be five (5) years and shall be renewed subsequently every five (5) years prior to thirty (30) days of its expiry.</p>	Amount of Rs. 25 Lakh is too high. It should be maximum Rs. 2 Lakh each megawatt of PV module. Five (5) year Bank guarantee will be difficult to provide as banks are reluctant to issue longer period bank guarantees. It should be maximum two (2) year and renewal accordingly before one (1) month of expiry.	No change in Tender conditions. Bidder to comply with tender conditions.
216	42	Bank Guarantees & EMD	3.11.6 (iv)	<p>Bank Guarantee for shortfall at the time of PG Test: In case the Contractor fails to achieve the NEEGG at the PG test then the Contractor shall, within a period of thirty (30) days, provide a Bank Guarantee of the amount equal to "Rs 26.88 x No. of shortfall units" valid for a period of 9 (nine) years. In case the Contractor achieves the NEEGG in the 10th year then the Bank Guarantee shall be returned to the Contractor at the end of 10th year of O&M Period. However, if the Contractor fails to achieve the NEEGG during the 10th year then Rs. 26.88/ kWh shall be charged for the shortfall that has occured in the 10th year with a maximum amount limited to the Bank Guarantee value.</p>	Rs. 26.88 is too high. It should be not more than PPA rate.	No change in Tender conditions. Bidder to comply with tender conditions.
217	58	Performance Guarantee	4.17.3	<p>The PBGs shall be liable to be encashed wholly or partly at the sole discretion of the Owner, should the Contractor either fail to execute the work within the stipulated period or fail to fulfil the contractual obligations or fail to settle in full his dues to the Owner. In case of premature termination of the contract, the PBG will be encashed and the Owner will be at liberty to recover the loss suffered by it from the Contractor.</p>	PBG shall not be encashed in case of premature termination of Contract due to reasons not solely attributable to Contractor or due to Force Majeure event.	No change in Tender conditions. Bidder to comply with tender conditions.
218	58	Performance Guarantee	4.17.4	<p>The Owner is empowered to recover from the PBG through invocation of PBG for any sum due and for any other sum that may be fixed by the Owner as being the amount or loss or losses or damages suffered by it due to delay in Performance and/or non-performance and / or partial performance of any of the conditions of the contract and / or non-performance of guarantee obligations.</p>	PBG shall not be encashed in case of delay in performance of contract, non performance of contract, partial performance of contract or premature termination of Contract due to reasons not solely attributable to Contractor or due to Force Majeure event.	No change in Tender conditions. Bidder to comply with tender conditions.
219	65	Civil and Other Non-Electrical Work:	5.1.5 (v)	<p>Solar PV Module Cleaning System: Contractor shall construct and operate 7.5 lacs liter (3x 2.5 lacs liter) underground RCC water tank for each 75 MW Project</p>	Two 35k liter water tank is sufficient for each 75MW solar power plant.	Please refer Amendment

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220	69	Statutory Requirements	5.1.9 (d)	Payment to GETCO for system study, SLDC Charges, Connectivity charges and GEDA registration charges, CEIG Inspection charges are in the scope of EPC Contractor.	All statutory deposit, guarantees and fee should be paid by GIPCL/GSECL or reimbursed to Contractor by GIPCL/GSECL at actual on documentary evidence.	Please refer Amendment.
221	70	Approval of Designs / Drawings	5.1.10 (viii)	The Owner reserves right to modify the specifications at any state as per local site conditions / requirements and EPC contractor shall comply with modification without any extra cost and time.	The Owner reserves right to modify the specifications at any state as per local site conditions / requirements by prior consult with Contractor and determining extra cost (if any) and extra time (if any). Same shall be agreed mutually by the Owner and the Contractor.	Already clarified at Sr. No 151
222	76	Civil Work	5.2.9	Storm Water Drainage System	Bidder suggest open earthen drain	Already clarified at Sr. No 17
223	77	Area Lighting	5.2.11	Area lighting arrangement shall be made to illuminate the entire site at an appropriate lux level for night hours or bad light hours	Request purchaser to clarify the lux level to be considered for area lighting in order to bring all bidders on same level	Already clarified at Sr. No 75
224	78	Watchman's Cabin and Main Entrance Gate	5.2.13	The Prefabricated Security Cabin of size 3.5 meter x 3.5 meter at the main entrance gate with toilet unit shall be designed in the constructed by the Successful Bidder keeping in view the safety and security of the power plant.	Provide height of security cabin.	As per industry standards minimum 3 meter from FFL.
225	78	Boundary Wall (Fencing)	5.2.12	The contractor shall provide and install smooth finish and uniform shape & size Precast compound wall of concrete grade M30 with use of OPC 53 Grade of GIPCL/GSECL approved brand cement, reinforced with 3mm iron (Phosphorous Carbon steel) of TATA Make using pre-stressed technology	Bidder suggest use 1.2 m high chain link+0.3 m barbed wire Fencing for Plant boundary peripheral length and we need at least three make.	No change in Tender conditions. Bidder to comply with tender conditions.
226	79	Civil Work	5.2.14	Roads: WBM/Asphalt road width shall be of 4m plus shoulder (minimum 750mm both side) and with sufficient thickness to access heavy equipment like transformers/inverters/ switchyard equipment transportation	Bidder suggest width of road - 3m plus shoulder 0.5m both side is sufficient.	No change in Tender conditions. Bidder to comply with tender conditions.
227	79	Civil Work	5.2.14	All remaining road for approaching to inverter room, peripheral roads shall be of WBM	Bidder suggest compacted road for periphery.	No change in Tender conditions. Bidder to comply with tender conditions.
228	81	Civil Work	5.2.16	Water supply: All necessary arrangement for wet cleaning of the solar panels shall be in the scope of the bidders and accordingly the agency has to provide all the necessary equipment, accessories, tool & tackles, pumps, tankers, tractors and piping arrangement which are required for the same.	Please confirm water supply will be provided by GSECL/GIPCL as the same is provided to all developers at Charanka.	No change in Tender conditions. Bidder to comply with tender conditions.
229	81	RCC or Pre-fab Inverter/RCC or Pre-fab Control cum Conference Room	5.2.17	RCC or Pre-fab Inverter/RCC or Pre-fab Control cum Conference Room	Bidder suggest as RCC column with roof of metal sheet.	No change in Tender conditions. Bidder to comply with tender conditions.
230	93	Module Mounting Structures (MMS)	5.2.22 (viii)	In case of galvanization of structures, specific requirement for thickness of galvanization should be at least minimum 80 microns at any point of the galvanized structure.	Bidder suggest Average 80-micron HDG.	No change in Tender conditions. Bidder to comply with tender conditions.
231	93	Module Mounting Structures (MMS)	5.2.22 (iii)	The array structure shall be so designed that it will occupy minimum space without sacrificing the output from Solar PV panels at the same time it will withstand severe cyclonic storm with wind speed up to maximum 180 Kmph.	Should be as per IS code (IS 875-part 3)	No change in Tender conditions. Bidder to comply with tender conditions.
232	93	Module Mounting Structures (MMS)	5.2.22 (ii)	The MMS should be safe, and designed to allow easy replacement of any module and easy access to the O&M staff. It should be designed for simple mechanical and electrical installation, should support Solar PV modules at a given orientation, absorb and transfer the mechanical loads to the ground properly and there should be no requirement of welding or complex machinery at site. Irrespective of design, none of the components shall be less than 1mm.	Bidder suggest to allow Pre Galvanized members shall be Galvalume/ZAM with coating of AZ150/M300 GSM respectively as per latest relevant IS specification for perlin and rafter.	No change in Tender conditions. Bidder to comply with tender conditions.
233	94	Module Mounting Structures (MMS)	5.2.22 (xiii)	The material of construction, structural design and workmanship shall be appropriate with a factor of safety of not less than 1.5.	Bidder suggest to follow factor of safety 1.0.	No change in Tender conditions. Bidder to comply with tender conditions.
234	94	Module Mounting Structures (MMS)	5.2.22 (xviii)	The Contractor should design the structure height considering highest flood level at the site. 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) minimum 500 mm	Purchaser requested to allow minimum ground clearance of 300 mm. This is standard industrial practice and higher clearance lead to increased in tonnage of MMS which in turn increased in tonnage of MMS which in turn increasing capital cost.	No change in Tender conditions. Bidder to comply with tender conditions.

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235	94	Module Mounting Structures (MMS)	5.2.22 (xiv)	For multiple module mounting structures located in a single row, the alignment of all modules shall be within an error limit of 5 mm in vertical / horizontal line.	Bidder suggest to follow natural contour gradient, then an only achievable.	No change in Tender conditions. Bidder to comply with tender conditions.
236	98	Electrical Work	5.3.2 (iii), 5.3.2 (xii)	<p>Junction Box / Combiner Box</p> <p>iii. The degree of protection for following equipment shall be: <input type="checkbox"/> Outdoor Junction Box : IP 65 or above, with canopy</p> <p>xii. Adequate capacity solar DC fuses & isolating disconnectors should be provided. Fuses and monitoring facility for each string/ input including spare terminals shall be provided.</p> <p>The String Junction Box must have adequate space for maintenance and spare input terminals. For SJB with upto 25 inputs 2 inputs shall be kept in spare, for SJB with more than 25 inputs 3 inputs shall be kept in spare.</p>	<p>iii. Bidder suggests to allow Junction box under MMS without canopy with IP65.</p> <p>xii. Bidder suggests to allow two string level monitoring with positive side fuse only.</p> <p>Bidder suggests to have only 5% spare at input side of SJB.</p>	No change in Tender conditions. Bidder to comply with tender conditions and already clarified
237	100	Inverter and PCU	5.3.3 (iv)	Inverter and Power Conditioning Unit (PCU): Capacity of single unit of inverter shall be min. 1,000 kW.	Bidder suggests to have capacity of single unit of inverter minimum 30 Kw.	No change in Tender conditions. Bidder to comply with tender conditions.
238	104	Inverter and PCU	5.3.3 (xxxvi)	<p>Inverter and Power Conditioning Unit (PCU)</p> <p>xxxvi. Standards and Compliances: Table 5-3 Detailed Specifications of PCU</p> <p>2. – Nominal AC Output power 3. – Nominal AC Output Voltage</p> <p>xv. The inverters shall have minimum protection to IP 65(Outdoor)/ IP 21(indoor) and Protection Class II or higher.</p>	<p>2. It shall be minimum 30 kW. 3. It shall be as per Inverter manufacturer. Bidder suggests to allow to use container PCU solution(IP54) also for outdoor application.</p>	<p>2. No change in Tender conditions. Bidder to comply with tender conditions.</p> <p>3. The inverters shall have minimum protection to IP 65(Outdoor)/ IP54 (with roof with separate structure)/ IP 21 (indoor) and Protection Class II or higher. Further all inverter (IP65 & IP54) inverters must be installed with proper plinth / platform.</p> <p>Further, all associated equipments like RMU, UPS, ACDB, SCADA Panel shall have suitable IP class and type of installation as per EPC tender.</p>
239	109	Electrical Work	5.3.5 (G)	<p>Technical Specification of LT XLPE Cables</p> <p>G. Armour: Galvanized steel flat strip / round wires applied helically in single layers complete with covering the assembly of cores.</p> <p><input type="checkbox"/> For cable size upto 25 Sq. mm. : Armour of 1.4 mm dia G.I. round wire <input type="checkbox"/> For cable size above 25 Sq. mm. Armour of 4 mm wide 0.8 mm thick G.I strip</p>	Please clarify armouring requirement for single core and three core cable separately.	Applicable for single & three core.
240	119	Electrical Work	5.3.12 (i)	<p>Step-Up Transformer:</p> <p>The Contractor shall provide the complete turnkey design, supply, erection, testing and commissioning of transformers and transformer substation to first step-up the output of the inverter to HV at the location of the inverter. Inverter Transformer must be protected with HV VCB Panel / RMU Capacity of each inverter block. Capacity of LCR (Inverter Block) shall not exceed more than 5 MW. Hence, total 75MW capacity of the solar plant with provision of rated 11kV or 33 kV HV Vacuum Circuit Breaker panel shall be connected upto 66 kV substation of the plant.</p>	Bidder requests to allow to give flexibility over the inverter block sizing instead of restricting upto 5MW as there are products available now having 7.2MVA single output in inverter.	Please refer Amendment
241	154	Electrical Work	5.3.33 (g)	<p>SCADA and Remote Monitoring System :</p> <p>String Monitoring System: Fiber optical cable shall be provided based on layout for SCADA system. Minimum 2 spare core with termination shall be provided.</p>	Bidder proposes to use RS485 for connecting SJB to SJB and SJB to SCADA Panel.	No change in Tender conditions. Bidder to comply with tender conditions.
242	157	Electrical Work	5.3.34 ('c)	<p>Management Information System (MIS) for each 75 MW Project:</p> <p>c. Complete 75 MW Plant data shall be available to remote locations. Minimum 4 Nos. of concurrent remote logins/user are envisaged for web based monitoring/view. Remote monitoring data for MIS shall be viewed at existing the Owner's PC / mobile. Separate PC / work station for MIS System is not envisaged. All data shall be accessible through internet with password protected login. Further, facility shall be provided for data view from mobile devices also.</p>	Bidder suggests to use minimum 3 nos. of concurrent remote logins/user, as mentioned in page no. 152 (XVIII).	No change in Tender conditions. Bidder to comply with tender conditions.

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243	147	Electrical Work	5.3.32 (iii)	Metering System: Separate meter has to be provided for L.T. (incoming) and H.T.(Outgoing) supply.	Metering is to be considered on evacuation point for GETCO metering, which is 66kV. Please clarify if any metering required at 11/33kV or at 415V	No change in Tender conditions. Bidder to comply with tender conditions.
244	161	VENDOR LIST	5.3.39	Vendor List :	Please Add following Vendor. Also confirm Bidder can proposed Vendor DDE after award of Contract	No change in tender condition. Bidder to comply with tender conditions. Please refer Notes at Page 165 of 297.
				PCU/Inverter	Sungrow	
				Module	Confirm that Bidder can take approval for vendor after Award of Contract if required.	
				HT Panel / HT Breaker	System House of ABB, L&T, Siemens, Schneider, C&S	
				LT Switchgear Component	System House of ABB, L&T, Siemens, Schneider, C&S	
				Power Transformer	Silchar, Atlanta , T&R ,	
				Inverter Transformer	Atlanta, Silchar, Toshiba, PETE,	
				Auxiliary Transformer	Gujrat Transformer, Mahati	
				Solar Cable & DC Cable	Polycab, Avocab, Vishal, Zenium, Gupta, Ravin	
				AC Cable	Polycab, Ravin, Gemscab, Gupta Power	
				Optical Fiber Cable	Sterlite	
				Earthing Pit Material	Sterlite, Balaji, JEF, Ennov, MNR	
				SJB	Solaris, Statcon	
				Lugs	Bi-Metalic	
				SCADA	ABB, Masibus, TAS-India, GE	
				WMS	Cambell, Jambekar, Sivara, Aeron,	
				Batteries	Numeric, HBL, Amrraja	
				UPS	Dubas, Power one, Consul, Numeric	
				Battery Charger	Statcon, Electronic System, Amar Raja	
				LA	JEF Flash-L , Onay	
				Isolator	IPL Product, Siemens	
				CT & PT	Mehru	
				66 kV Cable	Havells	
Disc & Post Insulator	Goldstone, Sarvana					
Insulator Hardware	Krishna Transmission, Dharia					
Clamp & Connector	Krishna Transmission, Dharia					
Numeric Relay	Ashida, ABB, Schneider					
Lighting Fixture /System	Nessa, wipro, Crompton					
CSSS	Stelmech, Popular switchgear, Expel, Ma					
LED Lighting	Nessa, Crompton					
Steel Structure for MMS	POSMAC					
Submersible / Sump Pump	Shakti Pump					
CCTV Camera / Monitoring System	Dahua, Hikvision ,					

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245	173	Timeline (Best Effort Schedule)	6.9.4	The issue of LoI shall be considered as the Zero Date	The Zero Date shall start from date of Notice to Proceed ("NTP") received by Contractor from Owner. Owner shall issue NTP to Contractor for its acceptance on completion of following conditions / tasks: 1) Financial Closure of Project by Owner; 2) Signing of Power Purchase Agreement by Owner (with a copy to Contractor); 3) Providing land (Encumbrance Free with clear Access to Project Site); 4) Access to Project Site without any hindrance/obstacle with motorable roads; 5) Approval of all Engineering Design & Drawings by Owner; 6) Approval of Technical Specification of Facility E&M, Civil Works, E&C Works; 7) Approval of unpriced POs of sub-contractor/vendors by Owner; 8) Remittance of Advance Payment against equivalent amount of Advance Bank Guarantee as per Payment Terms; 9) Signing of Supplies Agreement, Erection and Commissioning Agreement and Warp Agreement. Any of above condition / tasks may be waived or modified by Contractor if the same is acceptable to Contractor. The delay caused due to delay in issuance of NTP by Owner shall be automatically added in the Timeline Schedule without levy of liquidated damages on Contractor. Please confirm if this can be considered or not.	No change in Tender conditions. Bidder to comply with tender conditions.
246	174	Delay in Execution or Failure to Supply	6.10.2	If the Contractor fails to deliver the plant or fails to start the work within specified time frame after issue of LoI or fails to carry out the work as per agreed schedule or leaves the work site after partial execution of the work, GIPCL/GSECL shall have the right to get the work done through any other agency at the risk and cost of the Contractor. Further to this, GIPCL/GSECL may, without prejudice to the right of the Contractor to recover damages for breach of trust of the Contract, may impose penalties.	This clause shall be made applicable on Contractor only when such reasons for failure are solely attributable to the Contractor.	No change in Tender conditions. Bidder to comply with tender conditions.
247	176	Liquidated Damages for Delay and Underperformance	6.11.3	Maximum applicable Liquidated Damages: The upper ceiling for total liquidated damages for delay shall be maximum 10% of the EPC Contract Price	We kindly request you to consider LD at of unfinished work per week subject to maximum of 5% of contract price	No change in Tender conditions. Bidder to comply with tender conditions.
248	176	Liquidated Damages for Delay and Underperformance	6.11.4	The said right of the GIPCL to levy damages on account of delay shall be without prejudice to and in addition to the right of the Company to get the concerned work done from a third party at the complete risk and cost of the Contractor.	Such risk and cost should not be more than higher limit of liquidated damages.	No change in Tender conditions. Bidder to comply with tender conditions.
249	176	Liquidated Damages for Delay and Underperformance	6.11.8	Underperformance: For any shortfall in PR below 0.75 by the Bidder for the second (2) time, a penalty of 1% of the EPC Contract Price (including taxes & duties) shall be levied.	Since there is a penalty on loss of generation, we kindly request you to remove this penalty as there is no additional loss incurred to developer as for loss of generation, penalty is already being collected from contractor.	No change in Tender conditions. Bidder to comply with tender conditions.
250	179	Timeline (Best Effort Schedule)	6.9.9	Partial commissioning in each project of 75 MW slot shall be allowed in the minimum 15 MW and maximum in three slots. Also partial commissioning shall be considered by GIPCL/GSECL subject to consideration and acceptance by GEDA/GUVNL.	Partial commissioning in each project of 75 MW slot shall be allowed in the minimum 5 (five) MW and maximum in ten (10) slots. Also partial commissioning shall be considered by GIPCL/GSECL subject to consideration and acceptance by GEDA/GUVNL.	No change in Tender conditions. Bidder to comply with tender conditions.

<u>Sr No.</u>	<u>Page No.</u>	<u>Description</u>	<u>EPC tender Clause</u>	<u>Details as per EPC Tender (GIPCL/ Solar/EPC/2017/2x75 MW (AC) Solar PV/ Rev. 1.0)</u>	<u>Bidder's Query</u>	<u>Owner (GIPCL/GSECL/GSFC) reply / clarification to Pre Bid Queries</u>
251	180	Defect Liability	6.13.10	If the Contractor fails to commence the work necessary to remedy such defect or any damage to the Facilities caused by such defect within a reasonable time (which shall in no event be considered to be less than seven (7) days), the Company may, following notice to the Contractor, proceed to do such work, and the reasonable costs incurred by GSECL in connection therewith shall be paid to GIPCL/GSECL by the Contractor or may be deducted by the Company from any monies due to the Contractor or claimed under the Performance Guarantee, without prejudice to other rights, which GIPCL/GSECL may have against the Contractor in respect of such defects.	If the Contractor fails to commence the work necessary to remedy such defect or any damage to the Facilities caused by such defect within a reasonable time (which shall in no event be considered to be less than twenty (20) days), the Company may, following notice to the Contractor, proceed to do such work, and the reasonable costs incurred by GSECL in connection therewith shall be paid to GIPCL/GSECL by the Contractor or may be deducted by the Company from any monies due to the Contractor or claimed under the Performance Guarantee, without prejudice to other rights, which GIPCL/GSECL may have against the Contractor in respect of such defects.	No change in Tender conditions. Bidder to comply with tender conditions.
252	181	Termination for default	6.14.1	The Owner may, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Contractor, terminate the Contract in whole or in part if the Contractor fails to deliver or execute any or all of the goods within the time period(s) under the Contract or any extension thereof granted by GIPCL/GSECL pursuant to the clause for Delay in Execution or Failure to Supply or, If the Contractor fails to perform any other obligations(s) under the Contract.	In case of delay payment of undisputed amount of Contract Price by GIPCL/GSECL for the certified works or supply of material, the Contractor may delay the performance of contract without levy of liquidated damages and suspension, termination of contract by GIPCL/GSECL. Further, in case GIPCL/GSECL defaults in performing its obligation, Contractor can delay the performance without levy of liquidated damages.	No change in Tender conditions. Bidder to comply with tender conditions.
253	184	Insurance	6.18.6	Comprehensive insurance is to be arranged by the Contractor during the O&M period of the Contract	After FAT and on start of O&M period, Contractor shall take only Employee Compensation Policy. Please clarify if any other policy is required to be taken.	Please refer Amendment
254	190	Deduction from Contract Price	6.36.2	Any sum of money due and payable to the Contractor, as per the Contract Agreement, may be appropriated by the Owner and set off against any claim of the Owner, for the payment of a sum of money arising out of or under any other contract made by the Contractor with the Company. It is an agreed term of the Contract that the sum of money, withheld or obtained under this clause by the Company, will be kept withheld or retained as such by the Owner or till this claim arising out of in the same Contract is either mutually settled or determined by the arbitrator, or by competent court, as the case may be, and that the Contractor shall have no claim for interest or damages whatsoever on this account or any other account in respect of any sum of money withheld or retained under this clause and duly notified as such to the Contractor.	If there is any retention of amount for such disputes which are pending to get resolved either mutually or through arbitration then in that case interest Contractor shall be made entitled to claim interest and/or damages if decisions in such disputes results in the favor of the Contractor. This is necessary because settlement of disputes can be expected for the timelines by when it will get resolved. Please confirm.	No change in Tender conditions. Bidder to comply with tender conditions.
255	190	Terms of Payment	6.37	Terms of Payment	There should be interest @14% p.a. on delay payment of any undisputed invoices for Contract Price.	No change in Tender conditions. Bidder to comply with tender conditions.
256	195	Warranty / Guarantee	6.39.3	Defect liability: All plant equipment and components and overall workmanship of the grid solar power plants shall be warranted for a minimum of 5 years except solar PV Modules which shall be warranted for 25 years.	Defect liability: All plant equipment and components and overall workmanship of the grid solar power plants shall be warranted for a minimum of 5 years except solar PV Modules which shall be warranted (Product Defect warranty) for 10 years. Please see 6.39.9 for ten (10) year period.	Please refer Amendment
257	197	Insurance or Bank Guarantee	6.39.10 (A)	A) Bank Guarantee: Bank Guarantee against PV Modules Warranty: The Successful Bidder shall provide security in form of Bank Guarantee for an amount as specified in Clause No. 3.11.6 (iv) from the start date of O&M Period. However, the Bidder can submit BG valid for 5 years and further extend it for another 5 years. The BG shall be submitted prior to the return of PBG under the subject package.	A) Bank Guarantee: Bank Guarantee against PV Modules Warranty: The Successful Bidder shall provide security in form of Bank Guarantee for an amount as specified in Clause No. 3.11.6 (iv) from the start date of O&M Period. However, the Bidder can submit BG valid for 2 years and further extend time to time for total validity upto 10 years. The BG shall be submitted prior to the return of PBG under the subject package. In case of Insurance for PV module warranty is submitted, this clause shall not be applicable.	No change in Tender conditions. Bidder to comply with tender conditions.

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258	197	Arbitration	6.40.1	All matters, questions, disputes, differences and / or claims arising out of and / or concerning, and /or in connection with, and /or in consequence of, and /or relating to this contract which may arise between the parties in connection with the Contract or any matter arising out of or in relation thereto shall be reported to Gujarat Public Work Contract Dispute Arbitration Tribunal and provision of Gujarat Public Work Contract Disputes Arbitration and Tribunal Act 1996 shall be applied as updates time to time.	Consider arbitration under Arbitration and Conciliation Act, 1996.	No change in Tender conditions. Bidder to comply with tender conditions.
259	205	Taxes and Duties	7.13.3	Statutory variations in the tax shall be permitted as under: (A) Statutory variations during original contractual completion period : (i) If any increase takes place in taxes and duties due to statutory variation, then GIPCL/GSECL shall admit the same on production of documentary evidences.	If Anti dumping duty and safeguard duty applicable on import of PV modules in India after bid submission date, same should be payable extra by GIPCL/GSECL on submission of documentary evidences by the Contractor.	Please refer Amendment
260	249			CUF OR PR	Please clarify what is minimum CUF or PR requirement?	Minimum NEEGG and acceptable PR is already mentioned in the EPC Tender.
261				Not mentioned in RFP.	Provide bore hole requirement for water resource	Not Applicable
262				Not mentioned in RFP.	Bidder Suggest Top of concrete/ height of collar for MMS foundation shall be minimum 100 mm above FGL.	Pile cap shall be minimum 150 mm above FGL.
263	9	Important Amounts (NIT)	Table B (i) & (ii)	(i) Tender Fee (Non-refundable): Rs. 25,000/- (Rupees Twenty Five Thousand Only (ii) Earnest Money Deposit (EMD) in the form of Bank Guarantee (Refundable/adjustable): Rs. 3,00,00,000/- (Rupees Three Crore Only) with a validity as per Clause No. xiii of Table A (Important Dates) above.	As per Gazette Notification dated 23.03.2012 for Public Procurement Policy notified by the Government of India, Ministry of Micro Small & Medium Enterprises, MSEs are exempted in paying the tender processing fees and EMDs. Kindly confirm that this is also applicable for this tender against furnishing of proper valid certificate.	No change in Tender conditions. Bidder to comply with tender conditions.
264	34	Pre-Qualifying Requirements (PQRs)/ Eligibility Conditions (Technical)	3.2.2 (i)	The Bidder shall have an experience of design, supply, installation, commissioning and operation or plant installation of cumulative installed capacity of 100 MW or above in or outside India on or after 1 April 2013 as on the Deadline for Submission of Bid, with a minimum megawatt scale of plant.	Kindly request you to revise the eligibility criteria for 75MW solar project in order to complete the project within the specified timeline and in order to competitive bidding. Bidders have options to match L1 pricing for the same and two bidders are able to work for two different project.	No change in Tender conditions. Bidder to comply with tender conditions.
265	34	Pre-Qualifying Requirements (PQRs)/ Eligibility Conditions (Technical)	3.2.2 (ii)	Out of the above-mentioned 100 MW, there must atleast one solar PV power plant of 40 MW capacity.	Request you to consider the Private Solar Park development for capacity 40MW	No change in Tender conditions. Bidder to comply with tender conditions.
266	35	Pre-Qualifying Requirements (PQRs)/ Eligibility Conditions (Financial)	3.2.3 (i)	Cumulative Turnover of the Bidder for last three (3) financial years shall be at least Rupees Five Hundred Forty Crore Only (Rs. 540,00,00,000/-)	Request to consider the financial requirement for 75MW SPV Project OR Request to consider the financial requirement of 420,00,00,000.00 for three financial years	No change in Tender conditions. Bidder to comply with tender conditions.
267	184	Insurance	6.18.6	Comprehensive insurance is to be arranged by the Contractor during the O&M period of the Contract.	As per IRDA law insurance for any property can be taken ONLY by owner. The bidder we will take care of the insurance of project till commissioning. There after insurance has to be taken over by you. Kindly amend this clause.	Please refer Amendment
268	205	Taxes & Duties	7.13.4 & 7.13.5	Variation on account of exchange rate will not be payable. No statutory variation shall be payable by GIPCL /GSECL on the input items. i.e. raw materials etc. No statutory variation shall be admitted if the excise duty becomes payable because of exceeding of the prescribed limits for turnover of the Bidder.	Request to consider the imposition of Anti-Dumping Duty (ADD) if any in GIPCL's account.	Please refer Amendment
269				Site Visit	Request to provide the details of contact person at site	Refer Amendment

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270				Bid submission due date	Request to provide extension of three weeks from the date of site visit or from the date of corrigendum.	Bidders are requested to refer www.gipcl.nprocure.com or www.gipcl.com regularly for any time extension if any.
271	34	Pre-Qualifying Requirements (PQRs)/ Eligibility Conditions (Technical)	3.2.2 (ii)	Out of the above-mentioned 100 MW, there must at least one solar PV power plant of 40MW capacity	We request you to kindly reduce the plant capacity to 20MW. Or we request you to kindly provide option for QR in line with NTPC, NLC, APGENCO tenders where bidder can qualify with industrial EPC experience or allow at least other renewable power plant experience like wind power plant in MW scale with higher than 250Cores value.	No change in Tender conditions. Bidder to comply with tender conditions.
272	297	Liquidated Damages for Delay and Underperformance	6.11.3	Maximum applicable Liquidated Damages: The upper ceiling for total liquidated damages for delay shall be maximum 10% of the EPC Contract Price.	Kindly reduce the maximum limit to 5% in line with the NTPC, NLC and other PSUs tender. 10% is very huge liability. Also request you to increase incentive rate for early commissioning so there should be positive motivation for bidder and there will not be any delay. The part commissioning shall be allowed in the slot of 5MW block or one inverter transformer wise.	No change in Tender conditions. Bidder to comply with tender conditions.
273	177	Liquidated Damages for Delay and Underperformance	6.11.9	(C) Performance Guarantee Test / Final Acceptance Test: If the "Actual Delivered Energy" at metering point(GETCO end sub-station)is less than the Base NEEGG (corresponding to NEEGG quoted for 1st year of O&M) based on the procedure mentioned in the Appendix 15, then the penalty at rate of Rs (2.67x 1.50) per kWh shall be charged for the shortfall. The Bidder / Contractor shall make necessary correction to meet quoted NEEGG. In case contractor fails to pay penalty as above within 15 days, then the entire Performance Bank Guarantee shall be encashed by the Owner and all the remaining payments yet to be made by the Owner to the Contractor shall also be forfeited.	Kindly provide maximum limit for this LD. It should be open ended infinite risk to bidder.	No change in Tender conditions. Bidder to comply with tender conditions.
274	177	Penalty / Incentive for Generation during Operation & Maintenance (O&M)	6.12.2	Penalty for loss of Generation during O & M: If for any Contract Year, it is found that the "Actual Delivered Energy" is less than 'Base NEEGG' for the particular year, the Contractor shall pay the compensation to GIPCL/GSECL equivalent to Rs. (2.67 x 1.50) per kWh of under-generation. The same shall be recovered from payment yet to be made by GIPCL/GSECL to the Contractor and/ or from the Bank Guarantees available with GIPCL/GSECL	Kindly provide the maximum limit for the O&M test. It is open ended infinite risk for bidder. Kindly do in line with recent NTPC 750MW pavagada tender.	No change in Tender conditions. Bidder to comply with tender conditions.
275	10	Important Amounts (NIT)	Table B (v)	Insurance or Performance Bank Guarantee (PBG) Against PV Module Warranty: Rs. 25 Lacs per MW of PV Module (DC Capacity) valid for 25 years required to be submitted prior to submission of SD/PBG.	We request to remove this BG and make a one BG for O&M which shall be 10% of quoted generation value multiplied by PPA rate. As BG of module and insurance is not available in market right now.	No change in Tender conditions. Bidder to comply with tender conditions.
276	10	Important Amounts (NIT)	Table B (v)	Insurance or Performance Bank Guarantee (PBG) Against PV Module Warranty: Rs. 25 Lacs per MW of PV Module (DC Capacity) valid for 25 years required to be submitted prior to submission of SD/PBG.	The BG value should be on AC side as DC side can be a variable number	No change in Tender conditions. Bidder to comply with tender conditions.
277	11	Important Notes to Bidders	Important Notes to Bidders	All such documents should be strictly submitted by RPAD / speed post/ in person in sealed cover only.	Manual Submission shall also be allowed.	Manual Submission is allowed as per EPC Tender
278	41	Bank Guarantees & EMD	3.11.5	(b) In the case of Successful Bidder, if it fails within 7 days from the issue of LoI – (a) to sign the Contract Agreement and/ or (b) to furnish the Security Deposit cum Performance Bank Guarantee within the period prescribed. There is a clause 4.16.2 which also states the same to be done in 30 days.	Please delete this clause 3.11.5 (b)	Please refer Amendment

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279	46	Net Electrical Energy Generation Guarantee (NEEGG)	3.14.4	The Bidder shall submit PVsyst report along with NEEGG.	Bidder is committing the minimum generation. The same is indicated along with price bid. Why PVsyst report is required at technical bid submission stage, same will be submitted at detailed engineering stage	No change in Tender conditions. Bidder to comply with tender conditions.
280	46	Net Electrical Energy Generation Guarantee (NEEGG)	3.14.5	If the Bidder anticipates any degradation of the modules during the first year, it shall be taken care of to provide additional capacity of solar PV modules to meet guaranteed generation at the end of first year to avoid liquidated damages / compensation on account of Performance Guaranteed Generation.	Replacement with higher capacity of modules shall also be allowed.	Noted. The same shall be subject to technical feasibility, Approval by Owner and also without any commercial implication to Owner.
281	51	Enclosures of the Bid	4.4.2 (t)	Technical specifications and standard warranty document of PV modules	As vendor finalization happens during detailed engineering stage, the documents shall be submitted during detailed engineering stage	No change in Tender conditions. Bidder to comply with tender conditions.
282	55	Evaluation of Bid and selection of Bidder	4.12.5	A Bidder shall have to quote for entire 150 MW (AC) Solar PV power project. A single generation number is to be quoted.	Separate PG tests will be conducted? Cumulative generation numbers to be maintained or breakup to be provided.	(1) Bidder shall conduct separate PG test for each 75 MW (AC) & 10 MW (AC) Project. Bidder shall Quote NEEGG for 2x 75 MW Solar Project. For Each 75MW (AC), 50% of Quoted NEEGG and 50% of O&M Cost shall be considered.
283	58	Performance Guarantee	4.17.3	The PBGs shall be liable to be encashed wholly or partly at the sole discretion of the Owner, should the Contractor either fail to execute the work within the stipulated period or fail to fulfil the contractual obligations or fail to settle in full his dues to the Owner. In case of premature termination of the contract, the PBG will be encashed and the Owner will be at liberty to recover the loss suffered by it from the contractor.	Already necessary penalties are there, why PBG encashment is required. The clause shall be removed.	No change in Tender conditions. Bidder to comply with tender conditions.
284	58	Performance Guarantee	4.17.4	The Owner is empowered to recover from the PBG through invocation of PBG for any sum due and for any other sum that may be fixed by the Owner as being the amount or loss or losses or damages suffered by it due to delay in Performance and/or non performance and / or partial performance of any of the conditions of the contract and / or non-performance of guarantee obligations.	Already necessary penalties are there, why PBG encashment is required. The clause shall be removed.	No change in Tender conditions. Bidder to comply with tender conditions.
285	60	General scope of work	5.1	The Contractor shall comply that the AC capacity which shall be 150 MWAC including all the four plots. Capacity in each plot may differ as per plot size.	Is it allowed?	Bidder has to accommodate 2x75MW(AC) in Total given plots areas.Capacity in each plot may differ.
286	63	Tracking Structures	5.1.3	Tracking Structures: The Owner encourages Bidders to employ proven and reliable fix or seasonal tracking or any other tracking system system, however the Bidder should note that total land available is approximately as mentioned above in Table 5-1 for the 2 x 75MW (AC) Project.	Owner refers to seasonal tilt. Please confirm.	Fixed/Seasonal/Tracking structures are acceptable subject to tender condition.
287	65	General scope of work	5.1.5 (v)	Solar PV Module Cleaning System	GIPCL / GSECL shall provide the water during the O&M stage. Please confirm.	Please refer EPC Tender, Annexure-A7, Sr. no. 33.
288	47	General Terms	4.1.4	The Bidder shall submit a power of attorney as per the format at "Appendix 12: Format of Power of Attorney as Authorized Signatory" authorizing the signatory of the Bidder to commit to the Bid or as per their Company's format.	Bidder requests for submitting a general Power of Attorney. The same shall be accepted . Please confirm.	Bidder may forward general power of attorney for approval to GIPCL/GSECL/GSFC.
289	67	Communication	5.1.7	Communication: Each PV string needs to be monitored	Inverter monitoring may be allowed. This will lead to lower cost of the project.	No change in Tender conditions. Bidder to comply with tender conditions.
290	70	Planning and Designing	5.1.10 (viii)	The Owner reserves right to modify the specifications at any state as per local site conditions / requirements and EPC contractor shall comply with modification without any extra cost and time.	The clause shall be deleted	Already clarified at Sr. No 151
291	75	Civil Work	5.2.6	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.	Bidder is responsible for maintain the performance. The cleaning cycle shall be determined by bidder. The clause is also contradictory to 5.1.5 v	No change in Tender conditions. Bidder to comply with tender conditions.
292	97	Photovoltaic Modules	5.3.1 (xiv)	The Bidder shall provide to the Owner in the Bid, power performance test data sheets of all modules. The exact power of the module shall be indicated if the data sheet consists of a range of modules with varying output power.	Details shall be provided during detailed engineering.	No change in Tender conditions. Bidder to comply with tender conditions.
293	97	Photovoltaic Modules	5.3.1 (xvi)	GIPCL/GSECL or its authorized representative reserves the right to inspect the modules at the manufacturer's site prior to dispatch.	Any inspection by owner will be done at owner's cost	No change in Tender conditions. Bidder to comply with tender conditions.

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294	100	Inverter and PCU	5.3.3 (i)	Only those PCUs/ Inverters which are commissioned for more than 100 MW1 capacity (1000V DC) or 50 MW capacity (1500V DC) in other solar PV projects till date shall be considered for this project.	only Make needs to be maintained and not rating. Please confirm.	Yes, Bidder's understanding is correct.
295	172	Timeline (Best Effort Schedule)	6.9.2	The work must be completed as per the Timeline below from the date of handing over of site.	Here the best effort schedule is indicated. Please indicate the base schedule.	No change in Tender conditions. Bidder to comply with tender conditions.
296	175	Liquidated Damages for Delay and Underperformance	6.11.1	In case the EPC Contractor fails to achieve successful Commissioning / COD of 2 x 75 MW (AC) with GUVNL within 12 months from the date of Lol	Both the projects are to be treated seperately.	Bidder's understanding is correct
297	178	Penalty / Incentive for Generation during Operation & Maintenance (O&M)	6.12.8	Incentive for Early Completion (COD with GEDA / GUVNL): Twenty (20) paisa per unit incentive shall be payable for successfully early completion of the Project subject to early acceptance of COD by GUVNL and receipt of payment to GIPCL/GSECL	How much early commissioning can be done? Is it applicable for individual 75 MW or it has to be done for entire 150 MW. How long the incentive shall be given?	Bidder shall eligible for incentive for early completion (COD with GEDA/ GUVNL) of the each 75 MW & 10 MW Project before 365 days from the date of Lol subject to early acceptance of COD by GUVNL and receipt of payment to GIPCL/GSECL/GSFC.
298	177	Liquidated Damages for Delay and Underperformance	6.11.9	(C) Performance Guarantee Test / Final Acceptance Test: In case contractor fails to pay penalty as above within 15 days, then the entire Performance Bank Guarantee shall be encashed by the Owner and all the remaining payments yet to be made by the Owner to the Contractor shall also be forfeited.	The penalty can be deducted from pending payments. Please confirm.	Bidder's understanding is correct.
299	179	Defect Liability	6.13	Defect Liability Period	What is the DLP?	Details already specified in the EPC Tender.
300	183	Force Majeure	6.16.6	The Contractor shall not claim any compensation for Force Majeure conditions and shall take appropriate steps to insure men and materials utilized by it under the Contract well in advance.	If the contract is cancelled by GIPCL / GSECL, contractor's just amount shall be reimbursed by the owner.	No change in Tender conditions. Bidder to comply with tender conditions.
301	184	Insurance	6.18.6	Comprehensive insurance is to be arranged by the Contractor during the O&M period of the Contract.	What is meant by comprehensive insurance?	Please refer Amendment
302	185	Right of the Company to Make Change(s) in Design	6.26.2	The Owner shall have the right to make any change in the design, which may be necessary in the opinion of GIPCL/GSECL to make the plant and materials conform to the provisions and contents of the specification without extra cost to GIPCL/GSECL.	The clause shall be deleted	Already clarified at Sr. No 155
303	187	Inspection & Testing	6.32.2 (ii)	GIPCL/GSECL may depute its Engineer or representative or third party inspection agency for inspection during manufacture and in assembled condition prior to dispatch in accordance with the standard practice/ QAP of the manufacturer and applicable Standards, at no additional cost to GIPCL/GSECL for demonstration and performing the test/inspection.	Cost of Engineer / 3rd Party Inspection Agency shall be borne by bidder.	No change in Tender conditions. Bidder to comply with tender conditions.
304	188	Inspection & Testing	6.32.6	For all tests to be carried out, whether in the premises of the Contractor or any Subcontractor or the supplier, the Contractor, shall provide labour, materials, electricity, fuel, water, stores, apparatus and instruments etc. free of charge as may reasonably be demanded to carry out such tests of the plant in accordance with the Contract. The Contractor shall provide all facilities to GIPCL/GSECL or its authorized representative to accomplish such testing.	The technical facilities shall be provided by bidder. Rest shall be borne by owner	No change in Tender conditions. Bidder to comply with tender conditions.
305	191	Terms of payment for Supply	Sr.3	Supply of PV Modules on pro rata basis, for each 10 MWp (Supply of PV Modules shall be as per mutually agreed schedule on sequential basis only) payment through LC upon receipt of PV Modules at site for Domestic Modules and at any Indian Port for imported Modules	If LC option is not exercised then also payment shall be given as per the milestone. Please confirm.	No change in Tender conditions. Bidder to comply with tender conditions. If LC option is not exercised then also payment shall be given as per milestone.
306	191	Terms of payment for Supply	Sr.7	Upon Completion of the Facilities and Successful Performance and Operational Acceptance Test	What is meant by Performance and Operational Acceptance Test?	Upon Completion of the Facilities and Operational Acceptance Test(OAT) as per Appendix-16
307	192	Terms of payment for Supply	Note: 4	Payment against supply of PV modules shall be on sequential basis after readiness of module mounting structure as indicated in best effort schedule.	what is meant by readiness of module mounting structure	Readiness of module mounting structure (MMS) means EPC Contractor shall be completed erection of module mounting structure and ready for solar PV module placement on MMS.
308	195	Warranty/ Guarantee	6.39.3	Defect liability: All plant equipment and components and overall workmanship of the grid solar power plants shall be warranted for a minimum of 5 years except solar PV Modules which shall be warranted for 25 years.	Module performance warranty is 25 years. Please confirm.	Please refer Amendment

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309	197	Insurance or Bank Guarantee	6.39.10 (A)	Bank Guarantee against PV Modules Warranty: The Successful Bidder shall provide security in form of Bank Guarantee for an amount as specified in Clause No. 3.11.6 (iv) from the start date of O&M Period. However, the Bidder can submit BG valid for 5 years and further extend it for another 5 years. The BG shall be submitted prior to the return of PBG under the subject package.	This is a typo. The clause shall be 3.11.6 iii	Please refer Amendment
310	205	Taxes and Duties	7.13.3	Statutory variations in the tax shall be permitted as under:	Cutoff date is not mentioned. The same shall be bid submission date.	No change in Tender conditions. Bidder to comply with tender conditions.
311	219		Appendix 4	Format of Disclosure of PV Technology Proposed	Bidder will maintain the necessary guarantees and fulfil contractual obligation. Why to indicate DC capacities at this stage. The same shall be indicated in detailed engineering stage.	No change in Tender conditions. Bidder to comply with tender conditions.
312	226		Appendix 7	Submission of technical documents	Makes and specification - Both are mentioned. Why this sheet is required.	No change in Tender conditions. Bidder to comply with tender conditions.
313	101	Electrical Work	5.3.3 (xv)	The inverters shall have minimum protection to IP 65(Outdoor)/ IP 21(indoor) and Protection Class II or higher	Bidder request to accept container type inverters with IP54	Please refer Sr. no. 117
314	97	Photovoltaic Modules	5.3.1 (xv)	Only those crystalline modules (above 300Wp) of the same module manufacturer which has supplied for a capacity more than 100MW in other projects in India with minimum 1 project size of 10 MW. On this account, the Contractor shall provide full information, to the satisfaction of GIPCL/GSECL, before placing final order for the modules. The Contractor shall also submit the proof of original purchase.	If bidder has to use 1500V modules, this criteria might not be possible. Is this criteria only for the make or even for the model.	Additional clarification: For 1000 V modules, No change in Tender conditions. Bidder to comply with tender conditions. For 1500 V modules, manufacturer which has supplied for cumulative capacity more than 50MW in other projects in India or out of India with minimum 1 project size of 5 MW subject to tender conditions and specification.
315	93	Module Mounting Structures (MMS)	5.2.22 (vii)	Modules shall be mounted on a non-corrosive support structures (EPDM rubber gasket is to be provided as separator) which is mandatory. The frames and leg assemblies of the array structures shall be made of hot dip Galvanized steel per ASTM A123.	Module frames are anodized. EPDM may not be required	Already clarified at Sr. No 84
316	94	Module Mounting Structures (MMS)	5.2.22 (ix)	All nuts and bolts (fasteners) shall be made very good quality stainless steel of grade SS 304 required for module fixing and for other components of MMS, superstructure or switchyard, inverter room, control room, etc. in the plant premises nuts and bolts (fasteners) shall be of MS material with minimum Grade HDG: 8.8.	Bidder request to accept SS304 for module mounting and HDG for other MMS components.	Please refer Amendment
317	94	Module Mounting Structures (MMS)	5.2.22 (xiii)	The material of construction, structural design and workmanship shall be appropriate with a factor of safety of not less than 1.5.	Bidder request to accept working state design method as per IS801 (FOS 1)	No change in Tender conditions. Bidder to comply with tender conditions.
318	93	Module Mounting Structures (MMS)	5.2.22 (vii)	The frames and leg assemblies of the array structures shall be made of hot dip Galvanized steel per ASTM A123.	Bidder request for the provision of Galvalume / pregalve or any other light gauge material.	No change in Tender conditions. Bidder to comply with tender conditions.
319	6	Important Dates (NIT)	Table A (ix)	Target date for Commissioning of Project : 365 days from date of Letter of Intent (LoI)	We request you to consider project duration of 365 days from the date of land hand over	No change in Tender conditions. Bidder to comply with tender conditions.
320	236		Appendix 12	Format of Power of Attorney as Authorized Signatory	As the project specific Power of Attorney will be time taking process for us. We Request GIPCL to allow bidder to use the bidder's Standard POA which is acceptable to other PSUs like NTPC, NHPC, NLC etc.	Already clarified at Sr. No 288
321	249	Appendix 15: Format of Financial Proposal (SCHEDULE OF PRICE)	Table 15 A Schedule of Price - A	BREAK-UP OF PRICE FOR SUPPLY OF EQUIPMENTS a) in case anti-dumping duty is mentioned same shall be included in total EPC price for bid evaluation purpose. B) Anti-dumping duty on actual basis based on supporting documents/payment receipt by contractors or anti-dumping duty mentioned at "F" whichever is lower	As we do not know what will be Anti Dumping Duty (ADD) in percentage, so we request GIPCL to cover ADD under tax chagne law. ADD should be absorbed by the GIPC /GSECL as the quantum of effect is not measurable presently. As per tender document, the ADD reimbursement will be done on quoted ADD value or actual whichever is lower which implies that bidder will have to necessarily quote non-zero ADD to avoid ADD risk. As ADD value is not yet deleared by the GOI, loading of the same in random basis will make bidder uncompetative.	Please refer Amendment
322					Request GIPCL to provide AutoCAD & Countour drawing for the plots.	AutoCAD drawing attached.

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323	177	Penalty / Incentive for Generation during Operation & Maintenance (O&M)	6.12	Regarding penalty for loss of Generation during O&M	We request GIPCL/GSECL to put cap to the LD during O&M by limiting the maximum LD to 10% of the O&M contract value.	No change in Tender conditions. Bidder to comply with tender conditions
324	193	Payments Procedure	6.38.1 (b)	The Contractor shall submit the bill for claim in three copies with all supporting documents as per the Contract condition to GIPCL / GSECL. After due verification and recommendation, GIPCL/GSECL shall process verified bills for release of payment. Payments shall be released in 30 (Thirty) days by A/c payee cheque / RTGS/ NEFT from date of submission of clear invoice	We request GIPCL to pay all the bills through confirmed irrevocable without recourse Letter of Credit (L/C) allowing withdrawal on pro rata basis instead of Cheque. We request all the charges associated with L/C shall be borne by the Employer.	No change in Tender conditions. Bidder to comply with tender conditions
325	205	Taxes and Duties	7.13.3	Statutory variations during original contractual completion period	We request GIPCL to clarify the DATE from which Statutory variation will be applicable. Also, we understand that any Statutory variations for Custom duty will be reimburse as per Change in Law.	No change in Tender conditions. Bidder to comply with tender conditions
326	205	Taxes and Duties	7.13.3	GIPCL shall not be responsible for any liability on account of changes taxes / duties / levies in respect of this contract after the schedule project completion date.	Request GIPCL to include liability on account of changes taxes / duties / levies in respect of this contract during O&M Period to the account of GIPCL.	No change in Tender conditions. Bidder to comply with tender conditions. O&M Contract Period is 5 + 5 years.
327	6	Important Dates (NIT)	Table A (xi)	LD during Performance Guarantee (PG) Test Period	There is no upper cap limit mentioned for the PR shortfall LD applicable for shortfall in PR. Also, There is no upper limit mentioned for the generation shortfall LD.	No change in Tender conditions. Bidder to comply with tender conditions
328	56	Evaluation of Bid and selection of Bidder	4.12.11	For Bid Evaluation purpose, O&M period will be considered as 10 years. However, O&M period will be 5 years after COD with GEDA / GUVNL& completion of all works as per RFP, whichever is later and GIPCL/GSECL at its discretion may extend O&M period for another 5 years.	We request to keep O&M period for only 5 years then accordingly the NEEGG also to be reduced to 5 years instead of 10 years. As 10 years is a very long term, instead of having such a long O&M period and NEEGG, we request GIPCL to reduce the O&M and NEEGG period to 5 year from plant commissioning.	No change in Tender conditions. Bidder to comply with tender conditions
329	176		6.11.8	Compensation for Delay (Liquidated Damages) and Under Performance	LD to be 5% of the contract value	No change in Tender conditions. Bidder to comply with tender conditions
330	45	Net Electrical Energy Generation Guarantee (NEEGG)	3.14	Net Electrical Energy Generation Guarantee (NEEGG)	Contractor can provide PR uarantee only if the O&M for 10 years is done by Bidder	No change in Tender conditions. Bidder to comply with tender conditions.
331	179	Defect Liability	6.13	Defect Liability Period	Our understanding : Modules warranted for 90% o/p at 10th year and 80% at 25th year. PV modules DLP on workmanship and latent defect will be difficult as we can give product warantee 10 years on back to back basis. All other equipments shall be warranted for 5 years from successful completion of trial run insted f DLP. Please confirm.	Please refer Amendment.
332	142	Electrical Work	5.3.28	Auxiliary Power Supply	We propose to provide auxiliary supply (Station supply) to be tapped from Inverter duty transformer LV side with change over switch arrangement at control room and inverter room.This will offer better redundancy.	Acceptable to owner in LCR if the same is not deviating with plant performance and stability of the system.
333	56	Evaluation of Bid and selection of Bidder	4.12.11	O&M - After O&M period of 05 Years ,GIPCL at its discretion will decide to extend the O & M contract for another five years	In this case PR cannot be guaranteed beyond 5 years if O&M is not carried by the bidder	No change in Tender conditions. Bidder to comply with tender conditions.
334	293	Operation and Maintenance (O & M)	O&M	Guideline for Operation and Maintenance (O&M) after O&M: Responsibility of the Contractor to liaison with different State authorities	We request GIPCL to take the responsibility of liaison with different state authorities & the bidder can support	No change in Tender conditions. Bidder to comply with tender conditions.
335	296	Operation and Maintenance (O & M)	33 (2-IV)	Re-carpeting of the road surface at every five years interval.	Request GPICL to take this in its own scope as the O&M will be completer after 5 years.	No change in Tender conditions. Bidder to comply with tender conditions
336	119	Electrical Work	5.3.12 (i)	Step-Up Transformer: Inverter Transformer must be protected with HV VCB Panel / RMU Capacity of each inverter block. Capacity of LCR (Inverter Block) shall not exceed more than 5 MW.	Allow bidder to design block higer than 5MW. This will reduce the cost and Developer will get better rate.	Please refer Amendment

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337	60	General scope of work	5.1	Bidder has to consider power evacuation through underground 66 KV cable (3 + 1 spare)	Kindly confirm whether any cable differential protection has to be considered for the protection of 66kV cable.	Yes, as per GETCO's requirements.
338	60	General scope of work	5.1	Switchyard & meters at pooling s/s and GETCO s/s	We presume that pooling substation is referred as independent 66kV outdoor switchyard for 1X75MW block at plant end. Kindly confirm whether we can propose Single bus bar scheme instead of Main and Transfer bus arrangement at plant end 66kV switchyard?	Single Switchyard at Plant end with Two separate Power Evacuation line for each 75 MW (AC) project shall be considered subject to tender condition and specifications.
339	72	General scope of work	5.1.14	Terminal Point for the EPC Project: GETCO supervision charges for 66 kV cable laying and termination shall be inscope of EPC contractor, including all coordination, work execution, paper work shall be carried out by EPC Contractor.	Please define the scope of work at 66kV GETCO substation end, as it is not clear in the specification.	Contractor has to terminate power evacuation system in two separate bays for each 75 MW (AC) at GETCO end as per details given in EPC Tender. Also refer Amendment. Further, required work to be done by EPC Contractor at GETCO end bay for CT, PT and Metering system etc., as per GETCO requirements.
340	93	Module Mounting Structures (MMS)	5.2.22	Design wind speed of structure shall be 180 kmph	Request to Design wind speed of MMS shall be as per the wind zone (IS 875 Part 3) of the project location i.e 47m/s	No change in Tender conditions. Bidder to comply with tender conditions.
341	76	Civil Work	5.2.8	Land Development and Cleaning: The Contractor has to clean the site from wild vegetations, small trees and shrubs, uprooting of all vegetations, removal of all debris or soil, if any; filled the depression area and excavates and level the high level areas wherever required even though contractor follows the natural ground level for entire plant execution.	Approval of tree cutting to be provided by the client.	No Permission Required as plant is in the Gujarat Solar park.
342	79	Civil Work	5.2.14	Road: All the roads connecting the main gate to control room, switch yard shall be accessed by Asphalt road with sufficient base courses like Sub grade, GSB, WBM layer, Wet Mix Macadam layer, DBM layer and at top Seal Coat etc.	We suggest WBM road in place of bituminous road.	No change in Tender conditions. Bidder to comply with tender conditions.
343	75	Civil Work	5.2.5	The foundations should be designed considering the weight and distribution of the structure and assembly, and a maxim Seismic factors for the site have to be considered while making the design of the foundation.	The same shall be as per design requirement. For the project location, the wind speed as per IS 875 is 47m/s.	No change in Tender conditions. Bidder to comply with tender conditions.
344	94	Module Mounting Structures (MMS)	5.2.22 (xiii)	The material of construction, structural design and workmanship shall be appropriate with a factor of safety of not less than 1.5.	The same shall be chosen as per IS 800, IS 801 as per design required	No change in Tender conditions. Bidder to comply with tender conditions.
345	94	Module Mounting Structures (MMS)	5.2.22 (xviii)	The Contractor should design the structure height considering highest flood level at the site. 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) minimum 500 mm.	We request GIPCL to accept min. ground clearance of 400mm. Ground Clearance of ± 100 mm for clearing final punch point before handing over.	No change in Tender conditions. Bidder to comply with tender conditions.
346	97	Photovoltaic Modules	5.3.1 (xii)	All materials used for manufacturing solar PV module shall have a proven history of reliability and stable operation in external applications. It shall perform satisfactorily in relative humidity up to 100% with temperature between -10°C to +85°C (cell) and shall withstand adverse climatic conditions, such as high speed wind, blow with dust, sand particles, saline climatic / soil conditions and for wind 180 km/hr on the surface of the panel.	For the project location, the wind speed as per IS 875 is 47m/s.	No change in Tender conditions. Bidder to comply with tender conditions.
347	-		-	The Charanka site has faced with over voltages in grid in the past. The inverter supplied shall be designed in such a way that it shall be synchronized with grid even though the grid voltage is high due to light loading of transmission line. The grid voltage /synchronize voltage of inverter shall be have range so that it can synchronize and avoid the loss of generation due to grid over voltage.Further, PCU shall be with such design that it can generate reactive power if required.	The voltage operating range of PCU shall be as per OEM. Kindly accept the same.	No change in Tender conditions. Bidder to comply with tender conditions.
348	-		-		We suggest the use of Outdoor HT Panel (Skid mounted with canopy). The same is as per industry practice.	No change in Tender conditions. Bidder to comply with tender conditions.

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349	144	General Technical Specifications of Control Panel	5.3.31 (i)	The panel shall be self-supporting, free standing, floor mounted, modular type with construction having degree of protection of IP 54 as per IS 2147.	We suggest to kindly accept IP4X also.	No change in Tender conditions. Bidder to comply with tender conditions.
350	107	Cables and Wires	5.3.4 (iii)	Wires with sufficient ampacity and parameters shall be designed and used so that average voltage-drop at full power from the PV modules to inverter should be maximum 2% (including diode voltage drop).	We request to accept 2.5% voltage drop (String to Inverter) as the same is the norm.	No change in Tender conditions. Bidder to comply with tender conditions.
351	109	Technical Specification of LT XLPE Cables	5.3.5 (G)	Armour: For multi core armoured cables armouring shall be of galvanized steel as follows: 1.4 mm thick GS formed wire/4.0 mm dia GS wire	We suggest the same to be as per OEM / Relevant IS standard	No change in Tender conditions. Bidder to comply with tender conditions.
352	67	Communication		String Junction Box / Array Junction Box - SJB Bus Voltage and Current Monitor	We request NTPC to allow Combiner Box (Without Monitoring) Reason for the same as follows: 1) Zone monitoring is already available at Inverter end at 220 Kw scale. From the data, we can reach to the faulty string in 5 minutes using manpower at site 2) Communication Cabling is extra cost 3) O&M experience shows that String Monitoring is of no value as the Supervisor is able to locate faulty string thru Inverter monitoring as well with same efficiency (supervisor can easily trace the faulty string in 5 Min). 4) For a plant of 75 MW there will be a huge saving.	No change in Tender conditions. Bidder to comply with tender conditions. However it is allowed to connect two strings with 'Y' connector.
353	81		5.2.17	Inverter Room	We understand that containerized inverter solution is applicable and acceptable for this project. Kindly confirm.	Please refer Sr. no.117
354	96		5.3.1. (xv)	Only those crystalline modules (above 300Wp) of the same module manufacturer which has supplied for a capacity more than 100MW in other projects in India with minimum 1 project size of 10 MW.	This condition will not be met by modules to be supplied for 1500 V system as presently no one has supplied the same more than 100 MW capacity. Please relax this condition for 1500 V system PV modules.	Already clarified at Sr. No 314
355	1010	Inverter and PCU	5.3.3 (xv)	The inverters shall have minimum protection to IP 65(Outdoor)/ IP 21(indoor) and Protection Class II or higher.	Outdoor Inverters with IP 55 only are available and are working at various sites satisfactorily at various sites. The same are accepted by developers. Please allow IP 55 for outdoor inverters.	The inverters shall have minimum protection to IP 65(Outdoor)/ IP54 (with roof with separate structure)/ IP 21 (indoor) and Protection Class II or higher. Further all inverter (IP65 & IP54) inverters must be installed with proper plinth / platform. Further, all associated equipments like RMU, UPS, ACDB, SCADA Panel shall have suitable IP class and type of installation as per EPC tender.
356		General		Change in Law	Please clarify on the provisions of the tender in the event of any change in law during execution of the contract.	Please refer clause no. 7.13 and 6.42
357		General		Site Grading	Kindly furnish the contour map in autocad format to estimate the site levelling works	For getting idea about topography bidder has to visit the site and carryout contour survey at their own.
358		General		Natural ground level (NGL), Finish ground level(FGL), Highest flood level(HFL)	Kindly furnish Natural ground level (NGL), Finish ground level(FGL), Highest flood level(HFL) of the proposed area.	Bidder has to collect necessary information at their own during site visit.
359		General		Fencing	We request GIPCL to mark the bounday in autocad drawing and furnish the length of the boundary.	Tentative length is provided in AutoCAD Drawing as attached.
360	270	Annexure A1	Part 3: Land	Plot Layout	The furnished layout is not readable. Please furnish the plot layout in autocad format	AUTOCAD drawing of each plot is attached.

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361	60	General scope of work	5.1	The general scope of work for the 2x75 MW (AC) solar PV power plant involves Design, Engineering, Procurement & Supply and Construction (EPC), Operation & Maintenance (O&M) of the grid-connected solar photovoltaic power plant, commissioning and evacuation of power into the GETCO's 66 kV substation of Charanka 400/220/66 kV substation corresponding to the guaranteed plant performance in the form of guaranteed energy output.	Right of Way requirement, if any, may please be in the scope of the owner.	As Project is within Solar Park, No RoW is applicable. However, Bidder to follow GETCO/GPCL guidelines. No change in Tender conditions. Bidder to comply with tender conditions.
362	60	General scope of work	5.1	Bidder has to consider power evacuation through underground 66 kV cable (3 + 1 spare) of appropriate size from switchyard(s) to GETCO – S/S passing through the specified cable corridor/s by GPCL.	please provide the route length from plant switchyard to GETCO substation along with the cable routing/corridor details by GPCL. Please also furnish details of underground cables, if any, passing through the four plots for designing the array layout.	Already clarified at Sr. No 112
363	60	General scope of work	5.1	Bidders shall explore possibility to design single Switchyard between Plot-A and Plot-B1 (GIPCL) & between Plot-C and Plot-B2 (GSECL) subject to technical and site feasibility	Please clarify on no of switchyards to be made and power evacuation route.	Bidder shall have option to locate common switchyard for each 75 MW (AC) at common location. However, Two evacuation line for each 75MW (AC) shall be considered separately as per Tender condition.
364	60	General scope of work	5.1	Termination at GETCO end shall be in two separate evacuation bays for each 75 MW (AC) project.	We assume that bay allocation is in the name of the owner and same shall be handed over along with LOA. Please confirm	Dedicated Bays are already available for 2x75 MW (AC) Solar Projects (Two bays for each 75 MW). Contractor has to terminate Power Evacuation system in two separate bays for each 75 MW (AC) at GETCO end as per details given in EPC Tender. Also refer Amendment. Further, required work to be done by EPC Contractor at GETCO end bay for CT, PT and Metering system etc., as per GETCO requirements.
365	61	Switchyard SLD	5.1 Fig 5-1	Indicative Schematic single line diagram(SLD)	SLD furnished vide referred figure is not legible. Please furnish the SLD in readable form.	Indicative SLD is attached.
366	60-62	Scope of work	5.1, 5.1.1 & Fig. 5-1	Power evacuation	(i) As per the SLD furnished vide Fig. 5-1, & referred clause power evacuation is through two number feeders at 66kV level with each feeder capacity of 75MW. (ii) However, as per Cl.5.1.1, it is indicated that, Scope of work shall also include 66 kV Overhead /Under Ground cable work from Plot-A, Plot-B1, Plot-B2 & Plot-C solar plant substation to Charanka 400/220/66 kV substation As per (i) above, only two feeders at 66kV level are applicable, where as, as per (ii) four feeders at 66kV level are applicable. Please clarify.	Bidder shall have option to locate common switchyard for each 75 MW (AC) at common location. However, Two evacuation lines for each 75MW (AC) Project shall be considered separately as per Tender condition.
367	63	Electrical Work	5.1.4	UPS system shall be provided at Main Control room and each Inverter room	UPS system with 1x100% Charger, 1x100% inverter, 1x100% lead acid tubular battery bank with 30 min backup is envisaged. Please confirm	No change in Tender conditions. Bidder to comply with tender conditions.
368	65	Civil and Other Non-Electrical Work	5.1.5 (vii)	Approach / Internal Roads and Pathways: The Contractor shall provide internal roads and approach roads / pathways of asphalt type for all 4 plant sites. All peripheral roads shall be of WBM type	Please indicate the length of the approach road to be considered for each block. Also mark the main approach road from where approach road to solar block to be taken	No change in Tender conditions. Bidder to comply with tender conditions. It shall be decided during detailed Engineering.
369	68	Statutory Requirements	5.1.9 (a)	All other approval, as necessary for setting up of a solar power plant including CEIG, connectivity, construction power, power evacuation, GEDA, GETCO, GPCB etc. as per the suggested guidelines	We request you that the statutory approvals pertaining to the project site and power evacuation such as those from GEDA, GETCO, GPCB may please be in owner's scope while the EPC contractor shall only be responsible for statutory approvals related to synchronization/connectivity of the plant to the grid such as CEIG.	No change in Tender conditions. Bidder to comply with tender conditions.

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370	73	Terminal Point for the EPC Project	5.1.14 ('e)	Development of bay(s) at GETCO end substation – Charges related to development of bay shall be paid by EPC Contractor to GETCO	By "development of bay(s)", we understand that GETCO will carry out bay construction wherein supply of equipment and its erection will be done by GETCO. Since the bays are proposed to be extended by GETCO and the bidder is not in a position to estimate GETCO's cost for the same, development of the bays may please be excluded from bidder's scope of works.	Refer Amendment
371	77	Civil Work	5.2.11	Area lighting	We understand that the lighting shall be provided along the periphery and roads and within the rooms envisaged in PV plant. No other area lighting shall be provided. Further, lux levels for lighting within rooms shall be provided as per relevant IS. Please confirm.	Already clarified at Sr. No 75
372	79	Civil Work	5.2.15	Underground RCC water tank	As per the tender specification, it is understood that water tanks are uncovered. Please confirm.	It shall be covered with RCC slab as per the normal standard practice. No change in Tender conditions. Bidder to comply with tender conditions.
373	93	MMS	5.2.22 (iii)	The array structure shall be so designed that it will occupy minimum space without sacrificing the output from Solar PV panels at the same time it will withstand severe cyclonic storm with wind speed up to maximum 180 Kmph.	Please reduce the wind speed for design of MMS to 170kmph.	No change in Tender conditions. Bidder to comply with tender conditions.
374	94	MMS	5.2.22 (xxiv)	The Bidder shall be permitted ramming of the module mounting structure provided that they obtain consent of EIC. EIC shall provide such consent once it is convinced that such ramming shall not in any way deteriorate the strength of the structure and shall not reduce the structure's strength to enjoy a working life of more than 25 years. The design should be done by considering the life of the structure of 25 years.	Please specify the ramming procedure in detail as desired by Customer.	Clause 5.2.22 (xxiv) shall be considered as deleted and Ramming of the module mounting structure shall not be considered.
375	96	Photovoltaic Modules	5.3.1 (ii)	All modules shall be certified IEC 61215 2nd Ed. (Design qualification and type approval for Crystalline Si modules), IEC 61730 (PV module safety qualification testing @ 1000 V DC or higher). IEC 62804 Certified PV modules should be PID free, documents for the same should be submitted with conditions of the PID test should be for a humidity of 85 % and a cell temperature of 85 C at 1000Volts or higher , IEC 62716 , IEC 61701.	We request you to remove IEC 62716 certification for modules.	Accepted.
376	96	Modules	5.3.1 (v)	All photovoltaic modules should carry a performance warranty of >90% during the first 10 years, and >80% during the next 15 years. Further, module shall have performance warranty of > 98% during the first year of installation. Degradation of PV module for first year shall be limited to 3.5% and shall not be more than 1% in any subsequent year.	The two clauses are found contradictory. Please clarify on permissible percentage of module degradation for first year.	Please refer Amendment.
377	195	Warranty/ Guarantee	6.39.2	PV modules used in grid connected solar power plants must be warranted for peak output power at Standard Testing Condition (STC), which shall not be less than 90% at the end of ten (10) years and not less than 80% at the end of twenty five (25) years. The first year degradation shall not be more 2.5% of the PV Module capacity and in subsequent years it shall not be more than 1% per annum.		Already clarified at Sr. No 1
378	106	Cables and Wires	5.3.4 (ii)	Average voltage-drop at full power from the PV modules to inverter should be maximum 2% (including diode voltage drop).	As per industry practice may please be revised to 3% (including diode voltage drop)	No change in Tender conditions. Bidder to comply with tender conditions.
379	107	Cables and Wires	5.3.4 (ii)	Wires with sufficient ampacity and parameters shall be designed and used so that average voltage-drop at full power from the PV modules to inverter should be maximum 2% (including diode voltage drop). PV Modules should be connected with USE-2/RHW-2 cables array to junction box conductors and junction box to photovoltaic disconnecter with the THHN/THWN-2 sunlight resistant with 90°C wet rated insulation cable. Due consideration shall be made for the de-rating of the cables with respect to the laying pattern in buried trenches / on cable trays, while sizing the cables. The Contractor shall provide voltage drop calculations in excel sheet.	USE-2/RHW-2 is a USA standard for house hold solar application at 600 V. For 1000 V DC System, cables for interconnecting PV modules and PV modules to junction boxes as per EN 50618 are used. These cable are also having service life expectancy of 25 years. The cable from junction box to inverter and other LT cables shall be XLPE insulated Aluminium conductor cable as per IS 7098 part I. Please accept.	Please refer Amendment

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380	107	Cables and Wires	5.3.4 (iii)	All cables shall be supplied in the single largest length to restrict the straight-through joints to the minimum number. Only terminal cable joints shall be accepted. No cable joint to join two cable ends shall be accepted.	Straight through jointing kits will be minimized as far as possible based on the market availability. However, in exception cases, where route length is more, straight through jointing kits shall be used. Please accept.	Already clarified at Sr. No 88
381	109	Technical Specification of LT XLPE Cables	5.3.5	A) Medium voltage cable shall be XLPE insulated. PVC sheathed, aluminium or copper conductor, armoured conforming to IS: 7098 Part I B) Conductor: Uncoated, annealed copper, of high conductivity upto 4 mm ² size, the conductor shall be solid and above 4 mm ² , conductors shall be concentrically stranded as per IEC: 228.	We understand that the LT Power Cables upto 4 sq.mm shall be with copper conductor and for LT Power Cables whose size is 4 sq.mm and above, Aluminium conductor is allowed. Please confirm our understanding.	All solar cables 4 or 6 mm ² in size shall be annealed tinned copper.
382	120	Step-Up Transformer	5.3.12	Each 75 MW (AC) plant shall have minimum 2 nos. (50MVA & 25MVA) of 66 kV power transformer	Instead of having two transformers, it is proposed to have one transformer 48/80MVA Transformer for each 75MW block. The power from two sub blocks of one 75MW block shall be connected at 33kV level through 33kV switchgear at main control room. By the above, each 75MW block will have one number 66kV outgoing feeder which will be connected to 66kV GETCO's switchyard where in also only one bay per 75MW block is available. Please review and confirm.	Single transformer for 75MW Project is not possible due to GETCO's Power Evacuation Guidelines/limitations. And hence no change in tender condition. Bidder to follow Tender conditions only.
383	122	Electrical Work	5.3.13	Technical Data of Inverter Transformer	3 winding Inverter transformer with two windings on LV side and one winding on HV side of rating 2.5MVA with vector group of Dy11y11 is proposed. For each inverter transformer two number of PCUs shall be connected on LV side and output shall be connected to 33kV switchgear in HV side. Please review & accept.	Maximum allowable rating of single Inverter transformer (with multiple winding) shall be 5 MVA. Maximum allowable ratings of Local Control Room (LCR) /Block is 10MW.
384	122	Electrical Work	5.3.13	Inverter Transformer connection at LV side	It is proposed to connect the PCU with the LV side of Transformer through cable instead of bus duct as the MVA rating is less. Please review and confirm.	Suitable size of Cables from PCU to LV side of transformer is acceptable.
385	139	Electrical Work	5.3.23	Control and relay panel	We understand that the purpose of Control and relay panel indicated in the referred clause is for control & protection of 66kV local switchyard (which is in PV plant boundary) only. Please confirm our understanding.	Yes, bidders understanding is correct.
386	142	Electrical Work	5.3.28	Auxiliary Power supply: The Contractor shall install a separate 11 kV / 415 V step down transformer to supply power for internal equipment such as power for control equipment, area lighting, water pumps, and conference room fixtures, control room lighting and aircondition, etc	(i) Instead of 11kV or 33kV/415V step down transformer, we propose to tap the auxiliary power from PCU output through PCU Voltage/415V auxiliary Transformers. Auxiliary DB shall have two incomers from two auxiliary transformers to which power is tapped from two different PCUs. This philosophy will reduce the 11kV or 33kV breakers and thus the size of the IR & CMCS rooms leads to optimum offer. Please review and confirm. (ii) The rating i.e., 100MVA (min) indicated in the referred clause is on higher side. Rating of the auxiliary transformer shall be arrived based on the loads in particular room (i.e., Inverter room or Main control room) with 10 % margin. Please review and confirm.	No change in Tender conditions. Bidder to comply with tender conditions.

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387	143	Electrical Work	5.3.29	DC Battery & Charger	We propose to derive the DC power in Inverter rooms from UPS system itself. Seperate DC system is not envisaged in Inverter rooms. However separate DC system shall be provided in Main control room. Please review and confirm.	No change in Tender conditions. Bidder to comply with tender conditions.
388	144	Electrical Work	5.3.31	Control and relay panel	Please specify the purpose of the control and relay panel indicated in the referred clause	Control & Relay panel is for 66kV Switchyard operation, Control and Monitoring.
389	147	Electrical Work	5.3.32	Separate metering system has to be provided for L.T. (incoming) and H.T. (outgoing) supply	Since LT is proposed to be derived from PCU level itself, LT metering is not applicable. Further, as per bid specifications, the evacuated power is to be measured at 66kV level, thus separte metering at LT level is not required. Please review and confirm.	No change in Tender conditions. Bidder to comply with tender conditions.
390	158	Electrical Work	5.3.37	CCTV cameras	Please specify the number of cameras to be considered for the plant. Further, please clarify weather CCTV video monitoring shall be at one control room for two 75MW blocks or at each control room of respective blocks	Separate CCTV system as shall be provided in each control Room of 75MW (AC) . Also Refer clause no. 5.3.37 for other clarifications.
391	250	Appendix 16	Part A, S.No. 4	PR shall be demonstrated against the installed DC Capacity	The clause may please be amended as PR shall be demonstrated against name plate (AC) rating, thereby enabling the contractor to increase DC capacity to meet the PR	No change in Tender conditions. Bidder to comply with tender conditions.
392	252	Appendix 16	Part C, S.No. 8	Performance ratio(PR) - Effect due to variation of meteorological parameters e.g. ambient temperature, wind, speed, humidity etc. shall not be considered.	Kindly consider temperature degradation factor for modules in calculation for PR test.	No change in Tender conditions. Bidder to comply with tender conditions.
393	294	O&M	7	The Contractor shall wash the modules minimum twice in a month and maintain this schedule in its records for the cleaning cycle	As, meeting the Guaranteed Generation is contractor's responsibility, failing which contractor is liable to be penalized, the schedule of Cleaning of modules may please be decided by the contractor	No change in Tender conditions. Bidder to comply with tender conditions.
394	270	Annexure A1	3.5.1	<u>Details of Site:</u> Plot A - 188.0 acres, Plot B1 - 132.0 acres, Plot B2 - 100.0 acres, Plot C - 221.6 acres	It can be seen that the total land area available for 2x75 MW (150MW) is 641.6 acres. For meeting 23% CUF (302.2 MU) for 150MW, it is estimated to have a minimum DC overloading of 25%, i.e 187.5MWp DC capacity. As a result, land available is only 3.41 acres/MW which we feel is very less. We request GIPCL/GSECL to review the NEEGG vis-a-vis the land available.	No change in Tender conditions. Bidder to comply with tender conditions.
395	191	Terms of payment for Supply	6.37.1	Payment Milestone No. 7 - Upon Completion of the Facilities and Successful Performance	Reference to "successful performance"successful performance is not understood. Request GIPCL to kindly amend the milestone as "Upon Completion of the Facilities and Operational Acceptance Test - 5% of Supply Price"	No change in Tender conditions. Bidder to comply with tender conditions.
396	177	Liquidated Damages for Delay and Underperformance	6.11.9	<u>(C) Performance Guarantee Test / Final Acceptance Test:</u> If the "Actual Delivered Energy" at metering point(GETCO end sub-station)is less than the Base NEEGG (corresponding to NEEGG quoted for 1st year of O&M) based on the procedure mentioned in the Appendix 15, then the penalty at rate of Rs (2.67x 1.50) per kWh shall be charged for the shortfall. The Bidder / Contractor shall make necessary correction to meet quoted NEEGG. In case contractor fails to pay penalty as above within 15 days, then the entire Performance Bank Guarantee shall be encashed by the Owner and all the remaining payments yet to be made by the Owner to the Contractor shall also be forfeited.	We request that the clause may please be amended as ".... In case contractor fails to pay penalty as above within 45 days, then the amount equal to the penalty amount shall be realized from the Performance Bank Guarantee by the Owner...."	Please refer Amendment

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397	195	Warranty/ Guarantee	6.39.3	Defect liability: All plant equipment and components and overall workmanship of the grid solar power plants shall be warranted for a minimum of 5 years except solar PV Modules which shall be warranted for 25 years.	We understand that only performance warranty and not product warranty of Solar PV Modules is to be given either in the form of insurance or BG for "PV modules used in grid connected solar power plants must be warranted for peak output power at Standard Testing Condition (STC), which shall not be less than 90% at the end of ten (10) years and not less than 80% at the end of twenty five (25) years."	Please refer Amendment
398	65	Civil and Other Non-Electrical Work	5.1.5 (v)	Solar PV Module cleaning system - 7.5 lacs liter (3x 2.5 lacs liter) underground RCC water tank for each 75 MW Project	Based on our past experience, Capacity of the water tank may please be reduced to 3 lacs liter (3x1 lacs liter) for each 75 MW project. Further, we propose above ground PVC water tank. Kindly accept.	Please refer Amendment
399	73	Terminal Point for the EPC Project	5.1.14 (d)	Solar Park Plot will be provided to EPC Contractor as it where it basis and required land development (if any), tree/Vegetation removal, site enabling works etc shall be in EPC Contractor's Scope.	We understand that encumbrance free clear site shall be handed over to the contractor. Further, Approval for Tree Felling and cutting may please be in owner's scope.	No Change in Tender Conditions. However, approvals are not required as the site is within Gujarat Solar Park.
400	118	AC Network	5.3.11 (i)	Each individual block shall be connected to HT panel at MCR through AC cable.	Outdoor HT Panl may please be allowed.	No change in Tender conditions. Bidder to comply with tender conditions.
401	118	AC Network	5.3.11 (ii)	Outdoor inverter & RMU panel with IP65 or above are acceptable. Inverter station should be properly provided with canopy structure and working platform.	Outdoor Inverter (Central Inverter) with IP54 instead of IP65 may please be allowed as IP65 is only required in case of string inverter.	Already clarified at Sr. No 2
402	64	Civil and Other Non-Electrical Work	5.1.5 (iii)	Prefabricated Inverter rooms as per design	We understand that Containerised Inverter room is allowed. Please confirm.	Already clarified at Sr. No 117
403	153	SCADA and Remote Monitoring System	5.3.33.1 (xxv)	String Monitoring System: Monitoring of various parameters at string level should be made possible in the main control room at site by installing the suitable string monitoring system any fault at string level could be recognizable by that system.	It is requested to kindly accept Inverter level monitoring instead of string level monitoring.	No change in Tender conditions. Bidder to comply with tender conditions.
404	70	Planning and Designing	5.1.10 (viii)	The Owner reserves right to modify the specifications at any state as per local site conditions / requirements and EPC contractor shall comply with modification without any extra cost and time.	We request that the clause may please be deleted.	Already clarified at Sr. No 151
405	163	Vendor List	5.3.39 (16)	Vendor List: SCADA	We request GIPCL/GSECL to add Bidder in the list of vendors for supply of SCADA.	No change in Tender conditions. Bidder to comply with tender conditions. For approval of any other vendor please refer notes at page No : 165 of EPC Tender.
406	192	Terms of payment for Works	6.37.2 (1)	Terms of Payment for works: Mobilization Advance Payment-Against mobilization at site and submission of BG of equivalent amount	We request that the payment milestone may please be amended as "Mobilization Advance Payment-Against submission of BG of equivalent amount"	No change in Tender conditions. Bidder to comply with tender conditions.
407	35	Pre Qualifying Requirement	3.2.2 (iii)	"Out of the above-mentioned 100 MW, there must atleast one solar PV power plant of 40MW capacity."	We request you to kindly either reduce the 40 MW capacity to 10 MW capacity. OR Allow Bidding in the form of Joint Venture/Consortium.	Please refer Tender Amendment. Further it may be noted that , bidding in form of Joint Venture / Consortium is not allowed.