



**Tender Amendment/ Clarification Document**

Date: 12<sup>th</sup> January, 2018

Ref: GIPCL/Solar/EPC/2018/.....

To,  
**Prospective Bidder**

**Sub: Amendments/ Clarifications to "Tender for Design, Engineering, Supply & Procurement, Construction, Operation & Maintenance (O&M) of 2x75 MW (AC) and 10 MW (AC) Solar Power Grid-connected Power Plant at Gujarat Solar Park, Village Charanka, Taluka Santalpur, District Patan, Gujarat."**

Ref: *E-Tender No. GIPCL/ Solar/EPC/2017/2x75 MW (AC) Solar PV/ Rev. 1.0 dated 18<sup>th</sup> December, 2017.*

- (1) GIPCL had floated the Tender for Design, Engineering, Supply & Procurement, Construction, Operation and Maintenance of 2 x 75MW (AC) & 10 MW (AC) Solar Photovoltaic Grid-Connected Power Plant at Gujarat Solar Park, Village Charanka, Taluka Santalpur, District Patan, Gujarat (E-Tender No. GIPCL/ Solar/EPC/2017/2x75 MW (AC) Solar PV/ Rev. 1.0). GIPCL received queries from various potential Bidders in response to the Tender. Further, as indicated in the Tender, a pre-bid meeting was held at GIPCL, Vadodara on 2<sup>nd</sup> January, 2018.
- (2) Based on the deliberations with participants in the Pre Bid Meeting, amendments/ clarifications to the EPC are being issued (The "Amendment Document").
- (3) Site visit is planned on 18.01.2018 at Gujarat Solar Park Charanka at 11:30 hrs. Interested bidders shall intimate their Name/ Organization / Contact No on [solar@gipcl.com](mailto:solar@gipcl.com) , [nksingh@gipcl.com](mailto:nksingh@gipcl.com) latest by 17.01.2018.
- (4) This Amendment Document shall now be considered as an integral part of the EPC Tender. All other terms and conditions applicable to the Tender shall now be applicable to this Amendment Document also. Any amendments/clarifications indicated in this Amendment Document shall supersede all relevant terms and conditions/ clauses of the EPC Tender.
- (5) The Bidder shall understand, duly sign and seal each page of this Amendment Document and submit as per the method / procedure mentioned in the Tender.

Yours faithfully,  
For and on behalf of GIPCL

**Sd/-**

Addl. General Manager (SLPP)

Enclosed :

1. Attachment-1 ( Amendments )
2. Attachment-2 ( Clarifications to Bidders Queries)
3. Attachment-3 ( Bid Evaluation Methodology)
4. Attachment-4 ( Auto Cad Drawings )
5. Attachment -5 ( 66 KV Cable Route )



## Attachment-1 ( Amendments)



Sr. No.	Page No.	Clause No.	Tender Clause/ Specification		Amendment / Clarification by Owner	
1.	4	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 Lol, 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.		Replaced by "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 Lol, 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 through competitive bidding process. Considering the large volume and quantum of work involved, GIPCL/GSECL may award the work to more than one Bidder <b>(In case of splitting of work, Minimum Capacity shall be 75 MW (AC) for one bidder for 2 x 75 MW project, accordingly NEEGG and O&amp;M cost shall be considered)</b> 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."	
2.	5	Table-A (Important Dates)	iv. Online (e-tendering) Tender/Offer submission last date {This is mandatory}	Date: 15.01.2018 Time: 17:00 hours (IST) On N-Procure portal for Bid Submission	iv. Online (e-tendering) Tender/Offer submission last date {This is mandatory}	Date: <b>30.01.2018</b> Time: 17:00 hours (IST) On N-Procure portal for Bid Submission
3.	5	Table-A (Important Dates)	v. 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:Petrochemical	v. Physical receipt of Bid with all the relevant documents last date (By RPAD or Speed Post or By Personal Messenger) {This is mandatory}	Date: <b>31.01.2018</b> Time: 15:00 hours (IST) Venue: GIPCL Corporate Office, PO:Petrochemicals – 391 346,Dist. Vadodara.



				s – 391 346, Dist. Vadodara.		
4.	5	Table-A (Important Dates)	vii. Date of opening of Tender Fee, EMD Cover, Vendor Registration and Technical Bid Physical as well as Online opening ,	17 <sup>th</sup> January, 2018 (Internal opening by GIPCL)	vii. Date of opening of Tender Fee, EMD Cover, Vendor Registration and Technical Bid Physical as well as Online opening ,	<b>1<sup>ST</sup> February, 2018</b> (Internal opening by GIPCL)
5.	25	1.1.34	“Owner” means Gujarat Industries Power Company Limited (GIPCL) and Gujarat State Electricity Corporation Limited (GSECL) (Individually as Owner) for their respective 1 x 75 MW (AC) project.		“Owner” means Gujarat Industries Power Company Limited (GIPCL) and Gujarat State Electricity Corporation Limited (GSECL) (Individually as Owner) for their respective each 75 MW (AC) project and <b>Gujarat State Fertilizers &amp; Chemicals Limited for 10 MW(AC) Project.</b>	
6.	34	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.		“ Owner(s) 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. <b>It may be categorically noted that at the end of reverse auction bidding process, all the three projects namely 75 MW (AC) GIPCL, 75 MW (AC) GSECL and 10 MW (AC) GSFC shall be considered as a separate project(s) for all purposes. Thereafter, GIPCL/GSECL/GSFC shall individually decide about placement of Lol or award of contract for respective 75MW or 10 MW (in case of GSFC) Solar PV project at Charanka to successful Bidder at their sole discretion.</b> ”	



7.	34	3.2.2	<p>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.</p> <p>ii. Out of the above-mentioned 100 MW, cumulative 50 MW solar PV power plants shall have been commissioned and in operation in India.</p> <p>iii. Out of the above-mentioned 100 MW, there must at least one solar PV power plant of 40MW capacity.</p> <p>iv. The Bidder shall also submit performance generation gaurantee and performance of atleast one solar PV power plant of 10 MW which shall be certified from the Developer of that particular solar PV power plant.</p> <p>v. Bidder shall submit, in support to the above, the list of projects commissioned along with their work order/ LOI and the commissioning certificates along with the certificate of plant being in operation. In case the bidder wants to meet the eligibility criterion through its own power plant, then a certificate from Chartered Accountant to that effect will be required to be submitted.</p>	<p>i. The Bidder shall have an experience of design, supply, installation, commissioning and operation of cumulative installed capacity of 100 MW or above in India from 1 April 2011 as on the Deadline for Submission of Bid, with a minimum megawatt scale (1 MW or above) of plant.</p> <p>ii. Deleted</p> <p>iii. Out of the above-mentioned 100 MW, there must at least one solar PV power plant of <b>20 MW</b> capacity.</p> <p>vi. The Bidder shall also submit performance generation gaurantee and performance of atleast one solar PV power plant of 10 MW which shall be certified from the Developer of that particular solar PV power plant.</p> <p>vii. Bidder shall submit, in support to the above, the list of projects commissioned along with their work order/ LOI and the commissioning certificates along with the certificate of plant being in operation. In case the bidder wants to meet the eligibility criterion through its own power plant, then a certificate from Chartered Accountant to that effect will be required to be submitted.</p>
8.	35	3.2.3	<p>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/-).</p>	<p>i. Cumulative Turnover of the Bidder for last three (3) financial years shall be at least <b>Rupees Four Hundred Eighty Crore Only (Rs. 480,00,00,000/-)</b>.</p>



		<p>ii. The Net Worth of the Bidder during the last Financial Year shall be positive, wherein the Net Worth shall be calculated as follows:  <math display="block">\text{Net Worth} = (\text{Equity} + \text{Reserves}) - (\text{Revaluation reserves} + \text{intangible assets} + \text{miscellaneous expenses to the extent not written off} + \text{carried forward losses}).</math>                       The Bidder shall provide a copy each of audited annual report to ascertain their turnover &amp; net-worth.</p> <p>iii. The Bidder shall submit audited annual report of FYs 2014-15, 2015-16, and 2016-17 (if not audited then certification from Chartered Accountant shall be required).</p> <p>iv. In case a Bidder is a 100 % subsidiary company &amp; does not satisfy the annual turnover criteria, stipulated above on its own, its Holding Company would be required to meet the stipulated turnover requirements as above, provided that the Net Worth of such Holding Company as on the last day of the preceding financial year is at least equal to or more than the paid-up share capital of the subsidiary Company. In such an event, the Bidder would be required to furnish along with its Techno-Commercial Bid, a Letter of Undertaking from the Holding Company, supported by the Holding Company's Board Resolution, as per the format enclosed in the bid documents, pledging unconditional and irrevocable financial support for the execution of the Contract by the Bidder in case of award. Over and above bidder shall submit unconditional Bank Guarantee equivalent but not less than 5 % of EPC price from holding company which shall be furnished within ten (10) days after Notification of Award.</p>	<p>ii. The Net Worth of the Bidder during the last Financial Year shall be positive, wherein the Net Worth shall be calculated as follows:  <math display="block">\text{Net Worth} = (\text{Equity} + \text{Reserves}) - (\text{Revaluation reserves} + \text{intangible assets} + \text{miscellaneous expenses to the extent not written off} + \text{carried forward losses}).</math>                       The Bidder shall provide a copy each of audited annual report to ascertain their turnover &amp; net-worth</p> <p>iii. The Bidder shall submit audited annual report of FYs 2014-15, 2015-16, and 2016-17 (if not audited then certification from Chartered Accountant shall be required).</p> <p>iv. In case a Bidder is a <b>subsidiary</b> company &amp; does not satisfy the annual turnover criteria, stipulated above on its own, its Holding Company would be required to meet the stipulated turnover requirements as above, provided that the Net Worth of such Holding Company as on the last day of the preceding financial year is at least equal to or more than the paid-up share capital of the subsidiary Company. In such an event, the Bidder would be required to furnish along with its Techno- Commercial Bid, a Letter of Undertaking from the Holding Company, supported by the Holding Company's Board Resolution, as per the format enclosed in the bid documents, pledging unconditional and irrevocable financial support for the execution of the Contract by the Bidder in case of award. Over and above bidder shall submit unconditional Bank Guarantee equivalent but not less than 5 % of EPC price from holding company which shall be furnished within ten (10) days after Notification of Award.</p>
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	41	3.11.5	<p>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:</p> <p>a) If a Bidder engages in a corrupt practice, fraudulent practice, coercive practice, or restrictive practice;</p> <p>b) In the case of Successful Bidder, if it fails within 7 days from the issue of Lol – (a) to sign the Contract Agreement and/ or (b) to furnish the Security Deposit cum Performance Bank Guarantee within the period prescribed.</p> <p>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.</p>	<p>Replaced by “The EMD shall be forfeited and appropriated by GIPCL as per the discretion of GIPCL as genuine, pre-estimated compensation and damages payable to <b>GIPCL</b> 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::</p> <p>a) If a Bidder engages in a corrupt practice, fraudulent practice, coercive practice, or restrictive practice;</p> <p>b) In the case of Successful Bidder, if it fails (i) to furnish the Security Deposit cum Performance Bank Guarantee within the two weeks from date of LOI(s). or (ii) to sign the Contract Agreement within <b>30 days</b> from the issue of Lol(s)</p> <p>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.”</p>																																		
9.	60	5.1 (Table-5-1)	<p style="text-align: center;"><b>Table 0-1: Plot Area</b></p> <table border="1" data-bbox="517 962 1312 1283"> <thead> <tr> <th>Name</th> <th>Area (in Acre)</th> <th>Max. MW (AC)</th> <th>Company (SPD)</th> </tr> </thead> <tbody> <tr> <td>Plot A</td> <td>188.0</td> <td rowspan="2">75 MW</td> <td rowspan="2">GIPCL</td> </tr> <tr> <td>Plot B1</td> <td>132.0</td> </tr> <tr> <td>Plot B2</td> <td>100.0</td> <td rowspan="2">75 MW</td> <td rowspan="2">GSECL</td> </tr> <tr> <td>Plot C</td> <td>221.6</td> </tr> </tbody> </table>	Name	Area (in Acre)	Max. MW (AC)	Company (SPD)	Plot A	188.0	75 MW	GIPCL	Plot B1	132.0	Plot B2	100.0	75 MW	GSECL	Plot C	221.6	<p style="text-align: center;"><b>Table 0-2: Plot Area</b></p> <table border="1" data-bbox="1339 962 2123 1394"> <thead> <tr> <th>Name</th> <th>Area(in Acre)</th> <th>Max. MW (AC)</th> <th>Company (SPD)</th> </tr> </thead> <tbody> <tr> <td>Plot A</td> <td>187.75</td> <td rowspan="3">2X75 MW(AC)</td> <td rowspan="3">GIPCL &amp; GSECL.</td> </tr> <tr> <td>Plot B1 &amp; B2</td> <td>178.8</td> </tr> <tr> <td>Plot B-3</td> <td>30.9</td> </tr> <tr> <td>Plot C</td> <td>250.06</td> <td rowspan="2">10 MW(AC)</td> <td rowspan="2">GSFC</td> </tr> <tr> <td>Near GPCL-5MW</td> <td>44.63</td> </tr> </tbody> </table>	Name	Area(in Acre)	Max. MW (AC)	Company (SPD)	Plot A	187.75	2X75 MW(AC)	GIPCL & GSECL.	Plot B1 & B2	178.8	Plot B-3	30.9	Plot C	250.06	10 MW(AC)	GSFC	Near GPCL-5MW	44.63
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				<p>Plot-A &amp; Plot- C Shall be considered as Master Plot for GIPCL and GSECL Respectively.</p> <p>Land Area of Plot-B1, B2 and B3 shall be distributed suitably for each 75 MW (AC) of GIPCL and GSECL considering optimum Layout / Design / losses/ power evacuation etc . Further Total Available land area shall be equally (50%) divided among GIPCL and GSECL.</p>
10.	64	5.1.5 (ii)	<p><u>Foundations:</u> The Contractor shall design and construct appropriate civil foundations for MMS, prefabricated structures/RCC, transformers, switchyard equipment, feeder bay etc. 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. Contractor has submit batch report of each concrete batch. All necessary test related to materials of concrete mix like cement, sand, aggregates etc shall be carried out regularly as per relevant IS code. Test related to concrete cubes like compressive strength, workability etc shall be carried out. If any treatment required for foundation surface for strengthening soil characteristics i.e. application epoxy for protection against soil nature shall be applied based on geo-technical investigation report. Unless otherwise specified all the backfilling i.e. in foundation, plinth, trenches after concrete shall be carried by using fine sand only.</p>	<p>Replaced by "<u>Foundation:</u> The Contractor shall design and construct appropriate civil foundations for MMS, prefabricated structures/ RCC, transformers, switchyard equipment, feeder bay, <b>foundations for cable over existing cable corridor, for inter connection of cable for different plots, 66 KV lines from switchyard to GETCO end substation (applicable in case of overhead Transmission line)</b> etc. 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. Contractor has submit batch report of each concrete batch. All necessary test related to materials of concrete mix like cement, sand, aggregates etc shall be carried out regularly as per relevant IS code. Test related to concrete cubes like compressive strength, workability etc shall be carried out. If any treatment required for foundation surface for strengthening soil characteristics i.e. application epoxy for protection against soil nature shall be applied based on geo-technical investigation report. Unless otherwise specified all the backfilling i.e. in foundation, plinth, trenches after concrete shall be carried by using fine sand only."</p>
11.	64	5.1.5 (v)	<p><u>Solar PV Module Cleaning System:</u> 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</p>	<p>Replaced by "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 has to design as</p>





			<p>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 &amp; 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.</p>	<p>per relevant IS codes, submit and take approval from owner / consultant and construct and operate <b>4.5 lac litre (3 x 1.5 lac litre) underground RCC water tank for each 75 MW Project (i.e. (i) 2 x 1.5 Lac litre for Plot-A &amp; 1.5 Lac litre for Plot-B1 (ii) 1.5 Lac litre for Plot-B2 (iii) 2 x 1.5 Lac litre for Plot-C)</b> 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.”</p>
12.	68	5.1.9	<p>All construction, operation and maintenance procedures shall be carried out through appropriate relevant standards, regulations laid by GUVNL/GETCO / UGVCL / GEDA / GIPCL/ GSECL / Gol / MNRE and / or any other agency as and when applicable. Further, this shall comply with the applicable labor laws. The Bidder shall make himself aware of such requirements and shall not solely depend on the Company to avail full information.</p> <ol style="list-style-type: none"> <li>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.</li> <li>CT, PT and Metering system testing at ERDA or other lab as per GETCO requirements.</li> <li>All other statutory approvals and permissions not mentioned specifically but are required to carry out hassle free construction and operation of the plant.</li> <li>Payment to GETCO for system study, SLDC Charges, Connectivity charges and GEDA registration charges, CEIG Inspection charges are in the scope of EPC Contractor.</li> </ol> <p>All approvals, equipment, item and works which are not specifically mentioned in this document but are required for completion of work including construction, commissioning,</p>	<p>All construction, operation and maintenance procedures shall be carried out through appropriate relevant standards, regulations laid by GUVNL/GETCO / UGVCL / GEDA / GIPCL/ GSECL / Gol / MNRE and / or any other agency as and when applicable. Further, this shall comply with the applicable labour laws. The Bidder shall make himself aware of such requirements and shall not solely depend on the Company to avail full information.</p> <ol style="list-style-type: none"> <li>All other approval, as necessary for setting up of a solar power plant including CEIG, connectivity, construction power, power evacuation, GEDA, GETCO, GPCB <b>(at present GPCB Clearance is not Applicable)</b> etc. as per the suggested guidelines.</li> <li>CT, PT and Metering system testing at ERDA or other lab as per GETCO requirements.</li> <li>All other statutory approvals and permissions not mentioned specifically but are required to carry out hassle free construction and operation of the plant.</li> <li><b>d) Payment to GETCO for system study, SLDC Charges, Connectivity charges and GEDA registration charges, CEIG Inspection charges shall be borne by the Owner(s). However all Co-ordination, liaison work, Paper work etc. shall</b></li> </ol>



			operation & maintenance of Solar Photovoltaic Power Plant in every respect and for safe and efficient construction & erection, operation and guaranteed performance are included in the scope of this bid.	<b>be in the scope of the EPC Contractor.</b> All approvals, equipment, item and works which are not specifically mentioned in this document but are required for completion of work including construction, commissioning, operation & maintenance of Solar Photovoltaic Power Plant in every respect and for safe and efficient construction & erection, operation and guaranteed performance are included in the scope of this bid.
13.	72	5.1.14	<p>Terminal Point for the EPC Project</p> <p>(a) Complete EPC work for each 75 MW (AC) Solar PV Project up to interconnection at 66 kV GETCO sub-station.</p> <p>(b) GETCO supervision charges for 66 kV cable laying and termination shall be in scope of EPC contractor, including all coordination, work execution, paper work shall be carried out by EPC Contractor.</p> <p>(c) Solar Park LAND cost will be paid by GIPCL /GSECL to GPCL / SPIA.</p> <p>(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.</p> <p>(e) Development of bay(s) at GETCO end substation – Charges related to development of bay shall be paid by EPC Contractor to GETCO.</p> <p>(f) Solar Park –O&amp;M Annual Charges to GPCL will be paid by GIPCL&amp; GSECL.</p>	<p>Terminal Point for the EPC Project</p> <p>(a) Complete EPC work for each 75 MW (AC) Solar PV Project up to interconnection at 66 kV GETCO sub-station.</p> <p>(b) <b>GETCO supervision charges for 66 kV cable laying and termination shall be in scope of Owner(s), however all coordination, work execution, paper work shall be carried out by EPC Contractor.</b></p> <p>(c) Solar Park LAND cost will be paid by GIPCL /GSECL/GSFC to GPCL / SPIA.</p> <p>(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.</p> <p><b>(e) Development of bay(s) at GETCO end substation –Charges related to development of bay shall be paid by Owner(s) to GETCO.</b></p> <p>(f) Solar Park –O&amp;M Annual Charges to GPCL will be paid by Owner(s)</p>
14.	76	5.2.1 (vi)		<b>Added at the end of "Clause 5.2.1 (vi):</b> Bidder shall use GPS for establishing initial co-ordinates and bench marks at the designated all plots (Plot-A, Plot-B1, Plot-B2, Plot-C and GSFC's Plot) of Gujarat Solar Park, Charanka site for the field work.



15.	76	5.2.9	Storm Water Drainage System	<p><b>Additional clarification:</b></p> <p>“Earthen drains are not envisaged as per EPC tender. Lining shall be brick / stone pitching as per EPC Tender.</p> <p>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.”</p>
16.	79	5.2.14	<p><u>Roads:</u> 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) and with sufficient thickness to access heavy equipment like transformers/inverters/ switchyard equipment transportation. Contractor shall provide RCC culvert with RCC ramp with suitable gradient for approaching to Inverter room, control room and at main entry point from solar park approach to inside plant etc as required.</p>	<p>Replaced by “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) and with sufficient thickness to access heavy equipment like transformers/inverters/ switchyard equipment transportation. Contractor shall provide RCC culvert with RCC ramp with suitable gradient for approaching to Inverter room, control room and at main entry point from solar park approach to inside plant etc as required.</p> <p><b>Bidder shall provide NP3 class 300 mm to 600mm diameter Hume pipes for internal/peripheral Road crossing for various services like underground pipeline (potable or washing), communication cables, and electric cables within the plots area. Contractor/ bidder shall provide NP3 class 300 mm to 600mm diameter Hume pipes for cable crossing through the Solar Park existing roads as required. Further unless</b></p>



				<b>otherwise specified all pipes shall be encased with M15 grade of concrete keeping 150 mm cover at all sides. Contractor shall resurface the road after laying of the Hume pipes.”</b>
17.	79	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.	Replaced by “The Contractor has to design as per relevant IS codes, submit and take approval from client / consultant and construct <b>4.5 lac litre (3 x 1.5 lac litre) underground RCC water tank for each 75 MW Project (i.e. (i) 2 x 1.5 Lac litre for Plot-A &amp; 1.5Lacs litre for Plot-B1 (ii) 1.5 Lac litre for Plot-B2 (iii) 2 x 2.5 Lac litre for Plot-C)</b> 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. <b>As per IS 3370 part-1 2009 contractor shall design and execute the underground water tank with minimum concrete M-30 grade.”</b>
18.	94	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 Lol. Based on the results of above-mentioned tests, final approval for design of pile shall be provided	Replaced by “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 <b>plot</b> at strategic location, immediately after receiving Lol. Based on the results of above-mentioned tests, final approval for design of pile shall be provided.”
19.	94	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.	Replaced by “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 <b>HDG: 5.6.</b> ”
20.	96	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	Replaced by “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



			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.	have performance warranty of <b>&gt;97%</b> during the first year of installation. Degradation of PV module for first year shall be limited to <b>3%</b> and shall not be more than <b>0.7%</b> in any subsequent year.
21.	97	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.	Replaced by "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 <b>85%</b> 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 <b>as per IEC 61215.</b> "
22.	107	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 maximum2% (including diode voltage drop). <b>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.</b> 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	Replaced by "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 maximum2% (including diode voltage drop). <b>All cables and connectors for use for installation of solar field must be of solar grade which can withstand harsh environment conditions including High temperatures, UV radiation, rain, humidity, dirt, burial and attack by rodents, moss and microbes for 25 years and voltages as per latest IEC standards. (Note: DC cables for outdoor installations should comply with the EN50618 / TUV 2PFG 1169/09.07 or equivalent IS for service life expectancy of 25 years).</b> 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."
23.	111	5.3.6 ('E)	<u>Insulation Screen:</u> (e) The metallic part shall consist of a copper tape helical <b>applied with a 30%</b> overlap over the water barrier tape/blocking tape. A binder tape of copper shall be applied over the copper wire metallic screen	Replaced by " <u>Insulation Screen:</u> (e) The metallic part shall consist of a copper tape helical overlap over the water barrier tape/blocking tape <b>as per IS 7098.</b> A binder tape of copper shall be applied over the copper wire metallic screen."



24.	119	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. <b>Capacity of LCR (Inverter Block) shall not exceed more than 5 MW.</b> Hence, total 75 MW 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		Replaced by "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. <b>Capacity of LCR (Inverter Block) shall be maximum 10 MW.</b> 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."	
25.	155	5.3.33.1 (xxvi-ii)	<u>Temperature Sensor</u> :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, <b>the temperature sensors shall be located on the back of representative modules and on front glass surface.</b> 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.		Replaced by " <u>Temperature Sensor</u> :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, <b>the temperature sensors shall be located on the back of representative modules.</b> 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."	
26.	172	6.9.2 ( Best Effort Schedule Sr. No.7)	Completion of supply of PV modules, in phased manner, as per agreed schedule	D+210	Completion of supply of PV modules, in phased manner, as per agreed schedule	<b>D+150</b>
27.	177	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		Replaced by " <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	



			above within 15 days, then the entire Performance Bank Guarantee shall be en-cashed by the Owner and all the remaining payments yet to be made by the Owner to the Contractor shall also be forfeited.	NEEGG. In case contractor fails to pay penalty as above within <b>30 days</b> , then the entire Performance Bank Guarantee shall be en-cashed by the Owner and all the remaining payments yet to be made by the Owner to the Contractor shall also be forfeited."
28.	177	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.	Replaced by "In case of any defect in the system after Commissioning, the Contractor shall <b>initiate action for</b> 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/ <b>GSFC</b> to the Contractor and / or from the Bank Guarantee submitted to GIPCL/GSECL/ <b>GSFC</b> . 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."
29.	184	6.18.6	Comprehensive insurance is to be arranged by the Contractor during the O&M period of the Contract.	Replaced by "The EPC Contractor shall provide or obtain and maintain in force throughout the period of O&M the following Insurance coverage: (i) Insurance to cover third party liability of appropriate value along with an undertaking indemnifying GIPCL/GSECL/ <b>GSFC</b> from any such claim.  (ii) Workmen compensation and /or group personal accidents Insurance policy covering all its employees and works including of the sub-contractor. Pilferage, theft, burglary also are also to be covered by the EPC Contractor/O&M operator.  (iii) Fire and allied perils including earthquake, flood, storms, cyclone, tempest, insurance policy shall be taken by the Owner regularly immediately after COD. In case of any loss/ claim under the policy, EPC Contractor/O&M Operator shall immediately inform the same to the Owner.



				<p>(iv)The EPC Contractor/ O&amp;M Operator may or may not take MBD insurance policy but it would be the responsibility of the EPC contractor /O&amp;M Operator to operate and maintain the solar plant and all the associated equipments at his own cost for the quoted O&amp;M period for which the Owner shall pay the agreed O&amp;M charges only.</p> <p>(v) Any replacement / repair / modification of any item / equipment shall be carried out by the EPC contractor /O&amp;M Operator at his own cost for the quoted O&amp;M period, so as to have minimum down time. The Owner shall not be responsible for any break down / failure of any equipment to any reason thereof except for Force Majeure / Fire &amp; Allied Perils Events or extraneous reasons.</p> <p>(vi) The scope / type / form of insurance cover mentioned elsewhere in this tender, for the scope of the project for the quoted O&amp;M period, would be superseded by this Clause.”</p>
30.	195	6.38.1(h)	The <b>Owner may</b> consider only supply part payment for PV Modules through Letter of Credit (LC) as per the Terms of Payment specified in this tender. Respective charges for LC opening and other bank charges shall be borne by the EPC Contractor / Owner.	The <b>Owner shall</b> consider only supply part payment for PV Modules through Letter of Credit (LC) as per the Terms of Payment specified in this tender. Respective charges for LC opening and other bank charges shall be borne by the EPC Contractor / Owner.
31.	195	6.39.3	<u>Defect liability:</u> 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.	Replaced by “ <u>Defect liability:</u> 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 <b>product warranty shall be for 10 years and performance warranty shall be for 25 years.</b> ”
32.	197	6.39.10 (A)	<u>Bank Guarantee against PV Modules Warranty:</u> 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	Replaced by “ <u>Bank Guarantee against PV Modules Warranty:</u> The Successful Bidder shall provide security in form of Bank Guarantee for an amount as specified in <b>Clause No.3.11.6 (iii)</b> 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





			return of PBG under the subject package	submitted prior to the return of PBG under the subject package."
33.	205	7.13.3 (A)	<p><b>(A) Statutory variations during original contractual completion period :</b></p> <p>(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.</p> <p>(ii) If any decrease takes place in taxes and duties due to statutory variation, the same shall be passed on to GIPCL / GSECL or GIPCL / GSECL shall admit the decreased rate of taxes and duties while making the payment.</p>	<p><b>(A) Statutory variations during original contractual completion period :</b></p> <p>(i) If any increase takes place in taxes and duties due to statutory variation, then GIPCL/GSECL/GSFC shall admit the same on production of documentary evidences <b>except Reimbursement of Anti Dumping Duty on PV Modules which shall be applicable only if supply is completed within 5 months from the date of LoI.</b></p> <p>(ii) If any decrease takes place in taxes and duties due to statutory variation, the same shall be passed on to GIPCL / GSECL/GSFC or GIPCL / GSECL/GSFC shall admit the decreased rate of taxes and duties while making the payment.</p>
34.	222	Appendix 6:	Bid Evaluation:	Bid Evaluation and final reduction in EPC Contract Price for individual Owner(s) shall be carried out as per Attachment-3
35.	245	Appendix 15: Table 15 A, Schedule of Price - A	Payment of Anti-Dumping Duty	<p>Replaced by "Loading of Antidumping Duty (ADD) for Solar PV Modules (Lump sum) shall be removed from SCHEDULE OF PRICE –A (Column - F, Sr. No.1) and bidders are advised to mention " 0" (Zero) in above column.</p> <p>GIPCL/GSECL/GSFC shall reimburse actual ADD on PV Module paid by the contractor on production of supporting documents such as Custom and ADD receipt in Original or any other required documents by GIPCL/GSECL/GSFC. Further supply of PV Modules must be completed maximum within 5 months from the date of LOI for reimbursement of ADD if applicable. In the event of supply of Solar PV Modules after 5 months from the date of LoI, ADD reimbursement shall not be made for the quantity of solar PV modules after above mentioned period.</p>



36.	249	Appendix 16: Part B, 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.	Replaced by "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 <b>(preferably between 10:00 AM to 4:00 PM as per mutually agreed time)</b> 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.
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