

**REQUEST FOR SELECTION OF SOLAR PROJECT DEVELOPER(S) FOR SETTING UP 600 MW GRID CONNECTED SOLAR PV POWER PROJECTS ON BUILD-OWN-OPERATE BASIS
IN JHANSI SOLAR PARK, UTTAR PRADESH**

Sr. No.	Subject	Document	Existing Clause	Proposal for modification With Remark/Rationale and queries similar in nature	TUSCO's Response
1	Financial Closure timeline	RFS, 13	The SPDs shall achieve Financial Closure within 04 (Four) months from the Effective Date of the Power Purchase Agreement (PPA).	Requesting TUSCO to ammend financial closure to 9 Months as per general PPA clause	The SPDs shall achieve Financial Closure within 03 (Three) months from the Effective Date of the Power Purchase Agreement (PPA) i.e. <u>up to 180 days from LoA</u> ; or <u>09 months from LoA awarded by TUSCO, which ever is later. In any case, maximum time allowed for FC shall be 9 months from LoA.</u>
2	CUF related provision	RFS, 8.1	Thereafter, the declared annual CUF for the Unit shall remain unchanged for the entire term of the PPA/PSA (Declared annual CUF). The Declared Annul CUF by the SPG shall in no event, be less than 17% (seventeen percent)	Based on our previous experience, capacity fitment is likely to be a challenge. Consequently, the requirement for a minimum CUF of 17% seems quite high. We kindly request that SPPD either consider removing this minimum CUF requirement, as this can be addressed within the PPA by the SPD or reduce the minimum CUF requirement.	Thereafter, the declared annual CUF for the Unit shall remain as per the terms and conditions of PPA(s)/PSA(s) for the entire term of such PPA(s)/PSA(s).
3	PPA(s)/PSA(s)/Bi-lateral arrangements and its Timeline	RFS, 12.1	The successful Bidder for the Projects selected based on this RFS are required to have their own PPA/PSA/Bi-lateral arrangement for sale of Solar Power generated within the solar park with their respective procurer up to within 120 days of the issuance of LoA. Those already having PPA/PSA/Bi-lateral arrangement are also eligible and shall be given preference. PPA will be executed between Procurer & selected bidder (SPD). The PPA/PSA arrangement should accommodate the full Project Capacity awarded to the SPD post bidding process. The PPA shall be valid for a period as mutually agreed between SPD and procurer.	Request SPPD to ammend it to 180 days instead of 120 days. Also we need more clarification on the penalties if bidders are not able to get PPA within 120 days of issuance of LoA.	The successful Bidder for the Projects selected based on this RFS are required to have their own PPA/PSA/Bi-lateral arrangement for sale of Solar Power generated within the solar park with their respective power procurer within <u>180</u> days of the issuance of LoA. Those already having PPA/PSA/Bi-lateral arrangement are also eligible and shall be given preference. <u>Those seeking further extension in obtaining PPA shall have to submit Bank Guarantee of INR 0.34Lakh/MW/Month. Such extension can be granted for maximum 3 (three) months. The BG which shall be released after 30 days of submission of proofs of PPA. Effective date of PPA shall not be extended due to such extension in time.</u> <u>PPA(s) will be executed between Procurer(s) & selected bidder (SPD). The PPA(s)/PSA(s) arrangement should accommodate the full Project Capacity awarded to the SPD post bidding process. The SPD may enter into multiple PPA(s)/PSA(s)/Bi-lateral agreements for this purpose. The PPA shall be valid for a period as mutually agreed between SPD and procurer.</u>
4	Tie-Breaking of bid	RFS, 2(b.8)	In case of tie between quoted annual park charges and quantum of power in MW, tie-breaking shall be done by the time-stamping of the price bids submitted, i.e., the bidder quoting price-bid earlier will have a better ranking.	Request SPPD to kindly clarify time-stamping in case of tie between annual park charges and quantum of power in MW. Whether the bidder submitting bid earlier will be given the preference in that case?	In case of tie between quoted annual park charges and quantum of power in MW, tie-breaking shall be done by the availability of PPA(s), i.e., the bidder having PPA(s) for higher quantum of power to be served through Jhansi Solar Park will have a better ranking. Bidder shall make a declaration to this effect as per the enclosed format..... In case of tie between Annual Park Charges, quantum of Power and PPA(s) for quantum of power, network of the bidder shall be used for tie-breaking. A higher network shall be given better ranking.
5	Site KML file and technical studies	General	KMZ File and DPR	Request SPPD to share the KMZ file and DPR for the solar park. This is essential for a detailed evaluation of the land.	KML file and techical studies/details pertaining to site have been uploaded. Via link https://1drv.ms/f/c/e634dc56dbb4622d/Ei1itNtW3DQggOZrAAAAAABYFFT1SBXSeV328_KRP0fEg?e=1FiByl
6	Term of agreements	LRUA, Page No. 11	TUSCO Ltd. shall hand over requisite land on right to use basis on payment of land lease rent, for MW Solar Power Project to for a period of 25 years with provision for further extension on mutually agreed terms as per provision of GoUP, GoI.	Since the commissioning timelines of Solar PV Project is from 25 Years from the PPA Signing/Effective date , we hereby request you to ISA agrrement/Lease agrrement shall have validity from the Till the 25 Years from the SCoD/Extended SCoD/ CoD of the Plant	TUSCO Ltd. shall hand over requisite land on right to use basis on payment of land lease rent, for MW Solar Power Project to for a period <u>up to June 2051 from.....</u> with provision for further extension on mutually agreed terms and as per provision of GoUP, GoI.
7	Revision of CUF	RFS, 81	The SPG will declare the annual CUF of the Project at the time of submission of response to RFS , who shall be allowed, to revise the annual CUF once within first 12 (twelve) months of the SCSO or as per PPA/PSA.	Please link CUF Criteria with the PPA	The SPG will declare the annual CUF of the Project at the time of submission of response to RFS, SPG/SPD is free to re-assess the CUF within 12 months of SCSO or as agreed in PPA(s)/PSA(s).

8	PBG Provision	RfS, 14B	For delay in commencement of supply of power up to 6 (six) months from SCSD, encashment of Performance Bank Guarantee (PBG), or alternate instruments, on per-day basis and proportionate to the contracted capacity that has not commenced supply of power	Since the PBG is submitted to Procurer, and delay in SCoD allows to procure the encashment of PBG, so there is no requirement of PBG by the SPPD.	RfS provision shall prevail.
9	Solar Park Charges	RfS, 8	Charges towards Solar Park	Please keep the escalation of 4% in every three years in O& M Charges as these charges will have huge impact on the Solar PV Project O& M Charges, similarly in lease charges keep the escalation of 4% in every three years	RfS provision shall prevail.
10	Water Supply Charges	RfS, 6.3	Charges for Water Supply	Please provide the water charges for the FY 2024-25	The applicable water charges shall be as per actual usage.
11	Land Encumbrances	LRUA		We understand that the land handed over to SPD shall be free of any encumbrances	More than 95% of Project land is in possession of TUSCO.
12	Incentives under UP Solar Policy 2022	General Query		<p>UP Solar Energy Policy 2022 provides incentives for standalone power projects with capacity above 5 MW and for Solar Power Park developers. Incentive available to stand alone solar power projects with capacity above 5MW</p> <p>5. <i>Wheeling and transmission charges (Intra State) - 100% exemption (on sale of power to UPPCL), 50% exemption (captive use and third party sale)</i></p> <p>6. <i>Wheeling transmission charges (Inter State sale) and cross subsidy surcharge - 100% exemption on Intrastate transmission system.</i></p> <p>Similar exemption is not listed for Solar Power Park Developers. It is not clear, if the waiver is available to solar project developed in Solar Power Park. This may please be confirmed.</p> <p>Secondly, this waiver is available for solar project. REIA tenders permit, setting up of non-located wind-solar hybrid project, wherein in solar capacity would be set up in the TUSCO solar park, and the wind project would be located in a wind rich state. In such a scenario, will the incentives under the UP Solar Energy Policy 2022 available for such a project?</p>	The incentives and benefits prescribed in the Uttar Pradesh Solar Energy Policy - 2022 will be available as per extant policies of GoUP/GoI and subject to conditions that the bidder satisfies the eligibility criteria as per the Uttar Pradesh Solar Energy Policy - 2022. SPD has to seek such incentives from the concerned authority as per the extant Policy/Guidelines of GoUP.
13	Intra-STS and ISTS Connectivity	General Query		<p>The solar park is connected to UPPTCL S/s and has been granted connectivity at this S/s. For inter-state sale of power, how will be the connectivity to ISTS network? Is the UPPTCL GSS connected to ISTS network? Which is the nearest ISTS S/s available for connectivity?</p> <p>Please share the coordinates of UPPTCL GSS.</p>	220/400 kV UPPTCL GSS is being constructed at Garautha, at vicinity of 600 MW Jhansi Solar Park. At 400 kV level, it is proposed to be connected to 400 kV Orai STU Substation. For further details, Grid Map of Uttar Pradesh may please be referred.
14	Time extension	General Query	Extension in Bid Submission Date	It is requested that the bid submission date be extended by 3 weeks	A corrigendum has been issued in this regard. Bidders are requested to kindly visit the TUSCO Ltd. site and CPP Portal regularly.
15	Grid Connectivity related additional conditions	RfS, XI	TUSCO may also lay down conditions in order to meet Grid connectivity requirements, forecasting and scheduling requirements by appropriate commission or such other requirements, to improve power quality and in compliance with guidelines and provisions of statutory and regulatory bodies.	Defining and stipulating conditions for Grid connectivity and F&S etc is bestowed on the Commissions and transmission entities under the EA 2003. All entities connecting to the Grid have to necessarily abide by these requirements. What additional conditions would TUSCO be laying down and under what provisions?	As TUSCO is obtaining Grid connectivity for the Solar Power Generators, it may be required by the Nodal Agency (STU) or Authorities to fulfill certain conditions at POI. In line with above, TUSCO may also be required to lay down such operational and safety related conditions, as are required for Grid compliance at POI and fulfillment of operational and commercial responsibilities of Generator towards compliance with guidelines and provisions of statutory and regulatory bodies..

16	Delivery/ Metering Point	RFS, 17	Definition - 17. "DELIVERY/ METERING POINT" shall mean the point(s) in the grid, where the power from the solar power projects are delivered by SPD to their respective identified Procurer(s), in line with terms and conditions as specified in their respective Power purchase/sale agreement documents. For interconnection with grid and metering, the SPDs shall abide by the relevant CERC / SERC Regulations, Grid Code and Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006, CEA (Technical standard for Connectivity to the Grid), 2007, Working group report, 2022 etc. as amended and revised from time to time.	Delivery point to be defined as TUSCO GSS.	RFS provision shall prevail. Delivery point should be decided as per terms of the PPA(s)/PSA(s) /Bi-lateral agreements.
17	Bid capacity	RFS, 6	6.1 A Bidder, including its Parent, Affiliate or Ultimate Parent or any Group Company shall submit a single bid offering a minimum quantum of Contracted Capacity of 300 MW and a maximum quantum of 600 MW, in the prescribed formats. The Projects shall be quoted in multiples of 300 MW only above 300 MW.	6.1 A Bidder, including its Parent, Affiliate or Ultimate Parent or any Group Company shall submit a single bid offering a minimum quantum of Contracted Capacity of 300 150 MW and a maximum quantum of 600 MW, in the prescribed formats. The Projects shall be quoted in multiples of 300 150 MW only above 150 300 MW. It is recommended that the min bid capacity be reduced to 150 MW and multiples of 150 MW.	RFS provision shall prevail.
18	Provisions related to Power Transaction	RFS, 8	8 POWER GENERATION BY SOLAR POWER DEVELOPER 8.1 CRITERIA FOR GENERATION 8.2 SHORTFALL IN GENERATION 8.3 EXCESS GENERATION	These may be removed from this RFS. These would be part of the PPA and the mode of sale of power by the Successful bidder. These would not be relevant if the power is sold on merchant basis with no firm tie-up	Transaction of power shall be governed by the PPA(s)/PSA(s)/Bi-lateral arrangements. Therefore, clauses 8.1 CRITERIA FOR GENERATION 8.2 SHORTFALL IN GENERATION 8.3 EXCESS GENERATION the shall be governed as per the terms and conditions of PPA(s)/PSA(s)/Bi-lateral/trading arrangements for the entire term of such such arrangement.
19	Availability of Internal Power Evacuation system	RFS, 8.4	OFFTAKE CONSTRAINTS DUE TO TRANSMISSION INFRASTRUCTURE/ GRID UNAVAILABILITY & BREAK-DOWN	This clause is relevant in the PPA to be signed between the Successful Bidder and Procurer. This clause needs to be modified to cover and compensate the Successful Bidder/ SPD in the event of offtake take constraints due to unavailability and breakdown of TUSCO's transmission infrastructure in the Solar Park. What is the liability of TUSCO, in the event the TUSCO Solar Park S/s is unavailable.	TUSCO shall construct, operate and maintain Internal Power Evacuation Infrastructure for Generators as per best Industry practices. Therefore it is to be treated as Dedicated Transmission System. TUSCO shall strive to achieve above 98% availability of Internal Power Evacuation System during solar hours (8AM to 6PM) in a year. In case of reduction in availability of Internal Power Evacuation system during solar hours below 98%, then for each 1% of such reduction in availability, the annual park charges payable by the SPD to TUSCO shall be reduced by 0.5%. No separated compensation shall be provided to SPD by TUSCO in this regard.
20	Part Commencement of Supply of Power	RFS, 14.A	14. A PART COMMENCEMENT OF SUPPLY OF POWER Part Commencement of Supply of Power of the Project shall be accepted by the TUSCO Limited subject to the condition that the Minimum Capacity for acceptance of first and subsequent part(s) shall be 50 MW (with the last part being the balance Contracted Capacity), without prejudice to the imposition of penalty, in terms of the PPA/PSA and Agreements with TUSCO, on the part which has not yet commenced supply of power.	To be deleted : Part commissioning will be determined under the PPA/ Bi-lateral arrangement entered into by the SPD. The minimum commission capacity should be linked to the minimum connectivity/ injection requirement stipulated by UP State Grid Code. SPD should be permitted to commission such min capacity as the UP State Grid code permits.	RFS provision shall prevail.
21	Delay in commencement of Supply of Power	RFS, 14.B	14. B SCHEDULED COMMENCEMENT OF SUPPLY OF POWER AND LIQUIDATED DAMAGES NOT AMOUNTING TO PENALTY FOR DELAY IN COMMENCEMENT OF SUPPLY OF POWER	To be deleted : The supply provisions will be governed by the respective PPAs and the outcome determined by the PPA. In case the PPA is part-terminated, the capacity allocated in the park should not be reduced. The SPD will try to sign fresh PPA with another buyer. The Bidding guidelines issued by MoP, permit, untied capacities to participate in REIA bids. TUSCO, should ensure that it continues to receive the annual park fees from the SPD, and the project	For delay in commencement of supply of power beyond six months from SCSD, the following shall be applicable: - (i) SPD shall commence to pay to SPPD all the charges associated with the Solar Park under this RFS, ISA, LRUA and other applicable charges as stipulated by concerned authorities.

22	Roads and Drainage	RFS, 4.1 Drainage System & Site Levelling Grading	Keeping in view of the topography and flood levels of the area necessary cutting, filling & leveling work shall be taken up by SPD to have different benches suitable to respective project (Plot) requirement as well as compatible with the Road network. The drainage shall be planned according to the final contour of the area after finalizing/ attaining the modified levels after the required cutting, filling & leveling work. There will be main storm drain along the Roadside which will receive inflows from the different blocks drainage system. The grade/ gradient shall be planned keeping in view of the NSL as well as the existing natural drainage line so that the storm water is safely drained off from the Plant/ Project area. This storm water can also be conserved in suitable Pool and can be utilized again.	TUSCO to provide park level drainage layout drawing along with drainage invert level to plan outfall of plant level drain .Cross section details of Park level drain along with road cross section details to be provided. TUSCO to provide site specific studies including topography, Geotech, Water test assessment report , Environmental and social impact and climate risk assessment report of present site.	The details of common road and drainage being developed by TUSCO shall be shared with the bidder in due course. Technical studies related to site have been shared as above.
23	Metering Infrastructure	RFS, 5 Power Evacuation Plan for Project	Metering arrangement of each SPD shall have to be adhered to in line with relevant clause of PPA, state and central Regulations. SPD shall be responsible for metering arrangement at 33kV end of PSS. At 220 kV side of PSS, metering arrangement shall be provided by SPPD.	Proposed SPD metering is at 33KV voltage level as per the requirement of UPPTCL. TUSCO shall clarify on the scope of metering at 33KV & share UPPTCL metering specification requirement with SPD, if applicable.	Metering and delivery point shall be decided as per the terms of PPA(s)/PSA(s)/Bi-lateral arrangements. TUSCO shall provide metering infrastructure at 220 KV side of PSS. metering arrangement at 33 kV side shall be the responsibility of SPD. Further, the provisions related to the metering shall be governed by Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006 and subsequent amendments.
24	Integration and	RFS, 8. Performance Monitoring	The plant SCADA should be Open Platform Communications (OPC) compliant with standard DNP3 and modbus control interfaces over TCP/ IP having the provision to add protocol converters to implement custom and secure communications protocol standard for providing real time online data (including but not limited to irradiance, plant generation (instantaneous/ daily/ monthly/ yearly), Daily Peak Generation, temperature, wind speed etc.) to TUSCO.	1. Please clarify the required Space allocation & O&M Services for Solar Plant SCADA & PPC in proposed 33/220KV PSS-1&2 of TUSCO. 2. Please clarify the required Scope of RTU, PMU, PQM & Solar Plant SCADA integration with SAS & FOTE in proposed 33/220kV PSS-1&2 of TUSCO.	1. SPD shall be responsible for Installation and O&M of solar plant SCADA and PPC systems. Space shall be made available inside PSS in coordination with TUSCO/PGCIL. However space requirement has to be provided by SPD to PGCIL in advance. 2. Data transfer is planned through the SAS gateway.PQ meters (PQM) shall be provided by the SPD. PMU is being provided at PSS level by SPPD. SCADA for Solar Plant shall integrate with SAS &FOTE at PSS end to transfer data to/ from SLDC.The integration of SCADA at PSS end shall be in the scope of SPD.
25	DC Cable Standards	RFS, 3. Cables And Connectors	All cables and connectors to be used 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. It is recommended that the Cables of 600-1800 Volts DC for outdoor installations should comply with the BS/ EN EN50618/ TUV 2pfg 1169/08/07 for service life expectancy of 25 years.	GoI has issued notification on 24th August 2023 on DC Cable IS standard, In view of same Bureau of Indian standards has published IS 17293:2020 for DC cables. Please confirm if the IS standard to be followed or EN as mentioned.	DC cables are largely manufactured and type tested as per EN 50618. SPD is free to adopt the latest standard, which meets and/or exceeds the suggestive quality standards; in this case IS 17293:2020. The responsibility to procure, install and maintain the cables as per the standard market availability and technical requirement for plant operation for 25 years lies with SPD.
26	Interconnection Point & Contracted Capacity	RFS, Section - I,Definition of Terms	“INTER-CONNECTION POINT” shall mean the points at 220 kV voltage levels, where the power from the solar power Projects are injected into the identified STU Substations(GSS) (through Pooling substation and the dedicated transmission line connecting the Pooling Substation with the STU substation system) as specified in the Section VIII of RFS document. Metering arrangement shall also be provided by STU at this interconnection point where the power is injected into Grid. For interconnection with grid and metering, the SPDs shall abide by the relevant CERC / SERC Regulations, Grid Code and Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006, CEA (Technical standard for Connectivity to the Grid), 2007, Working group report, 2022 etc. as amended and revised from time to time along with any instructions by SPPD in this regard.	Kindly confirm if the SPDs can demonstrate the Contracted Capacity at the 33kV level.	RFS provision shall prevail.

27	Punch points of Scheduling, Forecasting	RFS, Section - III Shortfall in Generation	8.2 SHORTFALL IN GENERATION If for any contract year it is found that the project supplies energy less than the energy corresponding to the minimum CUF, the SPG/SPD will be liable to pay to their respective Procurer, penalty for the shortfall in availability of energy. The amount of such penalty will be as per the terms and conditions of the PPA/PSA	<p>Request for Clarification In line with MoP guidelines, requesting you to share scheduling and its punching point of Energy Availability at Regional Load Despatch Centres (RLDCs) / State Load Despatch Centres (SLDCs) to capture the same for Estimates.</p>	As per Guidelines for Tariff Based Competitive Bidding Process for Procurement of Power from Grid Connected Solar PV Power Projects: (f).The scheduling and its punching thereof at different Regional Load Despatch Centres (RLDCs) / State Load Despatch Centres (SLDCs) (including the injecting, intervening and buyer SLDCs / RLDCs) shall be the responsibility of Generator only. Total No. of punching points shall be governed as per the relevant CERC/SERC regulations.
28	Approval & Permits	RFS , Section -III Project Scope and Technology Section	All approvals, permits and clearances required for setting up of the Solar Project including those required from Central/State Government and local authorities shall be in the scope of the SPD. The Project to be selected under this RFS provides for deployment of PV Technology. However, the selection of Project would be technology agnostic within PV technology and crystalline silicon or thin film or CPV, with or without Trackers can be installed.	<p>Request for amendment: As project location to be assigned by SPPD, local challenges & compliances if any to be taken care by SPPD.</p>	RFS provision shall prevail.