PTC INDIA LIMITED



Invites

Expression of Interest (EOI)

From

Developers of Solar Power with Energy Storage System

For

Procurement of 500 MW ISTS-Connected Solar PV Power Projects with 250 MW/1000 MWh Energy Storage Systems (ESS) on Long Term basis

EOI No. - PTC/MKTG./Solar plus BESS/01/2025 dated: 01.08.2025

DISCLAIMER

- 1. This Expression of Interest (EOI) document is not an agreement or offer by the issuer to the prospective Bidders or any other party. The purpose of the EOI is to explore the market potential and has no compulsions to enter into definitive Agreements.
- 2. This EOI document does not guarantee the conversion of this EOI into any definitive agreement. PTC in its sole discretion may reject any and all proposals made by the Participants, may change the conditions relating to the EOI, or cancel this EOI at any time without assigning any reason. PTC will have no obligation/liability towards anyone in the event of cancellation of this EOI.
- While this EOI document has been prepared in good faith, neither the issuer nor its employees make any representation or warranty express or implied as to the accuracy, reliability or completeness of the information contained in this EOI document.
- 4. Neither the PTC nor any of its employees will have any liability to any Bidder or any other person under the law of contract, tort, the principles of restitution or unjust enrichment, or otherwise for any loss, expense, or damage which may arise from or be incurred or suffered in connection with anything contained in this EOI document, any matter deemed to form part of this EOI document, the process, the information supplied by or on behalf of PTC or its employees, or otherwise arising in any way from the selection process for the said supply of power.
- 5. PTC reserves the right to accept or reject any or all applications, and cancel/withdraw the EOI process without assigning any reason whatsoever and in such case, Participant shall not have any claim arising out of such action.

NOTICE INVITING EXPRESSION OF INTEREST (EOI)

Procurement of Power by PTC from Solar Generators with ESS on Long Term (25 years) basis.

1. Introduction

PTC India Ltd. (formerly known as Power Trading Corporation of India Limited) is the leading provider of power trading solutions in India. PTC India Ltd. was incorporated in 1999 as a Government of India initiated Company, co-promoted by Four Power Sector PSUs namely NTPC, PGCIL, PFC, and NHPC. PTC India Limited's primary focus is to develop a commercially vibrant power market in the country and undertake the trade of power to achieve economic efficiency and security of supply. Therefore, PTC has a tri-fold mandate:

- 1. To optimally utilize the existing resources to develop a full-fledged efficient, and competitive power market.
- 2. To attract private investment in the Indian power sector.
- 3. To encourage trade of power with neighboring countries.

The pioneering service of the Company led to the recognition of "Power Trading" as a distinct licensed activity in the Electricity Act 2003. PTC holds a Category I license from Central Electricity Regulatory Commission (CERC), the highest category with permission to trade unlimited volumes. PTC has maintained the largest market share since its inception and No. 1 power trading company in the last 26 years of operations with its innovative products and services. PTC has been able to add value to its customers by providing holistic services based on evolving needs of the clients.

PTC has in its portfolio Long-term Power Purchase Agreements (PPAs) with generators (IPPs) & cross border for a cumulative capacity of about 10 GW. Most of them are already tied up & operational. These projects are primarily based on domestic coal, imported coal, gas, hydro, and renewable energy resources. PTC also trades power on the medium term, short term, and power exchanges with consumers' profiles varies from large Utilities/Discoms to small open access consumers (C&I). PTC has dominant market position in all the market segments i.e ST, LT, MT and Exchange trades. PTC, with its long track record and strong connect with utilities has effectively managed the risks associated with power trading business. During FY 2024-25, PTC has traded volumes of around 82 BUs which includes long term, medium term, cross border, short term, and power exchange.

PTC has also leveraged on its strong balance sheet and high net worth for obtaining working capital limits from the bank. PTC has earned a profit after tax of Rs. 976.24 Cr. for FY 2024-25 and Trading Volumes of around 82 Billion Units. ICRA and CRISIL both have assigned long-term "AA-/stable" rating to the company.

2. Background and Objective of the EOI

India is running one of the world's biggest renewable energy transition program, in order to fight climate change, the Prime Minister has also pledged to increase the country's renewable energy capacity to 500 GW by 2030.

To achieve these humongous capacity addition targets, besides other options, we feel that market-based products will be required.

The main purpose of this Expression of Interest (EoI) is to mitigate the intermittent nature of solar energy by ensuring the availability of clean power not just during the day but also during peak evening hours or times of low solar output. By integrating battery storage, the configuration allows for reliable renewable energy supply, which is increasingly vital for utilities, industries, and government bodies striving to fulfill their clean energy goals and Renewable Purchase Obligations (RPOs).

Through this EOI PTC is exploring market interest in procuring power at a firm tariff with onward obligation for the sale of power through any Long Term/Medium Term/Short Term/Power Exchange or any other market/product lies with PTC. The ownership of green component/REC, if any, shall also be with PTC only. PTC is in discussion with prospective Utilities/industries/other consumers to Aggregate the demand.

This EOI has been floated for the procurement of solar power with BESS from interested developers on long-term basis. At a later stage, based on the EOI response, PTC may sign the bilateral PPA with the most competitive source. The terms and conditions of the PPA except those provided in this EOI, will be similar to the PPA issued by SECI as per standard competitive bidding guidelines. However, Company reserves its right to approve the above PPA including commercials.

Prior to signing the PPA, technical discussions/ clarifications/presentations may be held with the most competitive developer.

3. Participant's Eligibility Condition

- The Participant shall be a solar generation company. The Participant may be a single Company or a group of Companies ("Consortium") coming to implement the Solar Energy Project with BESS configuration. A Company registered in India, having CIN, GSTIN, and PAN shall be eligible to participate in the EOI.
- The Participant shall have commercially operational Solar Generating plants with a cumulative capacity of at least 250 MW within India and/or abroad.

- Net worth of the Participant shall be more than or equal to INR 1,42,00,000/MW (Indian Rupees One Crore and Forty-Two Lakhs /MW) of the quoted capacity, as on the last date of previous Financial Year, i.e. FY 2024-25 or as on the day at least 7 days prior to the bid submission deadline. The Participant shall provide the document along with the offer in support of Net Worth. Net-Worth to be considered shall be the total Net-Worth as calculated in accordance with the Companies Act, 2013 and any further amendments thereto.
- A minimum annual turnover of INR 80,47,000/ MW (Indian Rupees Eighty Lakhs and Forty-Seven Thousand/MW) of the quoted capacity during the previous financial year, 2024-25 or as on the day at least 7 days prior to the bid submission deadline.
- Entities with the start date of Connectivity on or before 30th June 2028 only shall be eligible to apply.
- A Bidder, including its Parent, Affiliate or Ultimate Parent or any Group Company shall submit a single bid offering a minimum quantum of cumulative Contracted Capacity of 50 MW and a maximum quantum of 500 MW, in the prescribed formats. The Projects shall be quoted in multiple of 50 MW only.

4. Brief Scope of the Power Procurement

Brief scope of power procurement by PTC under this EOI is as under:

S.No.	Scope	Details
1.	Procurer	PTC India Limited, 2 nd Floor, NBCC Tower, 15 Bhikaji Cama Place, New Delhi – 110066.
2.	Broad Scope	The Projects to be selected under this EoI provide for the deployment of Solar Photovoltaic Technology, along with Energy Storage System. However, the selection of Projects would be technology agnostic.
		 ESS of at least 0.5 MW/2 MWh capacity for 1 MW Project Capacity shall mandatorily be installed as part of the Project. It is clarified that ESS charged using a source other than solar power would not qualify as solar power. For avoidance of any doubt, it is hereby clarified that ESS should be owned by the SPD and co- located.
		• The SPD shall configure the project with the objective of supplying solar power to PTC. Accordingly, the project capacity, i.e. the Installed Capacity shall mean the rated capacities of the Solar Power Project and ESS components, in the following configuration:

3.	Project	Solar: 500 MW ESS: 250 MW/ 1000 MWh The project should be co-located and fulfill all the criteria's as per the extant Government Orders/ Notifications so as the project is eligible for 100% Transmission Charges Waiver. The solar PV modules and solar PV cells used in the Project shall be sourced only from the models/Cells and manufacturers included in the List-I (for solar PV modules) and List-II (for solar PV cells) under the "Approved List of Models and Manufacturers" as published by MNRE and valid as on the date of invoicing of such modules. Ownership of the Green Attributes/REC shall be with PTC. The Projects shall be located at the locations chosen by the
	Location	Bidder/SPD at its own discretion of cost, risk and responsibility.
4.	Grid Connectivity	The Project should be designed for interconnection with the ISTS in accordance with the prevailing CERC regulations.
		The responsibility of getting the ISTS connectivity shall entirely be of the SPD and shall be at the cost of the SPD, in line with applicable regulations.
		The SPD shall be required to follow the Detailed Procedure as issued by CERC/CTU under the General Network Access under the Central Electricity Regulatory Commission (Connectivity and General Network Access to the Inter-State Transmission System) Regulations, 2022. Solar PV Power Project shall comply with all the technical requirements specified under Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007, including subsequent amendment and clarifications issued thereto, as well as other Rules/Regulations issued by CERC/CEA and as amended from time to time.
		The Bidders are free to choose the ISTS substations for Interconnection of the Project to the Grid on a pan-India basis and must have status of connectivity on or before 30 th June'2028.
		The SPD shall comply with CERC regulations on Forecasting, Scheduling and Deviation Settlement, as applicable and are responsible for all liabilities related to Connectivity.
		Reactive power charges and charges against power drawn from grid as per CERC regulations, shall be payable by SPD as per

provisions of PPA. Metering arrangement for the Project shall have to be adhered to in line with the relevant provisions of the PPA.

- All charges and losses related to discharging the ESS component up to Delivery Point shall be borne by the SPD and the Buying Entity shall bear the applicable charges and losses during discharge of the ESS component beyond Delivery Point.
- Treatment of power supplied from the ESS component, with respect to waiver of ISTS charges and losses, shall be governed by the applicable Rules/Orders issued by the Ministry of Power/MNRE, read in conjunction with CERC's Order and Regulations notified in this regard. Further, it is clarified that in case commencement of power supply from the ESS component of the Project configuration gets delayed beyond the applicable date of waiver of ISTS charges and losses, due to reasons solely attributable to the SPD, the liability of inter-state transmission charges and losses shall be borne by the SPD.

5. Criteria for Energy Supply

- For supply of power in hours other than Peak Hours, the Bidders will declare the annual CUF of the Projects.
- The SPDs will be allowed to revise the same once within first year after the commencement of power supply from the full Project Capacity.
- The revised CUF shall be greater than the CUF initially quoted by the Bidder. Thereafter, the CUF for the Project shall remain unchanged for the entire term of the PPA. The declared/revised annual CUF shall in no case be less than 19% and shall not be more than 30%. The SPD shall maintain generation so as to achieve annual CUF within + 10% and -15% of the declared value till the end of 10 years from SCSD, subject to the annual CUF remaining minimum of 15%, and within +10% and -20% of the declared value of the annual CUF thereafter till the end of the PPA duration of 25 years.
- The Solar power (including ESS component charged with solar power) bought under this EoI shall be eligible for RPO compliance. The ESS capacity used in the Project shall be utilized by the Buyer to fulfill the respective Energy Storage Obligations (ESO) as per the Government of India's orders and notifications.

6. Assured Peak Power Supply

- PTC shall intimate the hours (which shall be 4 hours during a day) during which it intends to draw the energy from the ESS on daily basis latest by 6:00 AM of that day. PTC shall choose the 4 hours such that there is a continuous discharge from the ESS at least for 1 hour. The SPD is mandated to deliver 2000 kWh of energy per MW rated Project capacity of the project in AC terms, during Peak Hours as per the schedule given by the PTC (i.e., For each 100 MW of project capacity, SPD shall supply up to 200,000 kWh of energy during Peak Hours), on a daily basis.
- "Peak Hours" in this case, shall be defined in this Agreement. For each 100 MW of Contracted Capacity, as per the PPA, PTC may specify off-take of amount of power during any 4 hours out of the Peak Hours for off-take of 200,000 kWh of energy, on a daily basis.
- It is clarified that PTC is mandated to off-take the stored energy on a daily basis, and may choose to schedule peak power supply as per its requirement. In case of non-receipt of peak hours schedule from the PTC by 6:00 AM in the morning on a particular day, SPD shall supply the peak power as per its own discretion during the Peak Hours of that day.
- Any shortfall in supply of Peak Power below the requirement of PTC as per this clause, shall attract separate penalties and the same shall be dealt as per the PPA.
- The SPD shall offer power such that 100% of the annual energy offered corresponds to Solar power. The SPD can, however, source up to 5% RE power (in energy terms), on annual basis, from the green market sources/bilateral agreements, towards meeting the supply conditions stipulated in the EoI/PPA.
- In order to allow optimization of operation of ESS component, the SPD is allowed to use the ESS component for any other application (including market operations such as third party sale or sale in power exchange) within the availability of connectivity, without requiring No Objection Certificate (NOC) from PTC, during Off-Peak Hours (hours other than Peak Hours). It may be noted that at any instance of energy supply from the Project, priority shall be accorded by SPD to meet the capacity requirements as per PPA, before selling any quantum in the open market. Any instance of third-party sale of power from the

			Project by the SPD, while the supply commitments under the PPA remains unfulfilled, shall constitute a breach of SPD's obligations under the PPA and render the SPD liable for penalty @1.5 times of extant market rate/kWh (reference rate being the highest of the applicable rates in the DAM/G-DAM/RTM of all the Power Exchanges operating in India on that day) for the quantum of such sale. This penalty will be levied over and above the penalty for shortfall in meeting the CUF requirement during hours other than Peak Hours and supply of energy during Peak Hours.
7.	Shortfall in Energy Supply	•	For supply of power in hours other than Peak Hours, if for any Contract Year, it is found that the SPD has not been able to supply minimum energy corresponding to the value of annual CUF within the permissible lower limit of CUF declared by the SPD, on account of reasons primarily attributable to the SPD, such shortfall shall be dealt as per the applicable provisions of the PPA. Further, shortfall in supply of power during the Peak Hours shall be dealt separately, on a monthly basis, and the same shall also be dealt as per the applicable provisions of PPA.
8.	Part Commenceme nt of Supply of Power	•	Part Commencement of supply of power from the Project shall be accepted by PTC subject to the condition that the minimum capacity for acceptance of first and subsequent part(s) shall be 50 MW along with proportionate ESS component (with the last part being the balance Contracted Capacity), without prejudice to the imposition of penalty, in terms of the PPA on the part which has not yet commenced supply of power. For example, in case the Contracted Capacity is 300 MW, then the minimum capacity for acceptance of the first part commencement of power supply shall be 50 MW Solar PV Power Project along with a minimum ESS component of 25 MW/100 MWh.
9.	Commenceme nt of Supply schedule and Penalty for Delay in Commenceme	•	The Scheduled Commencement of Supply Date (SCSD) for supplying power from the full Project capacity shall be the date as on 24 months from the Effective Date of the PPA (for e.g. if Effective Date of the PPA is 30.09.2025, then SCSD shall be on or before 30.09.2027).
	nt of Supply	•	The maximum time period allowed for commencement of supply of power from the full Project capacity with applicable penalty, shall be limited to the date as on 6 months from the SCSD or the extended SCSD (if applicable).
		•	In case of delay in commencement of supply of power beyond the SCSD/ extended SCSD until the date as per the Clause above, as part of the penalty, the total PBG amount for the Project shall

			be encashed on pro-rata basis and proportionate to the
10.	Expected CUF for Solar	•	Contracted Capacity that has not commenced supply of power. To be quoted by the developer in the range between 19% to 27%.
11.		•	On a Monthly basis
12.	Due Date	•	45 days after a Monthly Bill
13.	Rebate	•	1.5% for payment within 10 days from the date of billing
14.	Performance Bank Gurantee (PBG)	•	The Successful Bidder shall submit a Performance Bank Guarantee (PBG) for a value @ INR 35,60,000/MW/Project (Indian Thirty-Five Lakhs and Sixty Thousand /MW/Project) prior to signing of PPA.
15.	Power Purchase Agreement (PPA)	•	PTC shall enter into the Power Purchase Agreement (PPA) with Bidders selected based on this EoI. A copy of standard PPA to be executed between PTC and the selected SPD will be made available on PTC's website.
		•	The draft PPA is on the same lines as other standard REIA PPAs. The PPAs shall be valid for a period of 25 years from the SCSD. Any extension of the PPA period beyond 25 years shall be through mutual agreement between the SPD and PTC.
16.	Penalty for shortfall	•	Penalty will be equal to 1.5 times the Applicable Tariff for the shortfall in energy terms.
17.	Late Payment Surcharge	•	In the event of delay in payment of a Monthly Bill beyond the Due Date, a Late Payment Surcharge shall be payable by on the outstanding payment, at the base rate of Late Payment Surcharge applicable for the period for the first month of default. "Base rate of Late Payment Surcharge" means the marginal cost of funds based lending rate for one year of the State Bank of India, as applicable on the 1st April of the financial year in which the period lies, plus five percent (500 bps) and in the absence of marginal cost of funds based lending rate, any other arrangement that substitutes it, which the Central Government may, by notification, in the Official Gazette, specify.
18.	Payment Security Mechanism	•	PTC shall provide to the SPD, in respect of payment of its Monthly Bills and/or Supplementary Bills, a monthly unconditional, revolving and irrevocable letter of credit ("Letter of Credit") equivalent to 110% of the estimated average monthly billing.
19.	Other Terms & Conditions	•	Shall be as per the standard REIA PPAs. The Technical Configuration of the Solar and BESS shall be as per Annexure of the standard REIA PPAs.

5. INSTRUCTIONS TO THE PARTICIPANTS

The Participants are required to submit the EOI application complete in all respects in soft copy to the following email address: **bharat.sharma@ptcindia.com**

• Date of EOI : 1st August, 2025

• Last date of seeking clarifications : 11th August, 2025

• Reply to queries/ clarifications : 22nd August, 2025

• EOI Submission End Date : 2nd September, 2025

• EOI Validity :120 days from the date of submission.

Nodal Person for Seeking Clarifications:

Bharat Sharma
Vice President (Marketing),
PTC India Limited,
(formerly known as Power Trading Corporation of India Limited)
2nd Floor, 15 Bhikaji Cama Place, New Delhi – 110066.
Mobile No. +91 9971393789

Email: bharat.sharma@ptcindia.com

Annexures:

Following are the annexures required to be filled and submitted by the Participant.

Annexures- A: Application Form

Annexures- B: Participant's Profile

Annexures- C: Price offer

Annexures- D: Any other Information, if required

Annexure - A

(EXPRESSION OF INTEREST: APPLICATION FORM)

(To be submitted on Company's Letter Head)

Ref No.	Date:
PTC INDIA Limited, 2 nd Floor, NBCC Tower, 15 Bhikaji Cama Place, New Delhi- 110066	
Sub: Expression of Interest (EOI) for the Supply of Solar power wit (ESS) from Solar Power Developers (Solar + ESS).	h Energy Storage System
This has reference to your EOI document no dated (Name of the Bidder), hereby Interest (EOI) from Solar Power Project with ESS for supplying the India Ltd. for the period of 25 years and in accordance with the condidocument.	submit its Expression of Renewable Energy to PTC
	(Signature)
(Name and Designat	tion of Authorized Person)
	(COMPANY SEAL) .

Annexure – B PARTICIPANT PROFILE

S. No.	Particular	Details
1.	Name of the Participant Company	
2.	CIN of the Participant	
3.	Date of Registration in India	
4.	Address for Correspondence	
5.	Name of the Authorized Person	
6.	Designation	
7.	E-Mail Address	
8.	Telephone	Mobile No: Fax Number:
9.	Likely Project Details	Solar:MW ESS:MW/ MWh
10.	Month-wise Generation Profile of the Solar plus BESS as applicable	(Expected month-wise generation in MUs for 12 months of a year) Solar:MUs (Solar Hours) BESS:Mus (Peak Hours)
11.	Month-wise Generation Profile during a typical day of the month	(To be plotted on hourly basis for a day in particular month i.e. 12 generation profiles to be submitted)
12.	Additional attachment	 Last Published Audited Annual Report. Document related to Net Worth. Brief Corporate Profile along with Operational capacities (including financial details and shareholding pattern)

Signature of Authorized Person with company s	eal
Name:	•••••
Designation:	••••

Annexure C PRICE OFFER FROM SOLAR PROJECT WITH ESS

Total Capacity of the Project		
Capacity Offered to PTC (MW/MWh)		
Expected Commencement of Power Supply		
Delivery Point		
Start Date of Connectivity		
Connectivity details with CTU (including the Connectivity Letter)		
Quoted CUF for solar (%) (Value will be considered at the time of signing the PPA)	%	MUs
Term of the Agreement		
Tariff (Rs./Unit)		
Any other information		

Company Seal & Signature of the Authorized Representative			
Name:			
Designation:			

Annexure D				
(ANY OTHER INFORMATION)				
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