

Before the
MAHARASHTRA ELECTRICITY REGULATORY COMMISSION
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Case No. 88 of 2020

Case of The Tata Power Company Ltd – Distribution seeking approval for the Bidding Documents for long term procurement (25 years) of 225 MW capacity from grid connected Wind-Solar Hybrid Power Projects through competitive bidding process for meeting its Renewable Purchase Obligations

The Tata Power Company Ltd – Distribution

..... Petitioner

Coram
I.M. Bohari, Member
Mukesh Khullar, Member

Appearance

For the Petitioner

: Sh. Peyush Tandon (Rep.)

ORDER

Date: 1 June, 2020

1. The Tata Power Company Ltd – Distribution (**TPC-D**) has filed the present Petition on 14 May, 2020 under Regulation 19 of Maharashtra Electricity Regulatory Commission (Renewable Purchase Obligation, its compliance and implementation of REC framework) Regulations, 2019 (**RPO Regulations, 2019**) and Regulation 92 and 94 of Maharashtra Electricity Regulatory Commission (Conduct of Business) Regulations, 2004 seeking approval for the Bidding Documents for long term procurement (25 years) of 225 MW capacity from grid connected Wind-Solar Hybrid Power Projects through competitive bidding process for meeting the Renewable Purchase Obligations (**RPO**) based on National Wind-Solar Hybrid Policy dated 14 May, 2018.

2. TPC-D's main prayers are as follows:

- a) To approve the Bidding Documents (Draft RFS and Draft PPA) prepared for procurement of wind solar hybrid power from grid connected wind solar hybrid power projects.*
- b) To accord approval for initiation of competitive bidding process for procurement of 225 MW Hybrid power from grid connected Wind Solar Hybrid Power Projects through competitive bidding process (To be conducted through appropriate E-procurement platform).*
- c) To consider the procurement of such power from grid connected Wind Solar Hybrid Power projects as purchase towards meeting the total Renewable Purchase Obligation (RPO) of Tata Power-D.*
- d) To approve publishing of Notice to Invite tender (NIT) through two national e-newspaper if Tata Power-D is unable to publish it through print newspaper due to the current COVID-19 situation.*

3. TPC-D in its Case has stated as follows:

- 3.1. The Commission notified the RPO Regulations, 2019 on 27 December 2019 for the control period starting from FY 2020-21 to FY 2024-25. As per the prevalent Regulations, TPC-D as a Distribution licensee has to procure certain percentage of its power requirement through Renewable Sources to meet its RPO.
- 3.2. National Tariff Policy, 2016 (**NTP**), was notified by the Ministry of Power (**MoP**) on 28 January, 2016. As per Para 6.4 (2) of the NTP, States are encouraged to procure power from RE sources above the notified capacity through competitive bidding to keep the Tariff low. The relevant portion of the NTP 2016 is quoted below:

“States shall endeavor to procure power from Renewable Energy (RE) sources through Competitive Bidding to keep the tariff low, except from the waste to energy plants. Procurement of power by Distribution Licensee from RE sources from projects above the notified capacity shall be done through Competitive Bidding process, from the date to be notified by the Central Government”.

- 3.3. Further, Section 5.12.2 of the National Electricity Policy, 2005 (**NEP**) provides for Competitive Bidding in Renewable Energy. The same is reproduced below:

“...Progressively the share of electricity from non-conventional sources would need to be increased as prescribed by State Electricity Regulatory Commissions. Such purchase by distribution companies shall be through Competitive Bidding process....”

3.4. Regulation 21.6 of the MERC MYT Regulations, 2019 provides for the following:

"The Commission shall consider a Petition for approval of power procurement agreement or arrangement having regard to the approved power procurement plan of the Distribution Licensee and the following factors:

- (a) Requirement of power procurement under the approved power procurement plan;*
- (b) Adherence to a transparent process of bidding in accordance with guidelines issued by the Central Government under Section 63 of the Act or Adherence to the terms and conditions for determination of Tariff specified under Part E of these Regulations;*
- (c) Competitiveness of the Tariff vis-a-vis the Tariff prevalent in the market and/or Tariff discovered through competitive bidding under Section 63 of the Act;*
- (d) Availability (or expected availability) of capacity in the intra-State transmission system for evacuation and supply of power procured under the agreement or arrangement;*
- (e) Need to promote co-generation and generation of electricity from renewable sources of energy.*

3.5. Considering the initiatives specified in the NTP/NEP to promote Renewable Power, the guidelines / policy issued by MoP to undertake the procurement of the renewable power through the competitive bidding route and MYT Regulations, 2019, TPC-D proposes to procure 225 MW capacity from grid connected Wind-Solar hybrid power projects under competitive bidding route for meeting its current and future RPO.

3.6. The bidding documents prepared by TPC-D are based on the Standard Bidding Guidelines issued separately for Solar and Wind power, National Wind Solar Hybrid Policy dated 14 May, 2018, draft bidding guidelines for Wind-Solar hybrid dated 11 October, 2019 and various Orders issued by the Commission from time to time.

3.7. TPC-D is seeking approval for the bid documents i.e. Request for Selection (**RfS**) and Power Purchase Agreement (**PPA**) and initiation of bidding process for the long-term procurement of power from grid connected Wind Solar Hybrid Power Projects for meeting its RPO.

3.8. TPC-D shall enter into PPA with the Bidder selected through the competitive bidding process for purchase of power from Wind-Solar hybrid power projects for a period of 25

years from the Commercial Operation Date based on the terms, conditions and provisions of the RfS.

- 3.9. The 225 MW hybrid quantum for which the bid has been called is kept in line with the RPO quantum approved by the Commission in MYT Order dated 30 March 2020 in Case No. 326 of 2019. The computation of the quantum is as following:

<i>In MUs</i>							
Particulars		FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	Total (MYT)
TPC-D Req @G<>T Periphery (InSTS Requirement)	A	4861	5031	5229	5459	5724	26304
Purchase from Hydro	B	710	710	710	710	710	3550
Sales excluding Hydro considered for meeting RPO	C=A-B	4151	4321	4519	4749	5014	22754
Total RPO Requirement (Non-Solar + Solar) in %	D	16.00%	17.50%	19.50%	22.00%	25.00%	
Total RPO Requirement (Non-Solar + Solar)	E=C*D	664	756	881	1045	1253	4600
Previous Year Shortfall of Solar Obligation	F	101	0	0	0	0	101
Total RE Purchase from existing sources	G=N+O+T	322	601	563	563	553	2601
Expected RE purchase from Hybrid power	H=P+U	0	0	690	690	690	2070
REC Purchase/short term power	I	250	0	0	0	0	250
For theYear RPO (Non-Solar+Solar) shortfall/(Surplus)	J=E+F-G-H-I	193	155	-372	-208	11	
Cummulative RPO (Non-Solar+Solar) shortfall/(Surplus)	K	193	349	-23	-231	-220	

- 3.10. Hence, TPC-D is proposing to procure the 225 MW Wind – Solar hybrid power to meet RPO through Competitive Bidding Process.

- 3.11. TPC-D shall also be incorporating the deviations/changes for the above-mentioned tender which were accorded approval by the Commission vide Order dated 2 August, 2019 in Case No. 136 of 2019 and Order dated 4 December, 2019 in Case No. 292 of 2019 for the long term procurement of 150 MW Solar Power from Grid Connected Solar PV Projects through Competitive Bidding (Followed by E- reverse Auction). The following deviations were approved by the Commission in the said Orders:

Clause	Clause as per MoP guideline	Deviation Sought	Rationale	Commission's Reply
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Clause	Clause as per MoP guideline	Deviation Sought	Rationale	Commission's Reply
Change in Law	<p>"Change in Law" shall refer to the occurrence of any of the following events after the last date of the bid submission, including: (i) the enactment of any new law; or (ii) an amendment, modification or repeal of an existing law; or (iii) the requirement to obtain a new consent, permit or license; or (iv) any modification to the prevailing conditions prescribed for obtaining an consent, permit or license, not owing to any default of the Solar Power Generator; or (v) any change in the rates of any Taxes, Duties and Cess which have a direct effect on the Project.</p> <p>However, Change in Law shall not include any change in taxes on corporate income or any change in any withholding tax on income or dividends.</p>	<p>"Change in Law" shall refer to the occurrence of any of the following events after the last date of the bid submission, including: (i) the enactment of any new law in India; or (ii) an amendment, modification or repeal of an existing law in India; or (iii) the requirement to obtain a new consent, permit or license in India; or (iv) any modification to the prevailing conditions prescribed in India for obtaining an consent, permit or license, not owing to any default of the Solar Power Generator; or (v) any change in the rates of any Taxes, Duties and Cess in India which have a direct effect on the Project.</p>	<p>As the power from the Solar Power project shall be utilized for supply to the electricity to the consumers of India only, the Change in Law clause should be restricted to Indian Laws and regulations only.</p> <p>In order to minimize and optimize the number of claims and optimize the costs, energy and time, under this, we propose that if any change in law event results in change of project cost, it should result in impact equivalent to at least 1% of estimated revenue in contract year.</p>	Approved
Payment Security Fund	<p>The Procurer shall provide payment security to the Solar Power Generator through:</p> <p>(b) Payment Security Fund, which shall be suitable to support</p>	Clause not to be used.	<p>Tata Power has a good payment record to the banks and the its creditors. Hence Tata Power-D requests the Hon'ble MERC to allow removing the</p>	Approved

Clause	Clause as per MoP guideline	Deviation Sought	Rationale	Commission's Reply
	payment for at least 3 (three) months' billing of all the Projects tied up with such fund;		clause regarding Payment Security Fund as a Letter of Credit has already been provided for in the Draft PPA as a payment security mechanism.	
Land Identification	The Bidder shall identify 100% land required for the project at the time of submission of bid. It is clarified that the Bidder shall not be allowed to change the location of the project after the submission of bid.	The Bidder shall identify 100% land required at the time of bid submission. However, the Bidder shall be allowed to change the location of the project once at the time of achievement of Financial Closure from the date of execution of the PPA	The bidders explained the difficulties in land acquisition process and indicated that the proposed modification will not impact the commissioning schedule as per the bid documents. Similar clauses have also been referred in SECI (Dondaicha Solar Park 250 MW), (1200 MW), NTPC (1200 MW) and MSEDCL (500 MW) tender documents.	Approved
Power Purchase Agreement	The PPA period should thus be not less than 25 (twenty-five) years from the date of the Scheduled Commissioning Date (SCD)	Term of PPA is 25 years from Commercial Operation Date for new projects and 25 years from signing of PPA for existing projects	The purpose of this clause is to purchase power for 25 years. If there is delay in the COD (with respect to SCOD), the effective period gets curtailed by this delay while a tariff period of 25 years is desired.	Approved

3.12. The key highlights of the Wind – Solar hybrid Tender documents and the deviations sought, from the Commission, in the bidding document are as follows:

S. No.	Clause	Approval sought	Rationale
1.	RfS document fees	INR 25,000/- (plus applicable GST)	TPC-D has set the tender document fee in line with similar tenders floated by other Indian states and SECI.
2.	Processing fees	INR 3 lakhs (plus applicable GST)	TPC-D has set the tender document fee in line with similar tenders floated by other Indian states.
3.	Financial Closure	Within 12 months from the execution of the PPA	TPC-D has set the Financial Closure according to the previous solar bid and solar guideline.
4.	Net worth	The Net-Worth of the Bidder as per the latest available audited financial statements shall not be less than INR 1.0 Crores per MW (of the capacity quoted).	TPC-D has set the Net Worth in line with the SECI tenders
5.	Liquidity	A minimum annual turnover of INR 75 Lakhs per MW of the quoted capacity as per the latest available audited financial statements. It is hereby clarified that “Other Income” as indicated in the annual accounts of the Bidder shall not be considered for arriving at the annual turnover.	TPC-D has set the Liquidity in line with the SECI tenders
6.	Delivery Point/Inter connection Point/ Metering Point	Delivery/Interconnection Point/Metering Point to be at Maharashtra STU Periphery.	Delivery/Interconnection Point/Metering Point has been specified for clarity.
7.	SCOD	Within 18 months from the date of execution of the PPA	TPC-D has kept the SCOD in line with the previous solar bid and solar guideline
8.	Capacity Utilization Factor (CUF)	Not less than 35% at the Delivery Point.	SECI tenders and draft guideline of Wind Solar Hybrid dated 11.10.2019 has kept the CUF minimum threshold at “not less than 30%”. Solar and wind power have already reached a CUF of 26% and 35% respectively. Therefore, keeping the

S. No.	Clause	Approval sought	Rationale
			<p>minimum threshold of Hybrid CUF at 30% is not advantageous.</p> <p>Given the RPO requirement of TPC-D i.e. 700 MU, the CUF limit has been increased to “not less than 35%” at the Delivery Point.</p>
9.	Definition of Project/Wind Solar Hybrid Power Project/Power Project	shall mean the Hybrid Power Project, comprising Solar PV and Wind Power generation facilities having a single point or separate points of injection in to the grid at the Delivery Point/Interconnection Point/Metering Point at an ISTS station or in case of sharing of transmission lines, by separate injection at pooling point and having control systems and metering. The Project shall include all units/ modules and auxiliaries and associated facilities, bay(s) for transmission system in the switchyard, dedicated transmission line up to the Delivery Point and all the other assets, buildings/structures, equipment, plant and machinery, facilities and related assets required for the efficient and economic operation of the power generation facility, whether completed or at any stage of development and construction or intended to be developed and constructed for the purpose of supply of power to Tata Power-D	The Hybrid Power Project will be designed for inter-connection with STU/CTU substation either directly or from pooling station where other projects are also connected, through a transmission network as per applicable regulations at the appropriate voltage. Definition has been extracted from Amendment dated 19.03.2020 to SECI RfS for 1200 MW ISTS connected Wind-Solar Hybrid Power Projects (Tranche III) RfS No. SECI/C&P/HPD/T3/1200MW/012020 dated 14.01.2020.
10.	Capacity configuration of the Project	In the proposed Wind Solar Hybrid Project, wind capacity shall be capped at 50% of the total capacity of the Wind Solar Hybrid Project	<p>Given the RPO requirement and the load curve of TPC-D, the wind power has been capped at 50% of the capacity.</p> <p>TPC-D will not be able to absorb excess wind power given its load curve.</p>

- 3.13. TPC-D shall conduct the bidding through a suitable platform for E-procurement in consultation with Discovery of Efficient Electricity Price Portal (**DEEP**) of MSTC and Bharat Electronic Portal, the details of which would be mentioned in the final RfS document after finalization.
- 3.14. TPC-D shall be endeavoring to publish the Notice to Invite tender (NIT) through two national e-newspaper if it is unable to publish it through print newspaper due to the current COVID-19 situation. TPC-D shall also be uploading the NIT on its website to fulfil the compliance as per the guideline procedure.
- 3.15. TPC-D requests the Commission to approve the draft RFS and draft PPA.
- 3.16. On completion of the bidding process followed by e-Reverse Auction, TPC-D shall again approach to the Commission for adoption of Tariff discovered through the Competitive bidding process under Section 63 of the Electricity Act, 2003 (**EA**).
4. At the e-hearing through video conferencing held on 26 May, 2020, the representative of TPC-D reiterated their submissions in the Petition. He further submitted that as per the directives of MNRE, the requirement of ceiling tariff has been done away in the proposed tender.

Commission's Analysis and Rulings

5. The Commission notes that TPC-D has projected that it will require about 690 MUs of Renewable Energy to meet its RPO Targets for the period from FY 2021-22 to FY 2024-25, as notified by the Commission. Accordingly, TPC-D has proposed to procure the 225 MW of Wind-Solar Hybrid power project through competitive bidding process.
6. The Commission notes that in its MYT Petition in Case No. 326 of 2020, TPC-D had proposed to procure additional 125 MW solar power for meeting its RPO. On this proposal, the Commission in its MYT Order dated 30 March 2020 has ruled as follows:

“Additionally, TPC-D has proposed to procure an additional capacity of 125 MW to meet the entire Solar RPO in the Control Period. Considering 2 years lead time required (6 months bidding process + 18 months installation and commissioning) for procuring RE power through competitive bidding, the Commission has considered RE power purchase from new sources from FY 2022-23 onwards. TPC-D should approach the Commission for adoption of tariff under Section 63 of EA well in advance considering time required for the actual power in FY 2022-23.”

However, instead of 125 MW solar procurement, TPC-D in present Petition has proposed 225 MW Wind-Solar Hybrid power procurement. As summarized in table at para 3.9 above, TPC-D has projected that with proposed procurement of 225 MW of Hybrid Power it will be able to comply with RPO for the 4th Control Period. The Commission is also aware of the fact that around 61 MW of TPC-D's Wind EPA (as mentioned in Case No. 89 of 2020) are expiring in this calendar year. Proposed Wind-Solar Hybrid power procurement would compensate such expiring Wind EPA. Hence, the Commission allows TPC-D to initiate process of procuring 225 MW Wind-Solar Hybrid Power through competitive bidding process.

7. TPC-D has submitted that it has prepared the bidding documents (RfS & PPA) in line with the Standard Bidding Guidelines issued separately for Solar and Wind power, National Wind Solar Hybrid Policy dated 14 May, 2018, draft Bidding guidelines for Wind-Solar hybrid dated 11 October, 2019 and various Orders issued by the Commission from time to time.
8. The Commission notes that the Guidelines from the Central Govt. for Wind-Solar Hybrid projects are still in draft stage and hence the Commission has to take holistic view of other notified guidelines (wind and solar separately) and SECI's bid document for hybrid projects, to approve the deviations sought by TPC-D.
9. Clause no. 3.1.1 (b) & (c) of MoP Guidelines for Tariff Based Competitive Bidding Process for Procurement of Power from Grid Connected Solar PV Power Projects dated 3 August, 2017 and Clause no. 5.1 (b) & (c) of MoP's Wind bidding Guidelines dated 8 December, 2017 states that procurer shall inform the initiation of bidding process to the Commission and shall seek approval of the Appropriate Commission for deviations, if any, in the draft RfS and draft PPA. Further, the Clause no. 6.1 (b) & (c) of MNRE's draft Guidelines for Tariff Based Competitive Bidding Process for Procurement of Power from Grid Connected Wind Solar Hybrid Projects also states the same. Accordingly, TPC-D has approached the Commission seeking approval for deviations in the Standard Bidding documents (RfS & PPA).
10. The Commission observes that apart from general changes, TPC-D has sought deviation in 3 parameters which are dealt as under:
 - 10.1. Financial Closure (FC):- TPC-D, in its Petition, has sought 12 months time period as SCOD, from the date of execution of PPA. As per the Draft Wind-Solar Hybrid Guidelines, this period had been provided as 7 months. The Commission notes that the bidding Guidelines for Solar projects provides this period as 12 months. Further, the SECI's RfS dated 14 January, 2020 for 1200 MW ISTS connected Wind-Solar Hybrid Power Projects (Tranche III) RfS No. SECI/C&P/HPD/T3/1200MW/012020 specifies

12 months time period for FC from effective date of PPA. TPC-D has also provided the rationale that the period for FC as 12 months has been set as per the recent Solar bid conducted by it. The Commission takes note of these factual aspects and accordingly allows 12 months period for FC from execution of PPA, as proposed by TPC-D.

- 10.2. Capacity Utilization Factor (CUF):- The Commission notes that TPC-D has specified CUF as *35% at the Delivery point*. The Draft Wind-Solar Hybrid Guidelines has specified this minimum limit as 30%. Further, the SECI's RfS dated 14 January 2020 has specified similar limit as per the Draft Guidelines. TPC-D has submitted that Solar and Wind power projects, individually have already attained CUF of 26% and 35% respectively and keeping threshold of 30% to Hybrid is not advantageous. Further, with the annual RPO of ~700 MUs from FY 2022-23 onwards, it has proposed to increase the CUF limit to 35% for 225 MW Wind-Solar Hybrid project.

Further in reply to the query whether it has explored the possibility of opting for Hybrid + Storage Tender with a higher CUF condition, TPC-D, in its reply dated 23 May, 2020 has clarified that bids for 225 MW capacity is based on National Wind-Solar Hybrid Policy dated 14 May, 2018 which provides for storage option and hence, bidders are free to offer capacities including storage.

The Commission also notes that in its RE Tariff Regulation, 2019, the Commission has specified minimum CUF as 28% and 30% for Solar and Wind Projects respectively. Therefore, the Hybrid projects which optimizes multiple resources has to outperform such individual CUFs. Accordingly, the Commission accords it approval for a minimum CUF of 35% at the Delivery Point for the 225 MW Wind-Solar Hybrid project.

- 10.3. Capacity configuration of the Project:- TPC-D has proposed that, given its load curve and RPO requirement, in the Draft RfS document, it has restricted the wind capacity to 50% the total capacity of the Wind Solar Hybrid Project.

The Commission observes that the as per the Wind-Solar Hybrid Policy, dated 14 May 2020, for a system to be recognized as hybrid, the rated power capacity of one resource shall be at least 25% of the other resource. The relevant excerpts from the said policy is reproduced below:

“ 4.3...

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However, a wind-solar plant will be recognized as hybrid plant if the rated power capacity of one resource is at least 25% of the rated power capacity of other resource.”

Further, the Draft Wind-Solar Guidelines also provides for similar configuration. The relevant Clause from the Draft Guidelines is reproduced below:

“3. APPLICABILITY OF GUIDELINES

3.1. These Guidelines are being issued under the provisions of Section 63 of the Electricity Act, 2003 for long-term procurement of electricity through competitive bidding process, by the Procurer(s)', from grid connected Wind Solar Hybrid Power Projects ('HPP') having, (a) individual size of 5 MW and above at one site with minimum bid capacity of 25 MW for intra-state projects; and (b) individual size of 50 MW and above at one site with minimum bid capacity of 50 MW for inter-state projects, subject to the condition that the rated power capacity of one resource is at least 25% of the rated power capacity of other resource. Thus, for a 100 MW project to be treated as hybrid project, the minimum resource (wind or solar) should not be less than 20 MW.”

TPC-D has submitted that to suite its demand pattern, it is capping the maximum limit for wind projects to 50% of the total capacity. The Commission notes that this ceiling has been provided on the 'maximum limit' which is still higher than the minimum threshold as provided in the Wind-Solar Hybrid Policy and in the Draft Wind-Solar Hybrid Guidelines. Accordingly, as TPC-D has put this condition to absorb Hybrid Power within its load curve, the Commission accords it approval for the deviation of limiting wind capacity as 50% of the total capacity, as sought by TPC-D.

11. The Commission also notes that in table at para 3.12 above, TPC-D has proposed various fees/charges for RfS Document, conditions of Net worth, requirement of Liquidity etc. in the bidding document. The Commission assumes that all such charges and financial requirement are proposed by TPC-D after proper due diligence and are accordingly approved by the Commission.
12. TPC-D has also submitted that due to the current COVID-19 situation, if it is unable to publish the NIT through print newspaper, it shall be allowed to publish the NIT through e-newspaper. During the e-hearing, the Commission conveyed that there are certain print newspaper which are still available despite the prevalent COVID-19 situation and directed TPC-D to explore them and ensure wide publicity is given for its NIT to get maximum number of bidders.
13. The Commission also takes a note that in line with recent Bids of SECI, TPC-D has not proposed any ceiling rate for its proposed procurement however process of reverse auction

will be conducted post first round of submission of financial bids and all eligible bidders would be allowed to participate in the process.

14. Further, there were typographical errors in the draft RfS document which was communicated to TPC-D vide email dated 21 May, 2020. TPC-D in its reply dated 23 May 2020, submitted the rectified RfS document. The Commission directs TPC-D to ensure that there are no further errors in the final Bidding documents to be published.

15. Hence, the following Order:

ORDER

1. **The Case No. 88 of 2020 is allowed.**
2. **The Commission accords its approval to the bidding documents for long term procurement (25 years) of 225 MW capacity from grid connected Wind-Solar Hybrid Power Projects through competitive bidding process as submitted by The Tata Power Company Ltd – Distribution and allows the deviations as dealt at above paras 10, 11 and 12.**
3. **The Commission directs TPC-D to rectify all errors/repetitions in the Bidding document before finalizing the Bidding process.**

Sd/-
(Mukesh Khullar)
Member

Sd/-
(I.M. Bohari)
Member


(Abhijit Deshpande)
Secretary

