

**BEFORE THE HARYANA ELECTRICITY REGULATORY COMMISSION
BAYS No. 33-36, SECTOR-4, PANCHKULA- 134112, HARYANA**

Case No. HERC/PRO – 44 of 2020

DATE OF HEARING : 30.09.2020
DATE OF ORDER : 30.09.2020

IN THE MATTER OF:

Application under Section 86(1) (b) and Section 62 of the Electricity Act, 2003 for approval of source for 10 MW solar power on short term basis.

Petitioner

Haryana Power Purchase Centre, Panchkula (HPPC)

Present On behalf of the Petitioner, through Video Conferencing

Shri Vikas Kadian, Xen, HPPC

Quorum

**Shri D.S. Dhesi,
Shri Pravindra Singh Chauhan,
Shri Naresh Sardana,**

**Chairman
Member
Member**

ORDER

Brief Background of the case

1. HPPC has filed the present petition seeking approval to procure power from M/s. LR Energy on short term basis from its 10 MW grid interactive solar power project at Village Dudianwali, Sirsa, Haryana, initially for three months and extendable upto 31.03.2021, with mutual consent of both the parties @ Rs. 2.70/- per kWh. HPPC has further sought approval to issue LOI and sign the PPA.
2. HPPC has submitted as under:-
 - a) That, the Petitioner, Haryana Power Purchase Centre (hereinafter referred to as 'HPPC') is a joint forum of Haryana Distribution Licensees i.e. Uttar Haryana Bijli Vitran Nigam Limited and Dakshin Haryana Bijli Vitran Nigam Limited (hereinafter collectively referred to as 'Haryana Distribution Utilities' or 'Discoms'), with a mandate to arrange/procure economical, reliable and cost effective power including renewable and non-conventional

sources for the Haryana Distribution Utilities in order to meet the universal service obligations of providing electricity to their consumers on demand.

- b) That pursuant to the provisions of Haryana Electricity Regulatory Commission (Terms and Conditions for determination of Tariff from Renewable Energy Sources, Renewable Purchase Obligation and Renewable Energy Certificate) Regulations, 2017, the following RPO has been specified, in the ARR order dated 01.06.2020 for the FY 2020-21:-

Energy Consumption for 2020-21 (MU)	%age of Non solar RPO of energy consumption	Non Solar RPO (MU)	Solar RPO as % age of energy sales	Solar RPO (MU)	Total renewable energy required to be purchased (MU)
36320.4	3.00%	1089.60	7.00%	2542.40	3632

- c) That the existing solar power capacity available with Haryana DISCOMs through long term agreements is 125.8 MW and 238 MW through solar rooftop. Whereas, 267.8 MW is currently available from non-solar RE sources. Besides this, HPPC has made the following tie-ups for procurement of RE Power in order to fulfil the mandated RPOs: -

i) Non Solar

Sr. No.	Name of the firm and/or Scheme	Contracted Capacity (MW)	Date of Signing of PPA	Expected Commissioning of Project
Wind Power Projects				
1.	SECI, ISTS Wind T-II 1000 MW Scheme	150	13.12.2017	March, 2021
2.	SECI, ISTS Wind T-III 2000 MW Scheme	350	17.05.2018	250 MW in Sept, 2020 50 MW in Oct, 2020 50 MW on 31.03.2021
3.	SECI, ISTS Wind T-III 2000 MW Scheme	590	21.01.2019	115 MW in April 2021 175 MW in Dec, 2020 300 MW on 28.02.2020
4.	SECI, ISTS Hybrid (Wind+Solar) T-I 1200 MW Scheme	110	11.07.2019	07.05.2021
Waste to energy Projects				
4	JBM Environment Management Pvt.Ltd	6.77	21.09.2018	January, 2021
5	Ecogreen Energy Gurgaon Faridabad Pvt. Ltd	25	Yet to be signed	2021-22
Biomass Based Projects				
6.	Small Biomass projects (10 Nos)	65	2018 & 2019	2020-21 & 2021-22
	TOTAL	1296.77		

ii) Solar

Sr. No.	Name of the firm	Contracted Capacity (MW)	Date of Signing of PPA	Expected Commissioning of Project
1.	SECI, ISTS Solar T-I 2000 MW Scheme	100	27.11.2018	31.01.2021
2.	SECI, ISTS Solar T-II 3000 MW Scheme	400	28.05.2019	07.01.2022
3.	SECI (ISTS Hybrid (Wind+Solar) T-I 1200 MW Scheme)	330	11.07.2019	07.05.2021
4.	SECI (ISTS Solar T-IV 1200 MW Scheme)	250	19.03.2020	01.01.2022
5.	NIT-77 (241 MW on long term basis)	241	06.07.2020 (240 MW) 19.06.2020 (1 MW)	2021-22
6.	HPGCL (Solar)	93	Under process	2021-22
7.	PM KUSUM	14.57	01.07.2020 (2 MW)	2020-21
	Total	1428.57		

In addition to above, 100 MW is expected to be added every year through solar rooftop.

- d) That with the above arrangements/tie-ups, the total installed capacity to the tune of 1993 MW and 1565 MW of solar and non-solar RE power is expected to be available by the end FY 2021-22 to meet RPO targets besides energy requirement.
- e) That with the available sources/tie-ups, 550 MUs and 1900 MUs of solar and non-solar RE power are expected during the FY 2020-21 against the target of 2542 MUs and 1090 MUs respectively. As such, non-solar RPO targets are expected to be achieved whereas; shortfall of solar RPOs to the tune of 1993 MUs is expected during FY 2020-21. The shortfall in solar RPOs is preliminary attributed to gestation period of Renewable Energy Projects.
- f) The Commission vide order dated 24.09.2020 in PRO- 32 of 2020 had approved purchase of 300 MW solar power on short term power till 31.10.2020 through PTC and a total of about 220 MUs of solar power is expected through this arrangement during the months of September, 2020 & October 2020. Thus, likely short fall of about 1772 MUs is expected during FY 2020-21 which is envisaged to be met through Short Term Purchases and RECs.
- g) That, M/s. L R Energy (Unit of Roop Ram Industries Pvt. Ltd.) a MSME and start-up company (herein after referred to as "LR Energy"), vide letter dated 27.07.2020 followed by emails dated 30.07.2020, 04.08.2020 and 11.08.2020 has offered solar power on short term basis for a period of three months at a tariff of Rs. 2.70/- per kWh from its 10 MW solar power plant at village Dudianwali, Sirsa, Haryana. LR Energy, vide email dated 11.08.2020, in reply to the queries raised by HPPC has confirmed as under:-
 - i) The energy will be metered at DISCOM's substation.
 - ii) The meter reading from the ABT meter at delivery point (substation side) will be accounted for generation claim. Else, if the same is recorded in the ABT meter will not be claimed.
 - iii) The power will be delivered at delivery point on actual basis. Tentative schedule shall be intimated as per HERC (Forecasting, Scheduling and Deviation Settlement for Solar and Wind Generation) Regulations, 2019.
 - iv) The estimated generation would be approximately 55000 +/- 10% units per day for the next three months.
- h) That, HERC in its Order dated 01.06.2020 on true-up for the FY 2018-19, annual (mid-year) performance review for the FY 2019-20, aggregate revenue requirement of UHBVNL and DHBVNL for the MYT control period 2020-21 to FY 2024-2025 and distribution & retail

supply tariff for the FY 2020-21 has directed Discoms to make every possible endeavor to meet the RPO targets as has been fixed for them by the Commission in timely manner in true letter and spirit.

- i) That, the SCPP, in circulation on 28.08.2020, has considered the proposal of LR Energy and approved purchase of solar power on short term bases initially upto three months and further extendable upto 31.03.2021 with mutual consent of parties @ Rs. 2.70/- per kWh at Discom's substation, subject to approval of the Commission.
- j) That, the offered rate of solar power is less than the average variable cost of power determined by the Commission in its tariff order for FY 2020-21 dated 01.06.2020 i.e. Rs. 2.88/kWh. The proposal of M/s LR Energy is reasonable and may be considered for fulfillment of solar RPOs for FY 2020-21. The copy of draft PPA is enclosed.
- k) That In view of the above, following prayers have been made:
 - a) To approve procurement of solar power from LR Energy on short term basis from its 10 MW grid interactive solar power project at Village Dudianwali, Sirsa, Haryana initially for three months and extendable upto 31.03.2021 with mutual consent of both the parties @ Rs. 2.70/- per kWh and allow HPPC to issue LOI and signing of PPA;
 - b) Or Pass such further order or order(s) as may be deemed necessary and fit in the circumstances of the case.

Proceedings in the Case

3. The matter was heard on 24th September, 2020 as scheduled, through virtual court (Video Conferencing). Sh. Vikas Kadian, XEN, HPPC, appeared for the Petitioner and mainly reiterated the contents of the Petition, which for the sake of brevity have not been reproduced herein. Upon hearing the matter, the Commission directed the Petitioner to provide the following details:-
 - i) Details of rate discovered during tender floated by HPPC in September-October, 2019.
 - ii) Rate at which the Solar Power arrangements/contracts have been finalized with SECI in respect of contracts mentioned at Sr. No. 1-4 under heading Solar in para 3 on page 2 of the Petition.
 - iii) Renewable power purchased till date against Renewable Purchase Obligations (RPO).
4. The case was next heard on 30.09.2020, wherein the Petitioner, on an affidavit dated 29.09.2020, submitted the information sought by the Commission, as reproduced hereunder:-
 - i) That HPPC had floated Request for Proposal (RfP) vide RFP No. 77/CE/HPPC/Solar /300MW dated 03.01.2019 with the approval given by the Commission vide Order dated 05.11.2018 in petition no. PRO No 53 of 2017 for procurement of 300 MW Solar Power

through competitive bidding. The total requisite capacity of 300 MW was divided into two categories i.e. 240 MW in Category-I, reserved for large developers with minimum capacity of 3 MW and maximum upto 240 MW and 60 MW in Category-II reserved for small developers in Haryana with capacity of 1 MW or 2 MW.

- ii) That the technical and financial bids of the above mentioned tender were opened on 06.08.2019 and 16.08.2019. The tariff discovered in the two categories is tabulated below:

Sr. No.	Name of the bidder	Qty offered	Category	Proposed plant location	Tariff Discovered in Rs. /kWh
1	Avaada Energy Pvt. Ltd. , Noida	240 MW	I	Bikaner, Rajasthan	2.73
2	Gurmitinder Kaur Randhawa, Chandigarh	1 MW	II	Shahbad, Haryana	2.999

- iii) That, the Commission, vide its order dated 18.02.2020 & 19.05.2020, approved the purchase of 1 MW & 240 MW solar power from Ms. Gurmitinder Kaur Randhawa and Avaada Energy Pvt. Ltd. @ Rs 2.99/kWh & Rs. 2.73/KWh, respectively.
- iv) That the rate at which solar power arrangements/contracts have been finalized with Solar Energy Corporation of India Ltd. are as under:-

Sr. No.	Name of the firm	Contracted Capacity (MW)	Date of Signing of PSA	Expected Average MUs	Tariff including trading margin of Rs. 0.07/kWh
1.	SECI, ISTS Solar T-I 2000 MW Scheme	100	27.11.2018	243	Rs. 2.572/kWh
2.	SECI, ISTS Solar T-II 3000 MW Scheme	400	28.05.2019	1025	Rs 2.51/ kWh
3.	SECI (ISTS Hybrid (Wind+Solar) solar T-I 1200 MW Scheme)	330	11.07.2019	1114	Rs. 2.76/kwh
4.	SECI (ISTS Solar T-IV 1200 MW Scheme)	250	19.03.2020	526	Rs 2.61/kwh
Weighted Average tariff					Rs. 2.62/kWh

- v) That the tariff mentioned at sr. no. 2 and 3 above are tariff levelized of solar Project for a period of 25 years. In general the tariff in the initial year of solar project is higher. Further, long term rates of solar power may be considered for comparison with short term power purchases. Further, the first year tariff determined by the Commission vide order dated 20.12.2019 in PRO -57 of 2019 for solar projects to be set up in Haryana under PM KUSUM scheme is Rs. 3.52 per unit against the long term levelized tariff of Rs. 3.11 per unit.
- vi) The detail of Renewable Power purchased by HPPC till date against Renewable Purchase Obligations (RPO) for FY 2020-21 is tabulated as under:-

Energy	RPO Targets	Solar Energy Purchased as on 29.09.2020	Energy Received from Solar Rooftop/Haryana based Projects
Solar (in MUs)	2542	216.37	316.55
Non Solar (in MUs)	1090		471.82
Total RE (in MUs)	3632		1004.74

Commission's Analysis and Order

5. The Commission observes that HPPC has to meet the Solar RPO targets fixed by the Commission, under Haryana Electricity Regulatory Commission (Terms and Conditions for determination of Tariff from Renewable Energy Sources, Renewable Purchase Obligation and Renewable Energy Certificate) Regulations, 2017 (HERC RE Regulations, 2017). The Commission, in its ARR Order dated 01.06.2020, has already observed that DISCOMs have defaulted in meeting the Solar RPO obligations. The shortfall in meeting Solar RPO upto FY 2018-19 was 1850 MUs. Further, during FY 2020-21 (till 29.09.2020), shortfall in meeting Solar RPO is 2010 MUs. Although, the Commission, as a one time measure in view of the Covid- 19 Pandemic, decided to waive off the current backlog of RPO, but, directed Discoms to make every possible endeavour to meet the RPO targets as has been given to them by the Commission in timely manner in true letter and spirit. Undoubtedly, such like projects in the kitty of DISCOMs shall enable them to achieve their RPO targets, which is expected to increase substantially in the coming years.
6. The Commission has further perused the provisions of National Tariff Policy, 2016, Haryana Solar Policy, 2016 as well as Regulation 6 (1) (h)/47 of HERC RE Regulations, 2017. The Commission also examined the relevant provision of Haryana Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Generation, Transmission, Wheeling and Distribution & Retail Supply under Multi Year Tariff Framework) Regulations, 2019, reproduced hereunder:-

"8.3.6 Power Purchase Agreement (PPA) – The Commission shall consider approval of PPA in the light of the approved power procurement plan either u/s section 86(1)(b) or 63 of the Act.

Provided that all such PPAs shall be submitted in the Commission with complete documentations and adherence to the relevant guidelines and policy. Further, no PPA / Supplementary Agreement shall be executed without the prior approval of the Commission.

Provided that the Commission shall approve the PPA as such or with appropriate modifications or reject the same after holding public / Stakeholders consultation on the same and if the same is not in conformity to the level of transparency required including competitiveness of the project or is found to be in violation of relevant statute / guidelines, the same shall not be admitted and rejected outrightly."

7. The combined reading of all these provisions has enabled the Commission to approve the power procurement plan of DISCOMs under section 86(1)(b) of the Electricity Act, 2003, which is a mode of power procurement distinct & inclusive of the provisions of Section 62 & 63 of the Electricity Act, 2003.
8. On the basis of above discussed legal framework, the Commission has proceeded to examine the reasonableness and competitiveness of the rate at which power is proposed to be procured from M/s LR Energy i.e. @ Rs. 2.70/kWh. In order to examine the same, the Commission has referred the average variable cost of power for the FY 2020-21 determined in ARR Order dated 01.06.2020 i.e. Rs. 2.88/kWh. Further, the Commission, has vide its Order dated 19.05.2020 (HERC/PRO-22 of 2020), has approved the procurement of 240 MW solar power from M/s Avaada Energy Pvt. Ltd. @ Rs. 2.73 /kWh at Haryana periphery, fixed for 25 years under section 86(1)(b) of the Electricity Act, 2003. The rate of Rs. 2.73/kWh was discovered through the competitive bidding held in NIT-77/CE/HPPC dated 3.1.2019. The Commission further observes that in order to meet RPO obligations, HPPC had floated NIT No. 81/CE /HPPC/Solar/ Short term dated 20.9.2019 to purchase 300 MW solar power for a year from the date of issue of LOI. The price discovered was Rs. 5.1/kWh. The Commission had approved the procurement for short term upto 31.10.2020, vide Order dated 24.07.2020 (HERC/PRO-32 of 2020), subject to the condition that the purchase decision shall be taken by the petitioner keeping in view floor price of REC and marginal cost of power which can be substituted with solar power so purchased.
9. The Commission further observes that trading in the green term-ahead market (G-TAM) has commenced since August 21,2020 at the IEX platform. The rate on Day ahead transaction in G-TAM has varied from Rs. 3/kWh on 21.08.2020 to Rs. 3.80/kWh on 10.09.2020.
10. In view of the above, the Commission considering the request of HPPC, approves the source under section 86(1)(b) of the Electricity Act, 2003 as well as draft PPA to be executed with M/s. LR Energy for procurement of 10 MW solar power on short term basis initially for three months and extendable upto 31.03.2021 with mutual consent of both the parties @ Rs. 2.70/- per kWh and allow HPPC to issue LOI and sign the PPA. The Commission has taken note of the submission of HPPC that power flow from this source shall start within next 2-3 days.
11. The Petition is disposed of accordingly.

This order is signed, dated and issued by the Haryana Electricity Regulatory Commission on 30.09.2020.

Date: 30.09.2020	(Naresh Sardana)	(Pravindra Singh Chauhan)	(D.S. Dhesi)
Place: Panchkula	Member	Member	Chairman