

**ODISHA ELECTRICITY REGULATORY COMMISSION  
BIDYUT NIYAMAK BHAWAN  
PLOT NO.-4, CHUNUKOLI, SHAILASHREE VIHAR  
BHUBANESWAR - 751 021**

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**Present:       Shri U. N. Behera, Chairperson  
                  Shri S. K. Parhi, Member  
                  Shri G. Mohapatra, Member**

**Case No. 42/2020**

GRIDCO Ltd.	.....	Petitioner
Vrs		
DoE, GoO & Others	.....	Respondents

**In the matter of:**    **Application under Section 86 of Electricity Act, 2003 read with Section 21 of the OER Act, 1995 seeking approval of PPA executed between GRIDCO and SECI Ltd. for procurement of 300 MW solar power from SECI under MNRE 2000 MW ISTS-Connected Solar Power Scheme towards fulfilling Renewable Purchase Obligation.**

**For Petitioner:**       **Ms. Sasmita Pattajoshi, AGM (PP), GRIDCO Ltd.**

**For Respondent:**    **Shri K. C. Nanda, DGM (Fin.), WESCO Utility, the representatives of SOUTHCO Utility and NESCO Utility, Shri Puneet Munjal, the representative of M/s. TPCODL, Shri M.G. Ramachandran, Advocate, SECI, Shri A.K. Choudhury, Jt. Director, OREDA and Ms. Niharika Patanayak, ALO, DoE, Government of Odisha are present. Nobody is present on behalf of GEDCOL.**

**ORDER**

**Date of hearing: 06.10.2020**

**Date of order: 15.12.2020**

GRIDCO Ltd. has filed the present petition seeking approval of the Power Purchase Agreement (PPA) executed between GRIDCO and SECI Ltd. for procurement of 300 MW solar powers from SECI under MNRE 2000 MW ISTS-connected solar power scheme towards fulfilling its Renewable Purchase Obligation (RPO).

2. GRIDCO has submitted that it had solar procurement capacity of only 168 MW and another 240 MW is under construction under state specific SECI VGF scheme Batch-IV. GRIDCO has made assessment of Renewable Energy (RE) capacity addition in this state to meet the RPO target as per the prevailing notification. The quantum of solar

capacity addition is required to be the tune of 1500 MW by 2021-22 as per renewable purchase obligation. Therefore, GRIDCO requisitioned 500 MW solar power from SECI under 2000 MW solar ISTS grid-connected scheme. SECI being the designated implementing agency for this scheme, has selected the developers through competitive bidding process to purchase power from them and sell the same to the utilities. The solar projects to be selected under this scheme may be installed anywhere in India connected through ISTS network (CTU Network). After reverse auction process, the lowest price discovered was Rs.2.44 / Kwh for 600 MW and average pooled price for total 2000 MW capacity was discovered at Rs.2.502 / Kwh.

3. SECI has forwarded a draft Power Sale Agreement (PSA) and requested GRIDCO for signing of the same for 300 MW solar power at a price of Rs.2.53 / Kwh with SECI trading margin of Rs.0.07 / Kwh. Further MoP, GoI has already issued waiver of ISTS charges and losses for 25 years for the solar power projects to be commissioned by December, 2022. Accordingly, no ISTS charges and losses are applicable for this 300 MW solar power from SECI. In view of the above, GRIDCO has signed the PSA with SECI on 21.08.2018 to procure the above said 300 MW solar power with the following terms and conditions:

- Term of the PSA is for 25 years
- Delivery point is at 220 KV or above where the power is injected into the ISTS network and metering shall be done at the interconnection point where power will be injected into the ISTS.
- Energy Accounting shall be as per the Regional Energy Account / State Energy Account as specified in the Grid Code.
- Interconnection facility shall be the facility in developer side of the delivery point where metering will be done.
- GRIDCO shall have to pay the fixed tariff of Rs.2.53 / Kwh plus the trading margin of Rs.0.07 / Kwh, totalling to Rs.2.60 / Kwh up to commissioning of the cumulative awarded capacity and then the weighted average tariff plus the trading margin after commissioning of the full capacity, which is Rs.2.572 / Kwh.
- Bill to the GRIDCO will be issued on the 1<sup>st</sup> business day of the next month

- Payment due date is 30 days, 2% rebate for payment made within 3 days of the presentation of the bill, 1% rebate for payment made beyond 3 days of the presentation of the bill up to the due date and late payment surcharge of 1.25% per month is applicable if payment is not made within 30 days beyond the due date.
  - Under payment Security Mechanism, GRIDCO has to provide LC, State Government Guarantee and Payment Security Fund as detailed in the draft PSA.
4. The SECI has introduced “state government guarantee” and “payment security fund” under payment security mechanism clause as per the MoP, GoI Resolution dated 03.08.2017. “State Government Guarantee” will be covered under Tripartite agreement signed between RBI, GoI and GoO whereas “Payment Security Fund” is optional for GRIDCO as per the PSA. SECI has also introduced generation compensation for ‘off-take constraints due to transmission infrastructure/grid unavailability and back-down’ in the PSA as suggested in MoP, GoI resolution dated 03.08.2017. The PSA has other standard clauses such as Quarterly and Annual Reconciliation, Force Majeure, Change in Law, Events of Default & Termination, Assignments and Charges, Dispute Resolution, Notices etc. as executed with SECI for other MNRE Schemes for availing Solar and Wind Power.
  5. The respondent TPCODL has submitted that the PPAs signed by the petitioner are annexed to the Bulk Supply Agreement (BSA) made by the petitioner with TPCODL as a part of it. The present PSA between GRIDCO and SECI is not reflected in the Annexure to the said BSA, which is contrary to the provision of the BSA. As per para 4.15 of the BSA between TPCODL and GRIDCO, GRIDCO has to sign additional PPAs with prior consultation with TPCODL. Any decision for tie up of long term capacity needs to be based on year wise projections of demand-supply gap along with its impact on tariff. There are mainly three options available to meet the RPO viz. (a) long term PPA (b) procurement of RECs and (c) procurement of green power in Green Term Ahead Market (GTAM). Further, CERC has recently given a go ahead to trading of green power on the exchange, purchase of which shall go towards meeting RPO. In the present surplus scenario it is imperative to evaluate all the options before choosing one of them vis-a-vis its impact on RST. In order to facilitate the above, TPCODL requires, (a) year wise demand-supply gap with respect to RPO and (b) comparative

tariff impact analysis for all the proposed renewable capacities. The Commission may decide on the above alternative based on the impact on retail tariff before approving the present long term PSA filed by the petitioner.

6. The respondent OREDA has submitted that the Commission may consider the followings while approving the present PPA filed by GRIDCO:
  - a. The agreed upon energy charges including trading margins for purchase of power from the 300 MW Solar Power Projects being Rs. 2.53/unit, prima facie appear to be very compelling.
  - b. However, as the energy reaches the 11 KV network within the state these prices shoot up to Rs.3.24/unit taking in to account the standard power losses at different voltage levels (Ref: 400 KV level: POSOCO website, 220/132 KV level: OPTCL transmission tariff order FY 2019-20, 33 KV level: OERC retail supply tariff order FY 2019-20) and applicable transmission charges (Ref: OPTCL transmission tariff order FY 2019-20,) and wheeling charges (Ref: OERC retail supply tariff order FY 2019-20).
  - c. The above prices at 11 KV level is Rs.0.16/unit higher than the feed-in-tariff determined by the Commission for solar power generation by local farmers under PM-KUSUM scheme (ref Case No.82/2018 dated 20.12.2019) which is Rs.3.08 at 11 KV level.
  - d. As per the agreement GRIDCO has to purchase maximum 822.24 MU annually from the solar projects under the subject PSA which will result in direct financial loss of Rs.13.15 crores per annum.
  - e. On the other hand procurement of solar power from generators within the state is likely to save GRIDCO from incurring such financial losses besides local generation of RE bringing in several direct and indirect benefits to the people of the state.

In view of the above, OREDA has prayed the Commission to advise GRIDCO for purchase of more home grown renewable energy rather than importing the same from other states.

7. The respondent SECI has submitted that it has been designated as the nodal agency for implementation of the central government schemes for setting up ISTS connected solar power projects under a tariff based competitive bidding processes and enter into PPAs with the successful bidders at the tariff discovered in the competitive bid process and also enter into PSAs with the distribution licensees/buying entities to enable them to fulfil the RPO. SECI is acting as an intermediary agency in purchase and sale of solar power under PPAs and PSAs on a back-to-back basis, utilising its trading license to facilitate such purchase and resale of electricity and entitled to a trading margin of Rs.0.07/Kwh payable by the buying utilities in terms of MNRE guidelines, RfS and the PPA.
8. SECI has entered into PSA with GRIDCO on 21.08.2018 to sell 300 MW solar power from the bid conducted for 2000 MW solar power under the ISTS connected solar power scheme of MNRE. The 2000 MW power is to be supplied by the six selected bidders who had quoted tariff in the range of Rs.2.44/Kwh to Rs.2.54/Kwh. The weighted average of the above tariff for 2000 MW from six power projects was worked out to Rs.2.502/Kwh. This was the average uniform pooled tariff for the entire 2000 MW. However, the pooled tariff is liable to change depending on the actual commissioning achieved by the respective projects. The mapping of the projects for supply to the buying utilities including GRIDCO has been done based on the long term open access availability of ISTS from the place of generation to the Odisha periphery. The subject 300 MW power which is being agreed to be supplied to GRIDCO at tariff of Rs.2.53/Kwh is being sourced and procured by SECI on a back to back basis from M/s. Azure Power India Pvt. Ltd. (Project Company of Azure Power India Pvt. Ltd.) under two nos. of PPAs dated 31.10.2018 executed with SECI for setting up of 300 MW power project each. The application of SECI for uniform tariff to all the procurers of 2000 MW including GRIDCO was however not approved by the Central Commission in its order dated 28.02.2000 in petition no.187/AT/2019. In this order CERC has adopted individual tariffs discovered through transparent competitive bidding process. Therefore, SECI vide its letter dated 18.08.2020 has requested GRIDCO for amendment of the present power sale agreement as given below:

*“Supplementary Power Sale Agreement*

*In accordance with the LTA mapping, the buying entity shall pay the individual tariff of the project mapped to GRIDCO as mentioned in schedule-I of this agreement plus trading margin of Rs. 0.07/Kwh as per RfS and which is fixed for entire term of the agreement.”*

9. SECI has submitted that the price of Rs. 2.53/Kwh payable by GRIDCO under the subject PSA plus trading margin of Rs. 0.07/Kwh is economical, competitive and in interest of the consumers and prayed the Commission to approve the PSA submitted by GRIDCO.
10. Replying to the objections raised by OREDA and TPCODL, the petitioner GRIDCO has submitted that in the mean time SECI has cited the order of the Hon'ble CERC dated 28.02.2020 in petition No.187/AT/2019 wherein Hon'ble CERC has considered and approved the adoption of tariff of each solar generator for the subject solar scheme. As SECI's proposal of the uniform tariff to all the procurers under the scheme was not approved by the Hon'ble CERC, GRIDCO has to pay the levellised tariff of Rs.2.53/Kwh plus SECI's trading margin of Rs.0.07/Kwh, totalling to Rs.2.60/Kwh towards availing the subject 300 MW solar power from the developer M/s. Azure Power India Pvt. Ltd. Mapping of projects for supply of solar power to the buying utilities is being done based on the long-term open access availability to the inter-state transmission system from the place of generation.
11. GRIDCO has submitted that in line with the CERC order dated 28.02.2020, SECI has proposed to amend the article 5.2 under heading 'Applicable Tariff' of the PSA dated 21.08.2018 based on the mapping approved by PGCIL and grant of LTA by PGCIL, which is under consideration of GRIDCO. As informed by SECI, the subject 300 MW solar power from M/s Azure Power India Pvt. Ltd., Rajasthan is scheduled to be available from November, 2020 through SECI under STOA, from February, 2021 under MTOA and from June, 2021 onwards through LTOA, which will help GRIDCO in meeting its solar RPO target.
12. Replying to the submission of TPCODL, GRIDCO has submitted that it is the state designated agency to fulfil RPO for the state consumption on behalf of the DISCOM utilities of the state. The subject PPA was executed with SECI on 21.08.2018 towards fulfilling the RPO target fixed by the Commission. However, this agreement for

purchase of solar energy from the upcoming developer was inadvertently missed from the list at Annexure-1 to the bulk supply agreement between GRIDCO and TPCODL.

13. GRIDCO is making year wise RE procurement plan for meeting the RPO target considering the power scenario of the state. The RE procurement plan of GRIDCO upto 2022 includes long term PPAs only due to uncertainty in availability of sufficient number of RECs and short term RE power in the market, including green power through G-TAM, which is introduced recently in August, 2020. GRIDCO has made the power supply and demand projection upto FY 2021-22 towards RE procurement plan for meeting the RPO. The power availability of the state by FY 2021-22 is projected at 5217 MW taking into account all the tied-up RE capacity of 1479.15 MW. GRIDCO has requested the DISCOM utilities to furnish long term demand projection data upto FY 2029-30 for long term power supply and demand projection of the state. The long term RE procurement plan shall be prepared based on the demand projection data received from the DISCOMs, requirement of RE to meet the RPO and the long term supply projection. During FY 2019-20 the state demand was 2911 MW against the power availability of 3489 MW with a surplus of around 578 MW. For the period from FY 2020-21 to FY 2021-22 the demand growth projection has been made taking into account the historical data and the effect of pandemic situation. The year wise demand-supply gap assessed by GRIDCO for the period from FY 2019-20 to FY 2021-22 with the specified RPO target of 11% for FY 2019-20, is given hereunder :

FY	2019-20 (Actual)	2020-21 (Estimated)	2021-22 (Projected)
Power Availability (MW)	3489	3991	4029
Power Demand (MW)	2911	2974	3222
Power Surplus (MW)	578	1017	807
Peak Power Availability(MW)	4428	4431	5050
Peak Power Demand(MW)	4337	4379	4507
Peak Power Surplus(MW)	91	52	543

14. GRIDCO has submitted that the purchase of the 300 MW solar power from M/s. Azure Power India Pvt. Ltd. through SECI @ 19% CUF will be providing maximum energy of 529.05 MU as per Clause 4.4.1 of the PSA, which is around 1.96% of the annual state energy consumption of around 27,000 MU. Also, the applicable tariff of Rs.2.60/Kwh is less than the Average Power Purchase Cost (APPC) of GRIDCO.

Hence Tariff impact of his 300 MW solar power will be negligible. In view of the above, GRIDCO has prayed the Commission to approve the PPA dated 21.08.2018 executed between GRIDCO and SECI by adopting the applicable tariff of Rs.2.60/Kwh towards fulfilling its RPO.

15. Heard the parties. The Commission observed that GRIDCO has entered into power purchase agreement with various thermal generators and at present it has surplus power availability. Further as per the estimation of power supply and demand projection upto FY 2021-22 as submitted by GRIDCO, there is also availability of surplus power with GRIDCO. However, GRIDCO has never achieved its RPO target fixed by the Commission since 2010-11. As per the RPO regulation if an obligated entity failed to fulfil its RPO, it has to compensate the same by purchasing Renewable Energy Certificates. If GRIDCO purchases RECs to the extent of its default in fulfilling the RPO it will exert a huge extra burden on the state consumers. The RPO status of GRIDCO for the last five years is given below:

(in percentage)						
Year	Solar		Non-Solar		Total	
	Target	Achieved	Target	Achieved	Target	Achieved
2015-16	0.50	0.67	2.50	1.21	3.00	1.88
2016-17	1.50	0.98	3.00	1.26	4.50	2.24
2017-18	3.00	1.02	4.50	1.27	7.50	2.29
2018-19	4.50	1.26	5.00	1.54	9.50	2.80
2019-20*	5.50	1.86	5.50	2.78	11.00	4.64

\* As per the performance review data for FY 2019-20 submitted by GRIDCO Ltd.

16. From the above submission of both GRIDCO and SECI, it is observed that SECI shall supply the solar power under the subject scheme at the rate of Rs.2.60/Kwh including SECI's trading margin of Rs.0.07/kwh which is less than the average power purchase cost of GRIDCO. Further, in its application GRIDCO has submitted that MoP, GoI has already issued waiver of ISTS charges and losses for 25 years for the solar power projects to be commissioned by December, 2022. Accordingly, no ISTS charges and losses are applicable for this 300 MW solar power from SECI. Therefore, GRIDCO has signed the PSA with SECI on 21.08.2018 to procure the above said 300 MW solar power.



17. In view of the above, the Commission is inclined to approve the subject PPA filed by GRIDCO to purchase 300 MW solar power under MNRE 2000 MW ISTS-connected solar power scheme. However, GRIDCO shall ensure that there be no increase in tariff of such procurement of solar power for the entire period of 25 years i.e. the terms of the subject PPA.
18. Accordingly, the case is disposed of.

Sd/-

**(G. Mohapatra)**  
**Member**

Sd/-

**(S. K. Parhi)**  
**Member**

Sd/-

**(U. N. Behera)**  
**Chairperson**