
2. GRIDCO has submitted that during July, 2017, it had non-solar procurement capacity of only 77 MW and another 113.5 MW small hydro capacity was under construction in the State and due to various reasons, non-solar RE projects have not been

commissioned in the scheduled time. GRIDCO has made assessment for Renewable Energy (RE) capacity addition in the state to meet the RPO target as per the prevailing RPO notification. The quantum of non-solar capacity addition was assessed to the tune of 700 MW by 2021-22. Therefore, for fulfilling RPO, GRIDCO requisitioned for 50 MW Wind power under the 1000 MW ISTS grid-connected Wind Power Scheme, Phase-I of MNRE. PTC India Ltd. being the selected Trading Company for this scheme, has offered sale of wind power for a period of 25 years from the selected projects through competitive bidding process. The wind projects to be selected under this scheme may be installed anywhere in India connected through ISTS network (CTU Network).

3. GRIDCO has stated that MoP, GoI has already issued waiver of ISTS charges and losses for 25 years for the wind power projects to be commissioned by December, 2022. Accordingly, no ISTS charges and losses are applicable for this 50 MW wind power from PTC India Ltd. In view of the above, GRIDCO has signed the PSA with PTC India Ltd. on 20.07.2017 to procure the above said 50 MW wind 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.
- Declared CUF will not be less than 20% over a year.
- Responsibility of getting ISTS connectivity and LTA shall be with the wind power developer.
- Energy Accounting shall be 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.
- Wind power developer will pay the compensation for shortfall in generation proportionately if any compensation is ordered by OERC.
- Bill to the GRIDCO will be issued on the 1st 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 after 3 days of the presentation of the bill up to the due date and late payment surcharge of 1.5% 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 and is to execute default escrow agreement.
4. GRIDCO has submitted that they are availing 50 MW wind power under the subject scheme of phase-I through PTC India Ltd. from M/s. Ostro Kutch Wind Pvt. Ltd. located in Gujarat w.e.f. 24.08.2018 and the full capacity of 50 MW from 30.03.2019 and also considering this power towards non-solar RPO target. GRIDCO is paying a fixed levellised tariff of Rs.3.46/kwh plus PTC trading margin of Rs.0.07/kwh (net tariff of Rs.3.53/kwh) applicable for 25 years.
 5. GRIDCO has submitted that as per the clause 6.8.3 of the TSA dated 20.07.2017 executed with PTC India Ltd. and with reference to the PPA between PTC India Ltd. and the Wind power developer, M/s. Ostro Kutch Wind Pvt. Ltd. is allowed to revise the declared CUF once within the first year of the COD. The declared CUF of M/s. Ostro Kutch Wind Pvt. Ltd. was 30.61% and accordingly the upper limit (120%) and lower limit (90%) of the energy to be procured by GRIDCO was 160.886 MU and 120.665 MU respectively. The wind power developer requested to revise the CUF from 30.61% to 36%. A supplementary agreement was executed with PTC India Ltd. on 22.08.2019 for modification of clause 6.8.3 of the PSA dated 20.07.2017 to the extent of revision of CUF to 36%. With such revision, the revised upper limit of procurement (120%) is 189.216 MU and lower limit of procurement (90%) is 141.912 MU to be availed by GRIDCO in the year. All other provisions and terms and conditions of the PSA dated 20.07.2017 have remained unaffected and the supplementary agreement dated 22.08.2019 is the integral part of the PSA dated 20.04.2017.
 6. 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 PTC India Ltd. is not reflected in the Annexure to the said BSA, which is contrary to the provisions of the BSA. As per para 4.15 of the BSA between TPCODL and GRIDCO, GRIDCO may sign additional PPAs with prior consultation with TPCODL, other retail supply licensees and prior

approval of the Commission. 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 with respect to the objective of meeting RPO while ensuring the least impact on the bulk supply tariff. 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.

7. The respondent OREDA has submitted that the Commission may consider the followings while approving the present PSA filed by GRIDCO:
 - a. The agreed upon energy charges including trading margins for purchase of power from the 50 MW Wind Power Projects being Rs.3.53/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.4.36/unit taking into 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: ERC retail supply tariff order FY 2019-20).
 - c. The above prices at 11 KV level is Rs.1.28/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 189.216 MU from this project annually which will result in direct financial loss of Rs.24.21 crore 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 RE

generation is expected to bring 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.

8. The respondent PTC India Ltd. has submitted that SECI has been designated as the implementation agency for setting up 1000 MW ISTS connected wind power projects sanctioned by MNRE. Under the said scheme SECI was required to develop a suitable mechanism for selection and monitoring the performance of the projects as well as selection of a suitable trading company to trade wind power generated from such projects. The selected trading company was required to sign PPAs with wind power developers for sale, purchase and resale of wind power at a tariff discovered through transparent open competitive bidding process and further to sign back to back power sale agreement with the buying entities/ Discoms/ State utilities/ bulk consumers. In this process PTC India Ltd. has been selected as the successful bidder for this scheme and entered into PSA with GRIDCO for sale of 50 MW wind power. SECI being the implementing agency selected the successful wind power developers through e-Reverse Auction along with the applicable tariff. The wind power under the subject scheme is to be supplied by five nos. of selected developers who had quoted tariff at Rs.3.46/Kwh. As per the mapping of the projects subject 50 MW wind power to GRIDCO is to be sourced from M/s. Ostro Kutch Wind Pvt. Ltd. on a back to back basis at the applicable tariff of Rs.3.46/Kwh plus the trading margin of Rs.0.07/Kwh, totalling to Rs.3.53/Kwh. Hon'ble CERC has adopted this tariff vide its order dated 03.12.2019 in Petition No.340/AT/2019.
9. Replying to the objections raised by OREDA and TPCODL, the petitioner GRIDCO has submitted that in the mean time PTC India Ltd. has cited the order of the Hon'ble CERC dated 03.12.2019 in petition No.340/AT/2019 filed by PTC India Ltd. wherein Hon'ble CERC has approved the adoption of tariff of each wind generator for the subject scheme discovered through competitive bidding process.
10. 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 PSA was executed with PTC India Ltd. on 20.07.2017

towards fulfilling the RPO target fixed by the Commission. This PSA has been included in the Annexure-A to the Bulk Supply Agreement between GRIDCO and TPCODL.

11. GRIDCO has submitted that they are 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 along with the RE procurement plan for meeting the RPO. The power availability of the state by FY 2021-22 is estimated at 4029 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 about 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

12. GRIDCO has submitted that the purchase of the subject 50 MW wind power from M/s. Ostro Kutch Wind Pvt. Ltd. through PTC India Ltd. @ 36% CUF will be providing maximum energy of 189.216 MU as per Clause 2 of the supplementary PSA dated 22.08.2019, which is around 0.70% of the annual state energy consumption of around 27,000 MU. Hence the overall tariff impact of this 50 MW wind power will be

negligible. In view of the above, GRIDCO has prayed the Commission to approve the PSA dated 20.07.2017 and the supplementary PSA dated 22.08.2019 executed with PTC India Ltd. to avail subject 50 MW wind power towards fulfilling its non-solar RPO by adopting the applicable tariff of Rs.3.53/Kwh including PTC's trading margin of Rs.0.07/kwh.

13. Heard the parties. The Commission observed that GRIDCO has entered into power purchase agreements 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. 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 the FY 2019-20 as submitted by GRIDCO

14. From the above submission of both GRIDCO and PTC India Ltd., it is observed that PTC India Ltd. shall supply the wind power under the subject scheme at the rate of Rs.3.53/Kwh including PTC's trading margin of Rs.0.07/Kwh. Further, in its application GRIDCO has submitted that MoP, GoI has already issued waiver of ISTS charges and losses for 25 years for the wind power projects to be commissioned by December, 2022 under this scheme. Accordingly, no ISTS charges and losses are applicable for this 50 MW wind power from PTC India Ltd. Therefore, GRIDCO has signed the PSA with PTC India Ltd. on 20.07.2017 to procure the above said 50 MW wind power.
15. In view of the above, the Commission is inclined to approve the subject PSAs filed by GRIDCO to purchase 50 MW wind power under 1000 MW ISTS-connected wind power scheme of MNRE. However, GRIDCO shall ensure that there be no increase in

tariff of such procurement of wind power for the entire period of 25 years i.e. the terms of the subject PSAs.

16. Accordingly, the case is disposed of.

Sd/-

(G. Mohapatra)
Member

Sd/-

(S. K. Parhi)
Member

Sd/-

(U. N. Behera)
Chairperson