

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 200/MP/2019

Subject : Petition under Section 38(2) of the Electricity Act, 2003 read with Section 79(1)(c) and Section 79(1)(k) of the Act, along with (i) Central Electricity Regulatory Commission (Grant of Regulatory Approval for execution of inter-State Transmission Scheme to Central Transmission Utility) Regulations, 2010; (ii) Regulation 111 and 114 of Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, and (iii) Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses) Regulations, 2020 for execution of Transmission System for 18.5 GW of Solar and Wind Energy Zones in Southern Region.

Date of Hearing : 17.9.2021

Coram : Shri P. K. Pujari, Chairperson
Shri Arun Goyal, Member
Shri P. K. Singh, Member

Petitioner : Power Grid Corporation of India Limited (PGCIL)

Respondents : Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO) and 17 Ors.

Parties Present : Shri M. G. Ramachandran, Sr. Advocate, PGCIL and SECI
Ms. Tanya Sareen, Advocate, SECI
Shri Ravi Nair, Advocate, SECI
Shri S. Vallinayagam, Advocate, TANGEDCO and AP Discoms
Ms. Stephania Pinto, Advocate, BESCOM, HESCOM, KPTCL
Shri Shahbaaz Husain, Advocate, BESCOM, HESCOM, KPTCL
Shri Anil Kr Meena, CTU
Shri Ankush Patel, CTU
Shri Swapnil Verma, CTU
Shri Subir Sen, CTU
Shri Shreedhar Singh, SECI
Shri Kaustav Roy, SECI
Shri R. K. Aggarwal, SECI
Ms. R. Ramalakshmi, TANGEDCO
Shri R. Srinivasan, TANGEDCO
Dr. R. Kathiravan, TANGEDCO

Record of Proceedings

Case was called out for virtual hearing.

2. At the outset, with permission of the Commission, the representative of the Petitioner made detailed presentation on 'Transmission System associated with Potential REZ in Southern Region' (in short, 'the proposed transmission system'). The representative of the Petitioner mainly submitted the following:



(a) Initially, the proposed transmission system was identified for envisaged potential Renewable Energy Zones ('REZs') of 18.5 GW in the renewable energy rich States of Southern Region, namely, (i) Karnataka [Koppal - 2.5 GW, Gadag - 2.5 GW & Bidar - 2.5 GW]; (ii) Andhra Pradesh [Kurnool - 5.5 GW & Ananthpuram - 2.5 GW]; and (iii) Tamil Nadu [Karur - 2.5 GW & Tuticorin - 0.5 GW]

(b) Subsequently, in a meeting held under the chairmanship of Secretary, Ministry of New and Renewable Energy ('MNRE') on 22.10.2020, it was decided that portion of the proposed transmission system in REZs of Kurnool (5.5 GW), Ananthpuram (2.5 GW) and Bidar (2.5 GW) may not be pursued further, as the applications for LTA had not been received by then. Accordingly, CTU along with MNRE and Solar Power Corporation of India ('SECI') prioritized the proposed transmission system for potential REZ on the basis of grant of Connectivity/ LTA and in addition, the transmission system of REZs was proposed for implementation in phased manner as under:

State/district	REZ potential (GW)	Phase-I	Phase-II
		(GW)	(GW)
Karnataka			
Koppal	2.5	2.5	
Gadag	2.5	1	1.5
Tamil Nadu			
Karur	2.5	1	1.5
Tirunelveli	0.5	0.5	
Total	8	5	3

(c) Based on the directions of Commission vide Record of Proceedings for the hearing dated 25.6.2021, SRPC convened a special meeting on 14.7.2021 with constituents of the Southern Region, to discuss the development and implementation of the proposed transmission system in phase-wise manner. In the said meeting, CTU requested for recommendation of SRPC for implementation of the proposed transmission system, in phase-wise manner, considering already granted Stage-II Connectivity/ LTAs.

(d) RE generation projects in Koppal, Gadag and Karur are coming up in the green-field areas where nearby ISTS facilities for integration of upcoming RE projects, is not available. The proposed transmission system comprises establishment of pooling station near REZs and its inter-connection with ISTS network and that it is the bare minimum which is required to facilitate connectivity to the upcoming RE generation projects. This would facilitate pooling of RE power from various RE projects in the REZs, connectivity with the ISTS as well as immediate evacuation of power.

(e) Transmission system, now proposed for 8 GW of prioritized REZs, are not new proposals but were already a part of the proposed transmission system for 18.5 GW.

(f) The same was deliberated in the special meeting of SRPC held on 14.7.2021 and as per the minutes of meeting, it was concluded that (i) revised study is to be carried out by CTUIL with CEA based on the 2022-23 scenario as well as considering the transmission system planned by STUs; (ii) proposal for requirement of transmission network to be discussed in SRPC (TP); (iii) impact on the transmission charges of the States due to implementation of transmission schemes to be informed to the States; and (iv) transmission scheme for integration of REZ, finalised by SRPC (TP) based on the revised

study would be implemented in phased manner strictly based on the LTA granted.

(g) Pursuant to the above, revised system studies were carried out for integration of 8.0 GW of prioritized REZs at Koppal, Gadag, Karur and Tuticorin for the timeframe of 2023-24. The study results were deliberated in in 3rd SRPC (TP) meeting held on 24.8.2021, wherein it was also agreed that implementation of the transmission schemes are to be taken-up in the phase-wise manner. During the said meeting, the States were also informed about the likely impact on transmission charges to the tune of Rs. 2210 per MW LTA/ month (approximately). However, the minutes of the aforesaid meeting, to be issued by CEA, are still awaited.

(h) Details of applications and grant of Connectivity/ LTA for the above-mentioned locations are as under:

REZ	Grant of St-II Connectivity (MW)	Grant of LTA (MW)	Start date of LTA
Koppal	1200*	600 {300 & 300}	1.10.22 and 31.12.22
Gadag	460	460 {300 & 160}	31.12.22 and 31.3.22
Karur	420	100	1.6.2022
Tuticorin	2200.1	1640^ {540}	31.10.2022

*Application for additional 110 MW Stage-II connectivity received at Koppal pooling station in August 2021

^Out of 1640 MW, LTA of 540 MW granted at Tuticorin-II pooling station with 4th ICT (500 MVA, 400/230kV)

(i) Accordingly, the Petitioner is now seeking regulatory approval to undertake implementation of revised transmission scheme for 8 GW, namely (i) Koppal REZ (Karnataka) [2.5 GW]; (ii) Gadag REZ- Part A (Karnataka) [2.5 GW] [Phase I-1 GW and Phase II-1.5 GW, which is to be taken only after receipt of Connectivity/LTA applications beyond 1 GW at Gadag]; (iii) Karur/ Tiruppur WEZ (Tamil Nadu) [2.5 GW] [Phase I-1 GW and Phase II- 1.5 GW, which is to be taken only after receipt of Connectivity/LTA applications beyond 1 GW at Karur]; and (iv) Tirunelveli and Tuticorin REZ (Tamil Nadu) [0.5 GW].

3. The learned senior counsel appearing for the Petitioner and the Respondent, SECI submitted that as of now, the Petitioner is seeking regulatory approval of the transmission schemes for evacuation of power from 8 GW of REZs in the Southern Region only, which are to be implemented in a phased manner. The learned senior counsel also added that at Koppal and Gadag, in addition to the existing RE projects capacities (awarded + e-Reverse Auction outcome) to tune of 1800 MW and 1110 MW respectively, tender for 600 MW RE park has already been issued, for which a pre-bid meeting has been held and that such capacities are to be awarded soon.

4. In response to the specific query of the Commission regarding addition to certain new elements in the transmission schemes viz. 400 kV transmission line bays at Narendra (new) and Gadag PS, etc., the representative of the Petitioner submitted that the elements were there in the scope of works but now the same has been shown in the scheme itself for further clarification of the scope. In this regard, the Commission observed that the Petitioner should clearly map the elements of the transmission schemes and addition or deletion therein, if any, should be clearly brought out.

5. In response to further query of the Commission regarding timeline between the two phases, the learned senior counsel for SECI and PGCIL submitted that phasing

would depend upon the availability of RE projects and the receipt of the Connectivity/ LTA applications. It was further added that the phasing would be done as per directions of the Commission in previous orders granting regulatory approval for NR and WR.

6. The learned counsel for the Respondents, TANGEDCO and AP Discoms mainly submitted the following:

(a) Based on the directions of the Commission, special meeting of SRPC was held on 14.7.2021. As concluded in the meeting of SRPC, a revised study needed to be carried out by CTU in consultation with CEA based on 2022-23 scenarios as well as considering the transmission system planned by STUs but this has not been done till date. As this has very high financial impact on the beneficiaries, CTU should comply with the requirement.

(b) CTU has filed an additional affidavit on 16.9.2021 in which it was stated that there was a meeting held on 11.8.2021 at CEA, in which it was decided to implement the full capacity of Koppal RE pooling station with 5x500 MW ICTs and associated bays and commissioning would be in staggered manner. This is different and not at par with the LTA granted. Also, the minutes of meeting dated 11.8.2021 held at CEA, was not discussed in 3rd SRPC (TP) meeting held on 24.8.2021 and the beneficiaries were not informed of the decision taken in the meeting.

(c) Implementation and COD of the transmission elements (ICT-wise) should be matched with the LTA granted by CTU to the RE generators. Any mismatch should be dealt with in accordance with the Regulations and the liability should not be fastened on the beneficiaries.

(d) The Petitioner may be directed to submit the copy of the minutes of 3rd SRPC (TP) meeting held on 24.8.2021 and get approval of SRPC on the revised proposal of CTU.

(e) The Commission may decide the Petition based on the recommendation of SRPC (TP) and then SRPC forum, due to the fact that the scope of the entire scheme has changed now.

7. In response, the representative of the CTU submitted that the revised system studies, as decided in the special SRPC meeting, were carried out by the CTU jointly with respective STUs and the said results were deliberated in the 3rd SRPC (TP) meeting. He further submitted that the transmission schemes for 4 REZs now prioritized do not include the augmentation of other corridors. It was also submitted that in the meeting held on 11.8.2021 at CEA, minutes of which are already available, it was observed that at Koppal, out of 1200 MW Stage-II connectivity granted therein, LTA for 600 MW has already been granted and e-Reverse Auction has already been done by SECI for RE capacity of around 1800 MW and for another 600 MW tender is under progress. It was, therefore, decided that the transmission scheme for entire 2.5 GW for Koppal REZ may be taken up instead of phasing the scheme albeit, addition of transformation capacity is to be done in a staggered manner. The same was also deliberated in the 3rd SRPC (TP) meeting, minutes of which are still awaited.

8. The learned counsel for the Respondents, KPTCL and PCKL submitted that while for Gadag it has been submitted that the implementation of the transmission

scheme will be in a phased manner, for Koppal it does not appear to be in a phased manner . Also, there is a mismatch between commissioning schedule of generation projects and transmission system planned by CTU. The learned counsel further submitted that the transmission charges for these transmission schemes should form part of national component and should be shared as per the Commission's Sharing Regulations.

9. After hearing the parties, the Commission directed the Petitioner to submit the following information/ documents on affidavit, by 30.9.2021:

- (a) Copy of minutes of 3rd SRPC (TP) meeting held on 24.8.2021;
- (b) Properly mapped elements of proposed transmission schemes for 8 GW of REZs;
- (c) Analysis as regards project cost, increase in transmission charges per MW for DICs and tentative renewable power generated per annum from the RE projects for each phase; and
- (d) Tentative timelines of two phases of the transmission scheme identified for four REZs.

10. After hearing the learned counsels for the Petitioner and the Respondents, the Commission reserved the order in the matter.

By order of the Commission

**Sd/-
(T.D. Pant)
Joint Chief (Law)**