IN THE APPELLATE TRIBUNAL FOR ELECTRICITY (Appellate Jurisdiction)

IA No. 1985 of 2022 in Appeal No. 433 of 2022

Dated: 18.07.2023

Present: Hon'ble Mr. Justice Ramesh Ranganathan, Chairperson

Hon'ble Mr. Sandesh Kumar Sharma, Technical Member

IN THE MATTER OF:

Tamil Nadu Generation and Distribution Corporation Limited,
Rep. by Chief Financial Controller/Regulatory Cell
7th Floor, NPKRR Maaligai
No.144, Anna Salai, Chennai – 600 002 Appellant(s)

Versus

- Central Electricity Regulatory Commission Represented by its Secretary 4th Floor, Chanderlok Building, New Delhi 110 001.
- 2. Power Grid Corporation of India Limited, Represented by its Chief General Manager "Saudamani", Plot No.2, Sector-29, Gurgaon -122 001.
- 3. Transmission Corporation of Andhra Pradesh Ltd. Represented by its Chief Engineer (APTRANSCO), Vidyut Soudha, Vijayawada-520004.
- 4. Kerala State Electricity Board (KSEB), Represented by its Managing Director Vaidyuthi Bhavanam, Pattom, Thiruvananthapuram-695 004.

- 5. Tamil Nadu Electricity Board
 Represented by its Chairman cum Managing Director
 NPKRR Malagai
 800, Anna Salai,
 Chennai 600002.
- Electricity Department
 Represented by Chief Electrical Engineer
 Government of Goa
 Vidyut Bhawan, Panaji, Goa 403 001.
- 7. Electricity Department, Represented by its Secretary Government of Pondicherry, Pondicherry-605 00.
- 8. Eastern Power Distribution Company of Andhra Pradesh Limited (APEPDCL), Represented by CGM/RA, P&T Colony, Seethammadhara, Visakhapatanam 530 020.
- 9. Southern Power Distribution Co of AP Ltd.
 Represented by Chairman & Managing Director,
 Srinivasa Kalyana Mandapam Backside,
 Tiruchanoor Road Kesavayanagunta
 Tirupati- 517501,
 Chittor District, AP.
- 10. Southern Power Distribution Company of Telangana Limited, Represented by Chairman & Managing Director 6-1-50, Corporate Office, Mint Compound, Hyderabad-500063.
- 11. Northern Power Distribution Company of Telangana Limited, H. No. 2-5-3 1 / 2, Vidyut Bhawan, Corporate Office, Nakkal Gutta, Hanamkonda, Warangal-506001,

Telangana.

- 12. Bangalore Electricity Supply Co. Ltd. BESCOM Power Purchase,
 Represented by General Manager (Electrical)
 2nd Floor, Corporate Office, K.R. Circle,
 Bangalore -560 001
- 13. Gulbarga Electricity Supply Co. Ltd. (GESCOM)
 Represented by Chief Engineer (Electrical)
 Station Main Road,
 Gulbarga 585102.
- 14. Hubli Electricity Supply Co. Ltd.
 Represented by General Manager
 Corporate Office, Navanagar,
 P B Road,
 Hubli 580 025.
- 15. MESCOM Corporate Office,
 Represented by its Managing Director
 Paradigm Plaza, AB Shetty Circle,
 Mangalore-575 001,
 Karnataka
- 16. Chamundeshwari Electricity Supply Co. Ltd.
 Represented by Superintending Engineer (Comml)
 Corporate Office, 927, L J Avenue,
 New Kantharaj Urs Road,
 Saraswathipuram,
 Mysore 570 009.
- 17. Transmission Corporation of Telengana Limited, Represented by its Managing Director Vidhyut Soudha, Khairatabad, Hyderabad 500082.
- 18. Karnataka Power Transmission Corporation Limited, Represented by Managing Director

Room No. 501, 5th Floor, KPTCL Building, Kaveri Bhavan, Bangalore-560 009.

- Tamil Nadu Transmission Corporation,
 Represented by its Managing Director
 NPKRR Maaligai,
 800, Anna Salai,
 Chennai 600 002.
- 20. Madhya Pradesh Power Management Company Limited, Represented by its Managing Director Shakti Bhawan, Rampur, Jabalpur 482008.
- 21. Maharashtra State Electricity Distribution Company Limited, Represented by its Managing Director Prakshgad, Plot No. G-9, Anant Kanekar Marg Bandra (East) Mumbai 400052.
- 22. Gujarat Urja Vikas Nigam Limited,
 Represented by General Manager (Commercial)
 Sadar Patel Vidyut Bhavan
 Race Course,
 Vadodara 390 007.
- 23. Union territory of Dadra & Nagar Haveli and Daman & Diu, Represented by Through its Executive Engineer Secretariat, Fort Area, Moti Daman-396220.
- 24. Chhattisgarh State Electricity Board, Represented by its Chairman P.O. Sunder Nagar, Dangania, Raipur, Chhatisgaarh-492013.
- 25. Madhya Pradesh Audyogik Kendra, Vikas Nigam (Indore) Ltd. Represented by its Managing Director 3/54, Press Complex,

Agra-Bombay Road, Indore-452008.

26. Central Transmission Utility of India Ltd.
Represented by its Chief General Manager
A wholly owned Subsidiary of
Power Grid Corporation of India Ltd.
A Government of India Enterprise
Saudamini, Plot No. 02, Sector 29,
Gurugram – 122001

....Respondent(s)

Counsel for the Appellant(s) : Mr. Sajan Poovayya, Sr. Adv.

Mr. S. Vallinayagam Mr. R. Kathiravan, EE Mr. R. Shrinivasan, AEE Ms. Raksha Agarwal Mr. Abhishek Kakker

Counsel for the Respondent(s) : Mr. Anand K. Ganesan

Ms. Swapna Seshadri

Mr. Amal Nair

Ms. Kritika Khanna Mr. Utkarsh Singh Ms. Surabhi Gupta Ms. Neha Garg for R-2

Mr. Prabhas Bajaj Mr. Ankit Roy for R-5

Mr. Sidhant Kumar Ms. Manya Chandok Ms. Muskaan Gopal Mr. Shivankar Rao

Ms. Gupreet Bagga for R-8&9

Mr. D. Abhinav Rao Mr. Rahul Jajoo Mr. Harsh Khirwal

Mr. N. Sai Vinod for R-10,11&23

Mr. Shubhranshu Padhi

Mr. Vishal Bansal

Mr. Niroop Sukirthy

Mr. Mohd. Ovais for R-12-16

Mr. Aakash Lamba for R-18

Mr. G. Sai Kumar

Ms. Nikita Choukse

Ms. Ekssha Kashyap for R-21

Ms. Suparna Srivastava

Ms. Tejasvita Dhwan

Mr. Tushar Mathur

Ms. Astha Jain

Ms. Divya Sharma

Mr. Sankalp Sharma for R-26

ORDER IA No. 1985 of 2022 (For Interim Relief)

PER HON'BLE MR. SANDESH KUMAR SHARMA, TECHNICAL MEMBER

1. The captioned Interlocutory Application (in short "IA") No. 1985 of 2022 has been filed by M/s. Tamil Nadu Generation and Distribution Corporation Ltd. (in short "Appellant" or "TANGEDCO") seeking interim relief against the Order dated 29.09.2022 (in short "Impugned Order") passed by the Central Electricity Regulatory Commission (in short "Central Commission" or "CERC") in petition no. 685/TT/2020 filed by Power Grid Corporation of India Limited (in short "R2" or "PGCIL"), a deemed transmission licensee, for determination of tariff under the

Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations").

- 2. After hearing the parties, we find it appropriate to adjudicate the captioned Appeal itself.
- 3. The Central Commission, in the Impugned Order, has held that:
 - "130. The main contention of the respondents is that Raigarh-Pugalur-Trissur HVDC system is one of the important elements of the National Grid which will provide flexibility, stability and RE integration, therefore, Raigarh-Pugalur-Trissur HVDC system may be treated as a national and strategic transmission system of national importance and 100% yearly transmission charges may be considered under National Component.
 - 131. We are of the view that the Commission is not the appropriate forum for declaring any transmission asset to be of national and strategic importance. It is further observed that transmission system being of national importance and a transmission system considered as a National Component are two different aspects. Therefore, we are not inclined to approve the 100% yearly transmission charges of Raigarh-Pugalur-Trissur HVDC system under National Component."

- 4. The main issue, thus, raised before us is whether the Central Commission has the powers and jurisdiction to declare any transmission asset as of national importance and 100% yearly transmission charges may be considered under National Component, if the answer to this is affirmative, then the Central Commission has erred in stating that "Commission is not the appropriate forum for declaring any transmission asset to be of national and strategic importance", and the Central Commission ought to have considered the submissions made by the Respondents.
- 5. We find it appropriate to hear the Central Transmission Utility (in short "CTU") on the aforementioned issue in the light of the functions and powers statutorily conferred upon CTU, the section 38 of the Electricity Act, 2003 (in short "the Act") provides that:
 - "38. (1) The Central Government may notify any Government company as the Central Transmission Utility:

Provided that the Central Transmission Utility shall not engage in the business of generation of electricity or trading in electricity:

Provided further that, the Central Government may transfer, and vest any property, interest in property, rights and liabilities connected with, and personnel involved in transmission of electricity of such Central Transmission Utility, to a company or companies to be incorporated under the Companies Act, 1956 to function as a transmission licensee, through a transfer scheme to be effected in the manner specified under Part XIII and such company or companies shall be deemed to be transmission licensees under this Act.

- (2) The functions of the Central Transmission Utility shall be -
- (a) to undertake transmission of electricity through inter-State transmission system;
- (b) to discharge all functions of planning and co-ordination relating to inter-state transmission system with -
 - (i) State Transmission Utilities;
 - (ii) Central Government;
 - (iii) State Governments;
 - (iv) generating companies;
 - (v) Regional Power Committees;
 - (vi) Authority;
 - (vii) licensees;
 - (viii) any other person notified by the Central Government in this behalf:
- (c) to ensure development of an efficient, co-ordinated and economical system of inter-State transmission lines for smooth flow of electricity from generating stations to the load centres;
- 6. Accordingly, CTU was impleaded as Respondent No. 26 to furnish their comments and necessary information/ documents in this regard.
- 7. The Appellant submitted that Transmission System in dispute is the Raigarh Pugalur Trissur HVDC transmission system which is implemented by PGCIL at an investment cost of Rs. 20,000 crores (approx) for the purpose of system strengthening to transfer surplus power from Chhattisgarh State (Raigarh) to

Southern Region and also as part of green energy corridor for transfer of Renewable Energy (in short "RE") power from RE rich Southern States to the rest of the country and this HVDC system qualifies all the characteristics to be declared as an asset of strategic importance, however, contended that the Central Commission has erred in considering the transmission scheme in spite of the fact that no regulatory approval was obtained by PGCIL prior to planning and commissioning of the instant asset as mandated by the CERC Regulatory Approval Regulations 2010, even to the fact that compliance to its own regulations is mandatory as per the settled principle of law.

- 8. It was also submitted by the Appellant that the Central Commission has failed to include the tariff under regional component of Western Regional beneficiaries as per Regulation 6(2) of the Sharing Regulations 2020, though PGCIL arrayed the Western Regional beneficiaries as respondents in the aforementioned petitions considering the fact that the power is also transferred from Southern Region (in short "SR") to Western Region (in short "WR"), the relevant extract of the relevant regulation is as under:
 - "6 (2) Yearly Transmission Charges covered under sub-clause (a) of Clause (1) of this Regulation shall be shared by drawee DICs of the receiving region and injecting DICs with untied LTA in the receiving region, in proportion to their quantum of Long-Term Access plus Medium Term Open Access and untied LTA, respectively."
- 9. The Appellant also invited our attention to the earlier decisions of the Central Commission in declaring i) Biswanath Chariali / Alipurdwar (Northeastern Region)

- Agra (Northern Region) HVDC, and ii) Mundra (Western Region)— Mohindergarh (Northern Region) HVDC transmission system, both similar to the present system where the beneficiaries are only NER, NR and WR, as transmission systems of strategic and national importance and the transmission tariff of this asset is recovered on all India basis, even though Southern region is not benefitted on account of this corridor, accordingly, the Central Commission ought to have considered and declared the present transmission system as National asset and the charges for this transmission system under the CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2010 should have been billed on all India basis.
- 10. Being aggrieved by the decision of the Central Commission to be consistence with its earlier orders passed by it in identical / similar HVDC assets and its refusal to share the transmission tariff of Raigarh-Pugalur-Trissr HVDC system on all India basis stating that CERC does not have the authority to do so, the Appellant filed the captioned appeal and the IA.
- 11. We find merit in the contention of the Appellant that the Central Commission, under the Act, having the jurisdiction under the Act has passed the order in respect of Biswanath Chariali / Alipurdwar (Northeastern Region) Agra (Northern Region) HVDC and Mundra (Western Region)—Mohindergarh (Northern Region) HVDC transmission system.
- 12. It was also submitted that the applicable regulations are the Sharing Regulations, 2010 for the aforementioned cited HVDC systems considering the

respective Commercial Operation Date (in short "COD") and for the instant transmission system is also the same.

- 13. It was also brought on record that the Central Commission considered the comments and recommendations of POSOCO in Biswanath Chariali-Agra bipolar HVDC, however, in the instant case, the comments and recommendations of POSOCO were not even discussed, even when brought on record and referred to by the Appellant, additionally prefer to decide the issue without any consultation with POSOCO, CTU and CEA, which are the premier technical bodies of the power sector.
- 14. Considering the above, the comments of CTU need to be considered in the matter, the comments as furnished by CTU are noted hereunder in brief:
 - i. That the 4000 MW HVDC bipole link from Raigarh pooling station in Chhattisgarh to Pugalur was agreed as a system strengthening scheme for meeting the requirement of future demands in the Southern Region (SR), accordingly, the Standing Committee on Power System Planning for Southern Region (in short "SCPSP(SR)") during its 37th Meeting held on 31.7.2014 was briefed that joint studies had been carried out by CTU and the Central Electricity Authority (in short "CEA") to facilitate import of 16000 MW power to SR due to huge deficit in the Southern Region on account of delay/deferment of generation projects and non-availability of gas for existing gas based generation projects, accordingly, the Raigarh-Pugalur HVDC could be implemented under

the regulated tariff mechanism, CTU (at that stage was part of PGCIL) suggested for implementation of the bipole link as 6000 MW HVDC capacity in a single phase to meet the urgent requirement of power, it was agreed, after the discussion in the Meeting and taking into account the suggestions of various SR constituents, to have a 6000 MW HVDC link from Raigarh, Chhattisgarh to SR.

- Further deliberations were held in the 42nd Meeting of SCPSP(SR) on ii. the potential availability and development of large quantum of renewable energy (RE) capacity in SR including the wind potential of about 2500 MW in Tirunelveli area, and accordingly, CTU suggested upgradation of the Tuticorin-Salem-Madhugiri Corridor, additionally, CEA suggested for a comprehensive study be carried out with Southern Region constituents for accessing the transmission system requirement in the Region as a whole in view of large potential of RE being envisaged in the Southern States and also considering the proposal for integration of RE into the Southern Grid, the Committee agreed for the same.
- iii. Thereafter, the Southern Region Power Committee (Transmission Planning) in its 1st meeting held on 16.12.2019, while reviewing the transmission system for RE projects, deliberated the suggestion made by the Appellant regarding the need for a tangible plan to bring the Raigarh-Pugalur-Trissur HVDC system into beneficial use so as to avoid the upgradation of existing ISTS corridor, and the same was further deliberated in the 38th Meeting of Southern Region Power Committee held on 23.12.2020 in view of surplus scenario and optimistic RE capacity additions projections in SR, the Southern Region Load Despatch Center (in short "SRLDC") suggested that the HVDC

- link could also be used for export of power, accordingly, the Raigarh-Pugalur-Trissur HVDC system could operate in reverse mode by minor investment at Raigarh vide augmentation of ICTs.
- iv. In view of above, the Technical Co-ordination sub-Committee (TCC) of Southern Region Power Committee in its 37th Meeting held on 28.10.2020, deliberated the issue, recommending for the consideration of the said HVDC system as a National Component, the relevant extract is quoted as under:

"5.7. TCC Deliberation:

- a) All members opined that the whole assets of Raigarh (Chhatisgarh)-Pugalur (TN) HVDC & Pugalur (TN) Trissur (KER) HVDC system may be declared as national and strategic projects/components and accordingly CERC may be requested. TANGEDCO suggested that PGCIL could also request CERC in this respect while filing tariff petition for the assets.
- b) APTRANSCO suggested that all the states may separately take up with MoP, recommending to declare the whole asset as a National Component.
- c) SRLDC opined that in view of the possibility of bidirectional power flow, i.e., from WR to SR as well as SR-WR, the CERC may be requested to declare the asset as national component and strategic project.
- d) Chairperson, TCC stated that SRPC would request CERC to declare Raigarh (Chhatisgarh)-Pugalur (TN) HVDC & Pugalur (TN) Trissur (KER) HVDC system as national and strategic component.

5.8. **Decision/Recommendation:**

The forum agreed in principle for declaring the whole assets of Raigarh (Chhatisgarh)-Pugalur (TN) HVDC & Pugalur (TN) – Trissur (KER) HVDC system as national and strategic projects/components and accordingly CERC may be approached."

v. Thereafter, in a Joint Study Meeting on Transmission Planning for Western Region and Southern Region on 16.12.2021, it was held as under:

"The HVDCs can be operated at various power orders during the day as per the grid requirement. Accordingly, operation of Raigarh – Pugalur HVDC in both the directions needs to be facilitated. Considering the above, study has been carried out to identify strengthening requirement beyond Raigarh (Kotra) PS under various operating conditions."

"iii. Deliberations and decisions taken in the meeting CTU representative briefed the participants that studies have been carried out to evolve a scheme for enabling operation of Raigarh-Pugalur HVDC link in reverse mode from Southern Region to Western Region under high SR export scenario.

vi. In another Joint Study Meeting of Southern Region constituents held on 30.6.2022-2.7.2022 to discuss various transmission proposals, the following was recorded:

"SRLDC requested that options may be explored for utilization of HVDC links like Raigarh-Pugalur HVDC and Talcher-Kolar HVDC in reverse mode for export of surplus power during peak RE scenario. Towards this, CTU clarified that based on the feedback received from POSOCO, adequate ICT augmentation has been planned and is being implemented at Raigarh & Kotra section in WR to facilitate operation of Raigarh-Pugalur HVDC link in reverse mode. With this augmentation, power flow of the order of 3000 MW may be exported through Raigarh-Pugalur HVDC to NEW grid. SRLDC opined that options may also be explored for further enhancing the capacity of reverse power flow to 6000 MW on Raigarh-Pugalur HVDC. In this regard, CTU clarified that Raigarh-Pugalur HVDC has been designed for reverse power flow upto 3000 MW. However, the matter for enhancement of the same to 6000 MW shall be suitably taken-up with POWERGRID to explore the feasibility of the same."

- vii. Accordingly, the reverse flow on the Raigarh-Pugalur-Trissur HVDC system (to the extent of 3000 MW) was to take place after adequate ICT augmentation at Raigarh and Kotra section in WR.
- 15. In the light of the aforementioned submissions, the CTU contended that the 6000 MW Raigarh-Pugalur-Trissur HVDC system was planned to import power from WR to the SR through direct interconnection between pit head generating stations in Chhattisgarh and load centres in SR, however, considering the surplus scenario and optimistic RE capacity addition projections later on, it was proposed to use the said HVDC system for export of power from SR as well (bi-directional), accordingly, the HVDC system was planned for 6000 MW import to the SR and provisions for 3000 MW reverse power flow for export from SR.

- 16. It was brought on record by the CTU that the HVDC system has facilitated SR constituents in peak import of about 16020 MW power from NEW grid during peak load on 10.3.2022, out of the 16020 MW import, about 6000 MW has been imported through the HVDC system, additionally, SR has exported about 6968 MW to NEW grid during high RE season on 10.08.2022, out of the 6968 MW export, about 3000 MW has been exported through HVDC system in reverse power flow mode, additionally, the HVDC system has been utilised in reverse power flow mode on continuous basis during the peak RE season of Southern Region i.e. July, 2022 to October. 2022 wherein about 3000 MW has been exported to NEW grid.
- 17. Further, added that SR would become surplus in power during peak RE hours in future in view of the surplus scenario and optimistic RE capacity addition projections as part of Government of India's target of achieving 175GW renewable power by 2022 and 500 GW renewable power by 2030, consequently, Raigarh-Pugalur HVDC transmission link will continued to be utilized for export of power outside SR (bi-directional), facilitating optimal utilization of existing inter-regional links and reducing the need for identification/implementation of additional interregional links for export of surplus power from SR, further, being utilized for import and export of power under various operating conditions, therefore may be considered as National Component under the Sharing Regulations, 2020.
- 18. It was informed that the consideration of the said HVDC link as National Component has been proposed by the CTU in its various representations, including communications dated 26.4.2022 and 29.4.2022 to the reference from

the Government of India, Ministry of Power on the issue of declaration of HVDC transmission link as National Component.

- 19. Also informed that the Government of India, Ministry of Power vide its letter dated 30.5.2022 addressed to the Central Commission has stated that the Raigarh-Pugalur-Thrissur HVDC system is benefitting both WR and SR and therefore, it appears that there is a case for inclusion of the subject transmission system as National Component under the Sharing Regulations, 2020, despite this the Central Commission in the Impugned Order has disinclined to consider the transmission system under National Component with the rider that "...if need be to consider the sharing based on bi-directional flow of Raigarh-Pugalur-Thrissur HVDC system due to change in load generation mix, the same shall be dealt by the Commission at the appropriate stage."
- 20. We find is absolutely unjust and unreasonable on the part of the Central Commission of ignoring the recommendations of the CTU, SRLDC and SRPC in addition to the submissions made by the Southern Region constituents and even not consulting the CEA, the technical Apex Statutory Technical Organisation, further, passing the order without considering the advice of the Ministry of Power.
- 21. On the contrary, POWERGRID, the transmission licensee, argued that there is no infirmity in the Impugned Order, accordingly, the captioned Appeal deserved to be dismissed, additionally, it has commissioned the said HVDC link and therefore, required to be paid for the Assets it has set up, adding that tariff recovery is not akin to a claim for damages but goes towards servicing of the capital cost invested by POWERGRID in the construction of transmission assets,

claiming that all the prudent costs and expenses incurred by POWERGRID along with a reasonable Return on Equity ('RoE') should be paid to it, further, submitted that there is no dispute on the tariff which has been decided by the Central Commission for the transmission assets set up by POWERGRID, none of the beneficiaries including TANGEDCO has questioned POWERGRID'S entitlement to its transmission tariff but only it is the manner of sharing the same.

- 22. We agree with the submissions of the POWERGRID to the extent that it is entitled to get the tariff it deserves to have but disagree that in case of erroneous determination, some beneficiaries can be penalized in the form of higher tariff.
- 23. It was further submitted by POWERGRID that the reliance of the Appellant on the MOP Letter which was addressed to the Central Commission to consider transmission charges of all HVDC inter-regional links under National Component has no merit as during the proceedings of Petition No. 685/TT/2020, there was no mention of the MOP Letter either by the Appellant or any other party, the petition was heard and reserved for Orders by the Central Commission on 11.02.2022 and the letter of MOP is dated 30.05.2022, neither TANGEDCO nor any other beneficiary brought the same to the notice of the Central Commission.
- 24. We decline to accept the submission of the POWERGRID as the Central Commission ought to have considered the same and its failure to acknowledge the letter of the Government of India on its own cannot be appreciated.

- 25. It was also submitted by the CTU that during the consultation process concerning the draft Sharing Regulations, 2020, the Central Commission clarified that HVDC systems planned to cater to the requirement of drawl by a particular region were covered under Regional Component and, in case of change in load-generation mix, if need arose to consider the sharing based on bi-directional flow of power, the same could be dealt with by the Commission at an appropriate time, therefore, the issue of considering the HVDC link i.e. Raigarh-Pugalur-Trissur HVDC system in the National Component was discussed at the time of framing of the Sharing Regulations, 2020 and the Central Commission decided to consider the same at an appropriate stage to include it in the National Component based on bi-directional flow of power, the said position has been reiterated by the Central Commission in the Order impugned.
- 26. It is further placed on record that the Central Commission under the provisions of the Sharing Regulations, 2010, proceeded to decide the proposed methodology for sharing of transmission charges for the "North East-Northern/Western Interconnector-I Project" and held as under:
 - "26. In view of the process of planning, development and execution of the transmission system as discussed hereinabove, we are of the view that the subject transmission systems are of strategic and national importance and are in the long term interest of the economy and consumers of the country. The ±800 kV Biswanath Chariali-Agra HVDC link is the first of its kind in India and is passing through the "Chicken Neck" area. This HVDC asset once created will serve multiple purpose of evacuating hydro potential of North East, Sikkim and Bhutan to the rest of the country and would also carry power from

serving needs of North East Region as well. In addition to this, the link is serving very important role of integrating the entire Indian Electrical Grid through a robust link. This asset is a unique asset due to its location and strategic importance. This link is a strategically important and vital connection for harnessing the present and anticipated exploitation and optimal utilization of hydro, thermal and renewable energy resources in the country. The strategic importance of the line is established by the fact that a secure and strong linkage for the North-Eastern Region and the rest of the country is now firmly established. Pertinently, the extremely narrow "Chicken Neck" which is 18 km X 22 km has been optimally utilized solving any future right of way issues in this critical, sensitive and vital area. Therefore, the setting up of such a powerful link is not only important but infuses a high degree of confidence, certainty and assurance for development of hydro power potential in North-East Region of the country, underlining the fact that no hydel development will have to face bottling up of power or backing down on account of transmission constraints. 27. The Commission agrees with POSOCO that the usefulness and importance of the subject transmission assets should not be seen in the narrow prism of its immediate utilization during the initial years but needs to be assessed over the entire life cycle of the assets which will carry the hydro power from the huge potential in North East for the benefit by the entire country. POSOCO has rightly pointed out that this link would provide the flexibility in power transfer, function as a pseudo phase-shifter and help in mitigating oscillations in inter-area mode and above all, the frequency controllers at BNC would help in operation of

Agra to Biswanath Charaiali during lean hydro season in NER, thereby

NER system, if it were to get islanded due to any reasons. Further, this bi-directional HVDC technology would enable optimal hydrothermal mix and successful integration of renewable energy resources of the country due to its connectivity with the hydro surplus North Eastern Region on one end and balance part of the country through National Grid. Strong interconnection through AC links between all the regions of National Grid would enable exchange of power between North–East Region and rest of the country. Moreover, this high capacity interconnection between North-East Region comprising of huge hydro potential would go a long way for integration of large renewable energy resources being developed in different parts of the country. Due to direct interconnection, hydro generation can support the variability and intermittent nature of renewable generation. Thus, this vital link is a flagship endeavor of the Indian Power Sector which will benefit the entire country.

28. Since the transmission assets are of strategic and national importance whose benefits shall be derived by the entire country, we are of the view that the charges for the HVDC assets covered in the present petition should be shared by all the regions of the Country.

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- 30. Since, these assets are proposed to be considered as assets of national importance and all the regions are proposed to bear the transmission charges, we consider it necessary to hear the DICs of all the regions........."
- 27. Further, in a similar position as above, the Commission in its Order dated 8.6.2013 passed in Petition 44/TL/2012 held as under:

It has thus emerged from the above that the transmission **"26**. systems of the petitioner were planned and executed as dedicated transmission lines. Though, CEA in its letter dated 16.3.2012 had recommended that Dehgam–Mundra–Mohindergarh–Bhiwani corridor developed as dedicated transmission system by the petitioner would act as a parallel Inter Regional link and will have an important role to play in National grid, if it is converted from a dedicated asset to a licensed inter-State asset, in its subsequent letter dated 28.2.2013, it has been recommended that the Mundra-Mohindergarh HVDC line can continue to function as dedicated transmission line without any system security problem. It has been further stated that if Mundra-Mohindergarh HVDC line is granted transmission licence from grid security consideration, this line could be allowed to carry 1250 MW by the system operator, unless parallel AC path of requisite capacity is created between WR and NR, so as to cater to N-1 criteria, which would result in creation of additional transmission system and consequent additional transmission charges for the DICs. CTU has submitted that if the transmission line is integrated into the grid and allowed to carry according to the capacity of HVDC line, then additional line may be required to cater to desired level of security, which can be determined by detailed study."

28. We find it totally inconsistent approach adopted in the present case, its decision to defer the consideration of the instant HVDC link under the components of National Importance to a later stage based on change in load generation and bi-directional flow of power is unreasonable as the Dehgam–Mundra–

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Mohindergarh–Bhiwani link, till date, has operated with only unidirectional flow, as submitted by the Appellant and also that the ±800 kV Biswanath Chariali-Agra HVDC link is under utilized and the SR is not benefitted by either of the two.

- 29. Further, the Central Commission decided the issue after considering the comments of the CEA, POSOCO & CTU in earlies cases, however, passed the Impugned Order without considering these regulations in the instant case.
- 30. We appreciate the views of the CTU and in the light of the above mentioned Orders, Statement of Reasons to the Sharing Regulations, 2020, and the fact that Raigarh-Pugalur HVDC transmission link will also be utilized for export of power outside the Southern Region(bi-directional) (on account of surplus scenario and optimistic RE capacity addition projections), the HVDC transmission link is likely to be utilized for both import and export of power under various operating conditions and may be considered as National Component under the Sharing Regulations, 2020.
- 31. It cannot be disputed that Tamil Nadu and other Southern Regional States are RE rich States and the resources will be shared for the benefit of the entire country, it was also submitted by the Appellant that the loan for the instant asset was sought from the Asian Development Bank citing it as a Renewable Energy Corridor.
- 32. Therefore, the submissions of the Appellant under these circumstances find merit, for considering the Raigarh Pugalur HVDC transmission system as

assets of strategic and national importance in line with the other HVDC systems so that the charges are shared on all India basis.

33. We, therefore, find it appropriate to set aside the Impugned Order and direct the Central Commission to pass fresh order in the light of the observations recorded in the foregoing paragraphs and also duly consulting the statutory authorities i.e. CEA, CTU and POSOCO in the matter and also considering the aforementioned MoP's letter dated 30.05.2022.

The captioned Appeal along with the IA is disposed of accordingly.

PRONOUNCED IN THE OPEN COURT ON THIS 18th DAY OFJULY, 2023.

(Sandesh Kumar Sharma)
Technical Member

(Justice Ramesh Ranganathan) Chairperson

pr/mkj