CENTRAL ELECTRICITY REGULATORY COMMISSION **NEW DELHI**

Review Petition No. 1/RP/2017 alongwith I.A. No. 4/IA/2017 in Petition No. 416/TT/2014

Coram:

Shri Gireesh B. Pradhan, Chairperson Shri A.K. Singhal, Member Shri A.S. Bakshi, Member

Date of Order : 18th July 2017

In the matter of:

Review petition under Section 94(1)(f) of the Electricity Act, 2003 read with Regulation 103 (1) of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, seeking review of order dated 22.8.2016 in Petition No. 416/TT/2014.

And in the matter of:

Power Grid Corporation of India Limited, "Saudamini", Plot No. 2, Sector 29, Gurgaon-122001 Haryana

.....Petitioner

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- 1. Karnataka Power Transmission Corporation Limited(KPTCL), Kaveri Bhavan, Bangalore - 560 009
- 2. Transmission Corporation of Andhra Pradesh Limited (APTRANSCO), Vidyut Soudha, Hyderabad – 500082
- 3. Kerala State Electricity Board (KSEB) Vaidvuthi Bhavanam Pattom, Thiruvananthapuram - 695 004



4. Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO) NPKRR Maaligai, 800, Anna Salai Chennai – 600 002

5. Electricity Department Government of Goa Vidyuti Bhawan, Panaji, Goa 403001

6. Electricity Department Government of Pondicherry, 58, NSC Bose Salai Pondicherry – 605001

7. Andhra Pradesh Eastern Distribution Company Limited (APEPDCL) Sai Shakti Bhavan, 30-14-09, Near Saraswathi Park Vishakhapatnam- 530020 Andhra Pradesh

8. Andhra Pradesh Southern Power Distribution Company Limited (APSPDCL) H. No. 193-93 (M) Up stairs Reniguta Road Tirupati-517 501, Andhra Pradesh

- 9. Andhra Pradesh Northern Power Distribution Company Limited (APNPDCL) H.No. 1-1-504, Opp. NIT Petrol Pump, Chaitanyapuri, Warangal – 506 004, Andhra Pradesh
- 10. Andhra Pradesh Central Power Distribution Company limited (APCPDCL) Singreni Bhavan, Red Hills Hyderabad – 500 063, Andhra Pradesh
- 11. Bangalore Electricity Supply Company Limited (BESCOM), Krishna Rajendra Circle Bangalore – 560 001, Karnataka
- 12. Manglore Electricty Supply Company Limited (Mescom) Paradigm Plaza, AB Shetty Circle, Mangalore-5750009, Karnataka
- 13. Chamundeswari Electricity Supply Corporation Limited (CESC), Corporate office 927, L J Avenue, Ground Floor, New KantharajUrs Road Saraswatipuram, Mysore – 570 009, Karnataka
- 14. Gulbarga Electricity Supply Company Limited (GESCOM) Main Road, Gulburga, Karnataka



- 15. Hubli Electricity Supply Company Limited (HESCOM) Navanagar, PB Road, Hubli, Karnataka
- 16. IL&FS Tamil Nadu Power Company Limited B- Block, 4th Floor, Navin's presidium 103, Nelson Manickam Road, Aminijikarai Chennai-600 029
- 17.PEL Power Limited 8-2-293/A/76 Road No. 9A Jubilee Hills Hyderabad-500 033

For petitioner : Ms. Swapna Seshadri, Advocate, PGCIL

Shri Jasbir Singh, PGCIL Shri S.S. Raju, PGCIL Shri M.M. Mondal, PGCIL Shri S.K. Venkatesan, PGCIL Ms. Supriya Singh, PGCIL

Ms. Pratibha Raje Parmar, PGCIL

For respondent: Shri S. Vallinayagam, Advocate, TANGEDCO

Ms. E. Shyamala, TANGEDCO Shri R. Kathiravan, TANGEDCO

ORDER

The instant review petition has been filed by Power Grid Corporation of India Limited (PGCIL) under Section 94(1)(f) of the Electricity Act, 2003 read with Regulation 103(1) of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 seeking review of the order dated 22.8.2016 in Petition No.416/TT/2014, wherein the transmission tariff was allowed for New 400 kV GIS pooling station at Nagapattinam with 1x125 MVAR Bus Reactor under the common transmission scheme associated with ISGS Projects in Nagapattinam/Cuddalore area of Tamil Nadu Part-A1(a) in Southern Region for tariff block 2014- 19 under Central

Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred as "2014 Tariff Regulations").

Brief facts of the case

- 2. The Review Petitioner had filed Petition No. 416/TT/2014 for approval of transmission tariff for instant assets under the Common Transmission Scheme associated with ISGS Projects in Nagapattinam/Cuddalore area of Tamil Nadu Part-A1(a) in Southern Region for 2014-19 tariff period. The Commission while approving the tariff in the order dated 22.8.2016 inter-alia disallowed the Review Petitioner's prayer for additional Return on Equity (ROE), approved COD of one bay as 28.6.2015 against the Review Petitioner's claim of 1.4.2015 and disallowed capital cost to the extent of ₹2264 lakh relating to the GIS bays.
- 3. The Review Petitioner has submitted that there are errors apparent on the face of record in the order dated 22.8.2016 which has necessitated the filing of the present review petition. The Review Petitioner has made the following prayers:
 - a) Allow the additional return on equity for the Nagapattinam Sub-station.
 - b) Approve the COD of the Neyveli Bay from 1.4.2015.
 - c) Allow the cost of the future 3 bays in the instant petition due to the peculiar fact that the GIS modules for the complete diameter have to be installed to comply with one and half breaker scheme for connectivity.
- 4. There is a delay of 50 days in filing the instant review petition. The Review Petitioner has filed I.A. No.4/IA/2017 seeking condonation of delay in filing the review petition. The Review Petitioner has submitted that during August-September, 2016, the

Commission issued several orders allowing AFC for including in the computation of PoC charges wherein the recovery of transmission charges was modified directing to recover the same from other entities. The Review Petitioner took time to examine the matter to take a consistent stand. The Review Petitioner further submitted that sorting out the internal differences and consulting a senior advocate also took time. The Review Petitioner has prayed to condone the delay in filing the review petition on account of the procedural requirements to be met at its end. The application for condonation of delay should have been dealt with at the admission stage itself. Since the IA was not dealt with in the initial stage and parties were directed to file the replies on merit, we are condoning the delay as an exception. The Review Petitioner is directed to file the review petitions within the timeline stipulated in Regulation 103 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 in future.

Grounds for Review

- 5. The Review Petitioner has submitted that certain material facts and documents in the original petition and the documents submitted vide affidavit dated 5.4.2016 were not considered in the impugned order which constitute error apparent on the face of record. The Review Petitioner has made the following submissions in support of the grounds for review:
 - a) The additional ROE for the instant assets was disallowed as the associated line, i.e. LILO of Neyveli-Trichy 400 kV line is only 23 kilometers whereas additional RoE is admissible only for transmission lines of length of more than 50 km. The Review Petitioner has claimed additional RoE for the New Nagapattinam

GIS Sub-station, and not for the associated bays for the LILO of Neyveli-Trichy at Nagapattinam. However, the Commission proceeded on the basis that additional RoE was claimed for line bays and accordingly denied additional RoE as the LILO did not conform to the minimum length as specified in the Tariff Regulations. According to the Review Petitioner, the timeline for grant of additional RoE for a 400 kV sub-station is 30 months and the instant GIS sub-station was commissioned within 30 months. Further, SRPC had issued a certificate dated 12.10.2015 under proviso (iii) of Regulation 24(2) of the 2014 Tariff Regulations stating that the commissioning of the instant GIS would benefit the system operation in the regional/national grid. The Review Petitioner has submitted that the instant asset, namely Nagapattinam GIS meets the requirements of both Regulation 24(2) and the timeline specified for 400 kV sub-stations.

b) As regards the commercial operation date, the COD for one bay has been granted as 28.6.2015 instead of claimed COD of 1.4.2015. The CEA Certificate dated 27.3.2015 submitted vide affidavit dated 5.4.2016 clearly states that both the bays had been charged on 22.3.2015. Both the bays at Nagapattinam Substation were ready for charging and were actually charged on 22.3.2015. Further, the Neyveli bay at Nagapattinam was under charged condition since 1.4.2015 as the line from IL&FS was terminated at this bay under a temporary arrangement made to facilitate start-up power requirements for IL&FS. However, SRLDC issued the certificate only when Neyveli line was terminated at its designated bay which was done later in June, 2015 as per original SLD. The Review Petitioner has further submitted that LILO of ckt-1 of Neyveli-Trichy Line was declared under

commercial operation on 3.5.2014 by connecting it to the dedicated IL&FS Nagapattinam Quad line bypassing the Nagapattinam GIS as the same was not ready then, on the request of IL&FS as per transmission agreement and the same is covered in Petition No. 36/TT/2014 and the transmission charges for the same was borne by IL&FS till commissioning of their 1st unit on 29.9.2015. This LILO was energized with effect from 22.1.2015 and thus the start-up power was drawn by IL&FS with effect from 22.1.2015 from Neyveli and Trichy line. On 1.4.2015, Nagapattinam Sub-station along with Neyveli and Trichy bays at Nagapattinam was charged. Since, IL&FS bays at Nagapattinam Sub-station for the dedicated ILFS-Nagapattinam Sub-station quad line were not ready, in order to provide the start-up power to IL&FS, connection of the Trichy portion of the LILO was terminated at the Nagapattinam Sub-station. However, the Neyveli portion remained unchanged. In order to complete the power flow, dedicated IL&FS-Nagapattinam Sub-station quad line which was earlier connected to the Trichy portion of the LILO, was terminated to Neyveli bay at Nagapattinam. Therefore, the Nagapattinam-Trichy was connected on 1.4.2015.

- c) As regards disallowance of capital cost to the extent of ₹2264 lakh relating to the GIS bays, the Review Petitioner has submitted that the Commission has proceeded on the premises that the capital costs of the following modules need not be allowed since they are not commissioned or put to use
 - a) 400 kV SF6 gas insulated line reactor bay module
 - b) 400 kV SF6 gas insulated ICT feeder bay module
 - c) 400 kV GIS auxiliary bus module provision for spare transformer



However, the GIS at Nagapattinam is of one and half breaker scheme and unlike in AIS, the GIS modules for the complete diameter have to be installed to comply with one and half breaker scheme for connectivity with both the main buses 1 and 2. In case of GIS, even though the construction is modular, it does not mean that it can be charged module-wise in an installation. It is a known fact that the GIS being of compact design, the area requirement of GIS is less as compared to AIS. The compact design has its own unique problems as well. As in instant case, if only the bus connected with diameter which is presently utilized for power flow is charged and the remaining part of bus is not charged, necessary end pieces shall be required to insulate it from other part which is difficult to plan for each instance. Each additional end piece would in turn require additional space which will increase the land requirement adversely impacting the benefits of the GIS. Further, in case, the GIS is planned bay-wise, it would increase the requirement of end piece, extension piece etc. leading to adverse cost impact in addition to the fact that whenever additional bus or bays are to be connected, the required HV Test would need to be carried out which is harsh on the existing GIS. Further, each GIS equipment can only be exposed to HV test only for a limited number of times. Thus, it will not be practical to carry out HV test with each increasing number of bays. Repeated opening for extension will increase the vulnerability of GIS for exposure to faults which may be caused due to ingress of dust, moisture etc. In addition, each extension and HV test would require the shutdown of complete station which may not be practical each time. The Review Petitioner had claimed cost of 9 bays amounting to ₹3383 lakh vide affidavit dated 5.4.2016.



However, in the impugned order only 3 bays have been considered for tariff whereby cost for the remaining 6 bays has been disallowed to the extent of ₹2264 lakh. In a similar case, the Commission vide order dated 25.5.2016 in Petition No. 283/TT/2015 allowed the cost and O&M expenses of one future bay on account of GIS module.

- 6. During the hearing on 7.2.2017, the learned counsel for the Review Petitioner reiterated the submissions made in the review petition and requested to allow additional RoE, approve COD of one bay from 27.6.2015 as claimed and allow the capital cost of ₹2264 lakh relating to the GIS bays.
- 7. The learned counsel for TANGEDCO, Respondent No. 4, submitted that that the originally intended Nagapattinam 765/400 kV Pooling station has not yet been completed by the Review Petitioner and the Review Petitioner has completed only a part of the sub-station facilitating evacuation of power from IL&FS and therefore claim for additional RoE is unjustified. As regards COD, learned counsel submitted that even though the Neyveli bay at Nagapattinam was ready, the bay was not used for the intended purpose and the Review Petitioner has modified the scope of the scheme temporarily for drawal of start-up power by IL&FS and therefore, COD could commence only from 28.6.2015, from which date the assets were put to regular use. As regards disallowance of capital cost, he submitted that the stated elements are not required for connecting Bus I and II and for reliable operation. These elements are totally redundant and do not enhance the reliability. Further, as PELPL project has been abandoned, there is no requirement for a 765/400 kV Pooling station as such. The six number of

feeders could very well be accommodated in three complete diameters with one and half breaker scheme without any hurdle. If the line reactors are required to be accommodated, it could be done with another diameter. The requirement of Bus Reactor of 125 MVAR needs to be revisited. Moreover, the two terminal feeders for IL&FS could be accommodated in the same diameter instead of ICT feeder bay module and auxiliary bus module provision for spare transformer. The Review Petitioner's contention that expansion or addition of bays in future requires unnecessary exposure of the existing GIS to harsh HV test vulnerability of GIS for exposure to faults which may be caused due to ingress of dust and moisture is not correct. The advantage of GIS is that each and every module could be tested in isolation without total shutdown and without any exposure to external atmosphere. The modules could be added in future without any technical snag. Learned counsel submitted that the contention of the Review Petitioner is not correct as the Review Petitioner has been testing the GIS modules for future bays without any difficulty.

- 8. The Review Petitioner in its rejoinder, vide affidavit dated 24.4.2017, has made the following submissions:
 - (a) The instant assets meet the requirement of proviso (iii) of Clause (2) of Regulation 24 of the 2014 Tariff Regulations and the timeline specified in the 2014 Tariff Regulations for grant of additional RoE. Hence, the instant assets qualify for grant of additional ROE of 0.5%.
 - (b) The CEA certificate dated 27.3.2015 states that both the bays were charged on 22.3.2015. Accordingly, the Review Petitioner had declared the commercial

operation date as 1.4.2015. The Commission had approved this date of COD in its order dated 31.5.2016 in Petition No. 36/TT/2014. Further, there is no commercial implication on TANGEDCO or any other beneficiary if the commercial operation date of the bay is taken as 1.4.2015 as the transmission charges for the bay are borne by IL&FS till 29.9.2015. Therefore, it is only a question of harmonising the two orders viz. the order dated 31.5.2016 and the order under review dated 22.8.2015. this regard, all the necessary details including the proof of charging of the bays had been filed by the Review Petitioner along with its affidavit dated 5.4.2016 wherein the CEA certificate dated 27.3.2015 has also been placed. However, the same has not been considered in the impugned order.

(c) The Commission has disallowed the capital costs of certain modules on the basis that they are not commissioned or put to use. However, the GIS at Nagapattinam is of one and half breaker scheme and unlike in AIS, the GIS modules for the complete diameter have to be installed to comply with one and half breaker scheme for connectivity with both the main Bus 1 and 2, the entire capital cost was incurred by the Review Petitioner at one go. Form 5 had been filed by the Review Petitioner alongwith the tariff petition. The Review Petitioner has also filed an affidavit dated 5.4.2016 wherein cost of total 9 bays were claimed (including 2 Bus Bar Module, 1 Aux Module for ICT and 1 Line reactor Module) i.e. Main Bay No. 4 (Including LR Module), 7 (Including Aux Bus Module), 10 and 12, Tie Bay No. 11 and Bus Bar Module Bay No. 13 and 14 amounting to ₹3383 lakh. The Commission in similar cases has allowed the entire capital cost.

Analysis and Decision

- 9. We have considered the submissions of the Review Petitioner and TANGEDCO. The Review Petitioner has filed the instant review seeking review on three issues viz. additional ROE, grant of COD of one bay from 1.4.2015 as against COD granted from 27.6.2015, and approval for the disallowed capital cost to the extent of ₹2264 lakh relating to the GIS bays.
- 10. With regard to ROE, the Commission in the impugned order has observed as under:-
 - "59. Further, the petitioner in the instant petition has submitted that as specified in the 2014 Tariff Regulations, the instant assets have been put under commercial operation within the timeline of 30 months and has claimed additional RoE of 0.50%. It is noted that as per proviso (vi) of Regulation 24 (2), additional RoE shall not be admissible for transmission line having length of less than 50 kilometres. The line length of the LILO of Neyveli-Trichy 400 kV line is 23 kilometres and the assets in the instant petition are bays at 400 kV GIS pooling station at Nagapattinam associated with LILO of Neyveli-Trichy 400 kV line of 23 kilometres. Hence, the additional RoE is not admissible for the instant assets."
- 11. The Review Petitioner's contention is that the instant 400 kV bays at Nagapattinam GIS Sub-station were commissioned within the 30 month timeline specified in the 2014 Tariff Regulations and further SRPC has certified that the commissioning of the bays are beneficial to the system operation in the regional/national grid as required under proviso (iii) to Regulation 24(2). Hence, the instant assets are eligible for additional RoE of 0.5%.
- 12. Regulation 24 of the 2014 Tariff Regulations regarding additional RoE provides as under:-
 - "24. Return on Equity:
 - (1) Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 19.



(2) Return on equity shall be computed at the base rate of 15.50% for thermal generating stations, transmission system including communication system and run of the river hydro generating station, and at the base rate of 16.50% for the storage type hydro generating stations including pumped storage hydro generating stations and run of river generating station with pondage:

Provided that:

- (i) in case of projects commissioned on or after 1st April, 2014, an additional return of 0.50 % shall be allowed, if such projects are completed within the timeline specified in Appendix-I:
- (ii) the additional return of 0.5% shall not be admissible if the project is not completed within the timeline specified above for reasons whatsoever:
- (iii) additional RoE of 0.50% may be allowed if any element of the transmission project is completed within the specified timeline and it is certified by the Regional Power Committee/National Power Committee that commissioning of the particular element will benefit the system operation in the regional/national grid:
- (iv) the rate of return of a new project shall be reduced by 1% for such period as may be decided by the Commission, if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Restricted Governor Mode Operation (RGMO)/ Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch centre or protection system:
- (v) and when any of the above requirements are found lacking in a generating station based on the report submitted by the respective RLDC. RoE shall be reduced by 1% for the period for which the deficiency continues:
- (vi) additional RoE shall not be admissible for transmission line having length of less than 50 kilometers."
- 13. It is clear from the sixth proviso under Regulation 24(2) of the 2014 Tariff Regulations that additional ROE for the transmission line having line-length of less than 50 km is not admissible. The assets covered in the instant petition are bays at 400 kV GIS pooling station at Nagapattinam associated with 400 kV Trichy Line-1 and 400 kV NLC TS-1 expansion line. The line length of the associated LILO of Neyveli-Trichy 400 kV line is 23 km which is less than 50 km specified in the 2014 Tariff Regulations. As per proviso (vi) to Regulation 24(2) quoted above, additional RoE of 0.5% is admissible only for transmission lines of more than 50 km. Accordingly, even though the instant



assets were commissioned and are beneficial to the system operation as certified by SRPC, the said assets do not qualify for additional RoE of 0.5% as the associated line is less than the 50 km.

14. As regards the commercial operation of the bays, the Commission in the impugned order has observed as under:-

"27. We have considered the submissions of the petitioner and respondent. We agree with the submissions of the respondent on this issue. The assets covered under the instant petition are 2 bays associated with LILO of Neyveli-Trichy 400 kV S/C Line at Nagapattinam Pooling Station. The GIS is a Modular Configuration and we do not agree with the submission of the petitioner that all equipments should be installed in one stage only. Thus, the modules such as ICT feeder, SF6 Gas insulated Reactor, Spare Transformer cannot be allowed to be capitalised unless they are commissioned and put to use. Hence, we are not inclined to allow the capital cost of the referred modules as on COD of the instant assets."

15. The Review Petitioner has submitted that the COD of one bay has been considered as 28.6.2015 in the impugned order whereas the asset was commissioned on 1.4.2015. The Review Petitioner has relied on the CEA Certificate dated 27.3.2015 submitted vide affidavit dated 5.4.2016 in the main petition. This certificate issued by CEA was considered by us while issuing the impugned order. The relevant portion of the order is extracted below.

"19. The issue of COD of LILO of Neyvelli-Trichy has been dealt with in Petition No. 36/TT/2014, and the COD of Nagapattinam Sub-station as covered under the instant petition is 1.4.2015 as per RLDC certificate dated 1.3.2016. We have perused the CEA certificate dated 27.3.2015, whereby, completion certificate is granted to bays covered in the instant petition. However, on a perusal of RLD Certificate dated 1.3.2016, it is observed that one bay was charged on 31.3.2015 and the other bay on 27.6.2015. Therefore, we are inclined to approve COD of one bay from 1.4.2015 and the other bay from 28.6.2015."

The CEA certificate dated 27.3.2015 is only the completion certificate granted to bays covered in the instant petition under Regulation 43 of CEA (Measures relating to



Safety and Electric Supply) Regulations, 2010, whereas, the bays were charged on 31.3.2015 and 27.6.2015 as per the RLDC certificate dated 1.3.2016. Accordingly, the COD of the bays were approved as 1.4.2015 and 28.6.2015. Therefore, there is no error in the impugned order. The Review Petitioner is trying to reargue the matter on merit at the stage of review which is not allowed. Accordingly, the review on this count is also not allowed.

- 16. As regards the disallowance of capital cost to the extent of ₹2264 lakh relating to the GIS bays, the Review Petitioner has submitted that the Commission has proceeded on the premise that the capital costs of the following modules need not be allowed since they are not commissioned or put to use:
 - a) 400 kV SF6 gas insulated line reactor bay module
 - b) 400 kV SF6 gas insulated ICT feeder bay module
 - c) 400 kV GIS auxiliary bus module provision for spare transformer

The Review Petitioner has submitted that the Gas Insulated Switchgear (GIS) at Nagapattinam is of one and half breaker scheme and unlike in AIS, the GIS modules for the complete diameter have to be installed to comply with one and half breaker scheme for connectivity with both the main Buses 1 and 2. The Review Petitioner, vide affidavit dated 5.4.2016, had claimed cost for 9 bays amounting to ₹3383 lakh. However, in the impugned order only 3 bays have been considered for tariff whereby cost for the remaining 6 bays has been disallowed to the extent of ₹2264 lakh. TANGEDCO has submitted that these elements are not required for connecting Bus I and II and for reliable operation.

- 17. We have considered the submission of the Review Petitioner and TANGEDCO. In the impugned order, 4 elements numbered 4, 7, 13 and 14 claimed in the petition have not been considered under capital cost as the same are not related to assets in the Petition No.416/TT/2014 and therefore, only the assets associated with 400 kV GIS Nagapattinam Sub-station i.e. item No 10, 11 and 12 have been considered for grant of capital cost. Accordingly, the Review Petitioner's prayer for review on this count is also disallowed.
- 18. Review Petition No.1/RP/2017 alongwith I.A. is disposed is disposed of in terms of the above.

sd/- sd/- sd/
(A.S. Bakshi) (A.K. Singhal) (Gireesh B. Pradhan)

Member Member Chairperson