## CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

## Review Petition No. 10/RP/2019 in Petition No. 168/TT/2018

### Coram:

Shri P.K. Pujari, Chairperson Dr. M.K. Iyer, Member

Date of Order : 06.1.2020

### In the matter of:

Review petition under Section 94(1)(f) of the Electricity Act, 2003 read with Regulation 103 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, seeking review of order dated 20.2.2019 in Petition No. 168/TT/2018.

## And in the matter of:

Powergrid Corporation of India Limited "Saudamini", Plot No. 2, Sector-29, Gurgaon- 122 001

.....Review Petitioner

### Vs

- National Thermal Power Corporation Ltd. (NTPC) NTPC Bhawan, Core-7, Scope Complex, 7, Institutional Area, Lodhi Road, New Delhi-110003
- Nevyeli Lignite Corporation Ltd., P.O. Nevyeli-607801, Cuddalore District, Tamil Nadu
- Nuclear Power Corporation of India Ltd. (NPCIL) Nabhikya Bhawan, Anu-Shakti Nagar, Mumbai-400094
- 4. NTPC Tamil Nadu Energy Company Ltd. (NTECL), G-Block, 123 & 123A, 12th Street, Anna Nagar (East), Chennai-600102
- 5. Meenakshi Energy Private Limited, Plot 119 Road No. 10, Jubilee Hills, Hyderabad-500033



- Simhapuri Energy Limited, 6-3-866/2, 3rd Floor, Begumpet Madhucon Green lands, Hyderabad-500016
- LANCO, Kondapalli Power Pvt. Ltd. Plot No. 4, Software Units Layout, Hitech City, Madhapur, Hyderabad-5000081
- Andhra Pradesh Power Co-ordination Committee, Vidyut Soudha, Hyderabad-500082
- 9. Power Company of Karnataka Ltd. Room No. 503, KPTCL Building, Kaveri Bhavan, Bangalore-560009, Karnataka
- Kerala State Electricity Board, Vydyuthi Bhavanam, Pattom Thiruvananthapuram-695004
- Tamil Nadu and Generation Distribution Corporation Ltd, 7th Floor, Eastern Wing, 144, Anna Salai, Chennai-600002
- 12. Electricity Department, Government of Puducherry, Puducherry-605001
- 13. Electricity Department, Government of Goa, Curti-Ponda, Goa-403401

# ...Respondents

For Review Petitioner	:	Ms. Ranjitha Ramachandran, Advocate, PGCIL Ms. Poorva Saigal, Advocate, PGCIL Shri Zafrul Hasan, PGCIL Shri S. S. Raju, PGCIL

For Respondents : None

# <u>ORDER</u>

The instant Review Petition is filed by Power Grid Corporation of India Ltd.

("PGCIL") seeking review of the order dated 20.2.2019 in Petition No. 168/TT/2018

under Section 94(1)(f) read with Regulation 103 of the Central Electricity Regulatory

Commission (Conduct of Business Regulations) Regulations, 1999. The Commission in order dated 20.2.2019 considered the total length of the OPGW fiber optic cable as 5256 km, out of which 2288 km is shared by PGCIL with Powergrid Telecom Network (PTN) and held that the capital cost of the OPGW fiber cable shared by PGCIL with PTN should not be included in the capital cost for the purpose of determination of transmission tariff. PGCIL has sought review of the said two findings of the Commission in order dated 20.2.2019.

### **Background**

2. PGCIL filed Petition No. 168/TT/2018 for approval of transmission tariff for Asset-1A: OPGW Communication Link of 7.47 km for Nellore Pooling Station-400 kV Nellore PG; Asset-1B: OPGW Communication Link of 22.88 km 400 kV Raichur-765 kV Raichur; Asset-1C: OPGW Communication Link of 32.73 km for Nellore Pooling Station-TPCIL (Thermo Power tech Corporation India Ltd); Asset-1D: OPGW Communication Link of 9.88 km for Kurnool (New)-Kurnool Sub-station; Asset-2: 148 km OPGW fiber optic cable along with associated equipment for 1) LILO of Nagarjuna Sagar-Gooty at Kurnool (PG)-30 km. 2) 765 kV Raichur-Kurnool (PG)-118 km; Asset-3: 159 km OPGW fiber optic cable along with associated equipment for 1) 400 kV Kadapa (PG)-Chittor (APTRANSCO)-159 km 2) 400 kV Kadapa (PG)-Chinakampally (APTRANSCO)-approach Cable); Asset-4: 1717.112 km OPGW fiber optic cable along with associated equipment (includes 966.436 km under cost apportionment with POWERTEL) for 400 kV Neyvelli TS-II-400 kV Neyveli TS-1 Expn. (13.921 km), Tuticorin Pooling Station-Madurai Sub-station (95.361 km), Madurai Sub LDC (TNEB)-Madurai 230 kV (TNEB)-Madurai (PG)-13.794 km, 400 kV PUGALUR(PG)-Trichy (TNEB)-Trichy (PG)-94.150 km, 230 kV Tanjore (TNEB)-400 kV Trichy (TNEB)-58.014 km, 230 kV Thiruvaur (TNEB)-230 kV

Tanjore (TNEB)-71.909 km, 400 kV Hassan PG)-Neelmangla (KPTCL) 204.936 km, 400 kV Narendra Davengere-153.393 km, LILO of Neyveli TS-II-Trichy to Nagapattinam - 45.198 km, and Telecom links under Fibre Sharing Madurai-Trichy-129.584 km. Madurai-Tirunelveli & Tirunelveli-Trivandrum-267.824 km. Sriperambadurur-Kalivindapattu-30.697 km, Udumalpet- Arasur-65.048 km, Salem-Udumalpet-147.383 km, Neyveli TS-II to-Trichy-163.70 km, Kolar-Sriperambadur-162.20 km; Asset-5: 956.599 km OPGW communication links along with associated Communication Equipment (includes 132.30 km under cost apportionment with POWERTEL) for Kochi-Trichur-78.261 km, Kudankulam-Tirunelveli Link-11(79.517 km), Kolar-HOODY (51.024 km), Kudgi-Kolhapur (191.273 km), Narendra-Kudgi (176.13 km), Kochi-Brahmapuram (KSEB) - 6.598 km, Tiruvarur-Kadalangudi (TANTRANSO) - 47.954 km, Tirunelveli- Edamon (82.59 km), Neyveli TS 2-Bahour (52.021 km), Salem-Dharampuri (58.931 km), Sriperambadur-Pondy-132.3 km Telecom sharing, OPGW Links & EPABX Systems for SRLDC Bangalore, Main SLDC; TANTRANSCO Chennai, Main SLDC KSEB Kalamassery, Backup SLDC KSEB Trivandrum, SCC PED Puduchery, Main SLDC APTRANSCO Vijayawada, Main SLDC TSTRANSCO Hyderabad and EPABX systems (Hot Line Speech Communication Systems for Grid Operation); Asset-6: OPGW links for Establishment of Fiber optic communications system for central sector stations Project of Southern Region-1) 400 kV Nagarjun Sagar(PG)-400 kV Mehboob Nagar (185.336 km), 2) 400 kV Raichur (PG)-400 kV Mehboob Nagar-74.051, 3) Nellore PS- Gooty crossing point to Kadapa-(213.383 kms) 4) 400 kV Simhadri (PG)-400 kV Vemagiri (PG)-194.958 km, 5) 220 kV Tallapally, APTRANSCO-220 kV VTPS APTRANSCO-132.636 km, 6) LILO of Simhadri-Vemagiri (PG) to Gajuwaka-13.207 km, 7) 220 kV Gooty APTRANSCO-400 kV Gooty (PG)-0419 km, 8) 220 kV

Ghanapur TSTRANSCO-400 kV Ghanapur PG-0.294 km, 9) 220 kV Khammam APTRANSCO-400 kV Khammam PG-0.332 km, 10) 400 kV Vijayawada PG-220 kV Vijayawada Sub-LDC-0.328 km 11) 400 kV Nagarjuna Sagar PG-220 kV Tallapally, APTRANSCO-0.233 km, 12) 400 kV Khammam PG - 400 kV Vijayawada PG-114.565 km (Telecom Sharing), 13) 220 kV Vishakhapatnam VSS - 400 kV Gazuwaka PG- 2 km, 14) Ramagundam NTPC - Repeater-204-Bhadrawati 15) 400 Ghanapur PG- Repeater-346-Ramagundam NTPC; kV Asset-7: OPGW Communication Link for Bhavani-Sirichery- 36.243 km, 220 kV Kalpakkam (PG-400 kV SP Koil (TNEB)- 30.005 km, 230 kV Kadalangudi-230 kV Neyveli TS-2 - 73.90 km, Mysore-Hootagalli (KPTCL)-6.384 km, 400 kV Mysore (PG)-400 kV Kozhikode (PG)-215.663 km, Villupuram-Bohour-16.768 km, 230 kV Neyveli TS-II, 230 kV Neyveli TS-1-8.675 km, 400 kV Kaiga (PG)-Davangere/Gutur-167.127 km, Alamathy (TNEB)-Vallur-36.023 km, 400 kV LILO of Sriperumbadur-Nellore to Alamathy-41.253 km, 400 kV Tuticorin PS Dharmapuri (Upto crossing of Madurai-Tirunelveli)-78.180 km, Telecom and links under Fibre Sharing Kalivindapattu-Sirichery-23.304 km; Asset-8: OPGW Communication Link for 1) 400 kV Vijayawada (PG)-Vemagiri (APTRANSCO)-195.366 km; 2) 400 kV LILO of Ramagundam-Khammam to Warangal- 14.198 km; 3) 400 kV Ghanapur-Kurnool (APTRANSCO)-226.502 km, 4) 220 kV KTPS-Khammam TS Transco-67.582 km; 5) 400 kV Munirabad- Raichur; 6) 220 kV Hindupur-Gooty AP Transco and Telecom links under Fibre Sharing: 1) 400kV Nellore-Sriperambudur-188.996 km, 2) 400 kV Ramagundam-Warangal-99.148 km, 3) 400 kV Nagarjunsagar-Gooty-307.529 km, 4) 400 kV Vijaywada-Gajuwaka-1416.70 km under "Fiber Optic Communication svstem for Central Sector Sub-stations & Generating Stations" in Southern Region." (hereinafter referred to as "transmission system") for 2014-19 tariff period under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2014 (hereinafter referred to as "2014 Tariff Regulations"). PGCIL submitted that Assets-4, 5, 6 and 7 were shared by PGCIL with PTN. PGCIL had adjusted the capital cost of Assets-4, 5, 6 and 7 by de-capitalizing the amount while claiming the additional capital expenditure from the date of commencement of such sharing.

3. The tariff for the transmission system was allowed vide order dated 20.2.2019. The Commission in order dated 20.2.2019 observed that as per Investment Approval (IA) dated 29.5.2012, 5207 km of OPGW fiber optic cable was to be laid by PGCIL out of which 499 km OPGW fiber was to be shared by PGCIL with PTN and later in the Revised Cost Estimate (RCE), the length of the OPGW fiber optic cable was revised to 5256 km, out of which 2288 km of OPGW fiber cable was to be shared by PGCIL with PTN. Accordingly, it was held that the capital cost of the fiber cable shared with PTN should not be included in the capital cost for the purpose of determination of transmission tariff. PGCIL has sought review of the said findings of the Commission in order dated 20.2.2019 in Petition No. 168/TT/2018 and has also sought correction in the calculation of capital cost of Assets-4, 5, 6 and 7 in the instant Review Petition.

- 4. PGCIL has made the following prayers:-
  - "a) Allow the Review Petition and modify the Order dated 20.02.2019 passed in Petition No. 168/TT/2018 to the extent stated in the present Review Petition;
  - Allow the full capital cost on COD and de-capitalize the cost of sharing assets with Telecom Network from Additional Capitalization from date of such sharing;
  - c) Without prejudice to prayer (b), modify the Order to extent of corrections in calculation of capital cost to extent challenged above; and
  - d) pass any such further order or orders as this Hon'ble Commission may deem just and proper in the circumstances of the case.

## Submissions of PGCIL

5. The gist of the submissions made by PGCIL in the Review Petition and in its written submission dated 23.8.2019 in support of the Review Petition are as follows.

a) In order dated 20.2.2019, the total length of the OPGW fiber cable owned by PGCIL was inadvertently considered as 5256 km, out of which 2288 km is shared with PTN. Actually, the total length of the OPGW fiber cable covered in the IA dated 29.5.2019 is 7544 km. PGCIL has laid 5256 km and PTN owns 2288 km of OPGW fiber cable. PGCIL shares PTN's 2288 km of OPGW fiber cable. PGCIL has so far filed petitions claiming tariff for 6809.80 km out of 7544 km and in Petition No.168/TT/2019 claimed tariff for 6242.753 km of OPGW fiber cable. However, the total length of the OPGW fiber cable was considered as 5256 km in order dated 20.2.2019, instead of the claimed 6242.753 km. It is an error apparent on the face of the record which is sought to be modified in the instant Review Petition.

b) The cost of OPGW optic fiber laid by PGCIL for its transmission business is borne by PGCIL. The cost of the same is shared by PTN only when it is used by PTN and PTN cannot be held liable to share the cost of the OPGW optic fiber when it is not used by PTN. The instant OPGW optic fiber was not intended to be used by PTN from their COD. Moreover, the Investment Approval and the scheduled COD were based on the requirement of PGCIL and not on the requirement of PTN.

c) Assets-4, 5, 6 and 7 are shared by PGCIL with PTN. They were not shared by PTN from their COD and therefore the cost of the assets has to be borne by PGCIL from the COD till the assets are shared by PTN. PTN will share the capital cost from the day it shares the asset with PGCIL. Accordingly, the cost can be adjusted/deducted/decapitalised from the date the assets are shared by PTN.

d) Keeping in view the future requirements and prudent practice, PGCIL has installed OPGW fiber cable of 24 links instead of 8 or 12 links consistently in all cases of OPGW optic fiber, irrespective of whether it is used by PTN or not, as the marginal cost of 24 links is not more than 5% of 8 or 12 links.

e) Some links of Assets-4, 5, 6 and 7 of PGCIL, which were put into commercial operation on 30.3.2015 31.3.2016, 1.8.2016 and 30.3.2017 respectively, were shared by PGCIL with PTN. They were shared with PTN from 1.4.2017 and 1.4.2016. It was submitted in Form 10-B in the main petition that PGCIL has shared approximately 875.78 km of the OPGW fiber cable installed by PTN and has paid a cost for the same and has included such costs in the capital cost claimed. Similarly, PTN is sharing the fiber cable installed by PGCIL and pays a cost for the same which is reduced from the capital cost from the date of usage of the fiber cable by PTN.

f) It was inadvertently held in order dated 20.2.2019 that the capital cost of Assets-4, 5, 6 and 7 shall be shared by PTN from the date of their COD. The full capital cost of the assets capitalized by PGCIL as on COD may be allowed. Additionally, the adjustment of the capital cost of asset shared with PTN may be considered from the actual date of sharing and not from COD of subject assets as held in the impugned order. Such sharing of cost may be reduced by de-capitalizing the amount in the respective year of sharing while claiming additional capital expenditure.

g) A few mathematical errors have crept in calculating the adjustment of sharing cost in the impugned order. Detailed tabular representation is presented highlighting such errors, in the written submission dated 23.8.2019.

6. The Review Petition was admitted on 24.9.2019 and notice was issued to the Respondents. None of the Respondents have neither appeared nor filed any reply in the matter. During the hearing on 6.11.2019, learned counsel for PGCIL while reiterating the submissions made in the Review Petition submitted that the capital cost of the assets, which have been shared with PTN, should be adjusted from the date of actual sharing of the asset with PTN rather than the COD of the assets.

## Analysis and Decision

7. We have considered the submissions of PGCIL and the material available on record. In order dated 20.2.2019, the length of the transmission system was considered as 5256 km, out of which 2288 km of OPGW fiber cable is shared by PGCIL with PTN. We have perused the IA and RCE, it is observed that the total length of the OPGW fiber cable covered under the scope of the instant IA is 7544 km, out of which 5256 km is laid by PGCIL and 2288 km are owned by PTN, which is shared by PGCIL for which PGCIL has paid a cost and has included such costs in the capital cost claimed. Out of the 7544 km OPGW fiber cable under the scope, PGCIL has claimed tariff for 6809.80 km of fiber cable in various petitions. PGCIL has claimed tariff for 6242.753 km in Petition No.168/TT/2018. However, in order dated 20.2.2019, inadvertently the length of OPGW fiber cable was stated as 5256 km out of which 2288 km of OPGW fiber cable is shared with PTN. This is an error apparent on the face of record, which requires modification. Accordingly, the total length of the OPGW fiber cable covered in the IA is modified as 7544 km and PGCIL

has claimed tariff for 6242.753 km in Petition No.168/TT/2018 which includes 2288 km of fiber cable owned by PTN.

8. The second contention of PGCIL was that the capital cost of the OPGW fiber cable ought to be adjusted from the date of actual sharing rather than from COD of subject assets as held in the impugned order. In order dated 20.2.2019, the Commission has held that the IA has envisaged sharing of the capital cost of OPGW fiber optic with PTN and therefore the capital cost should be adjusted from the capital cost at COD. The relevant portion of the order dated 20.2.2019 is extracted hereunder for ready reference.

"ii) We have considered the scope of the original investment approval which states that 5207 km of OPGW fiber optic cable shall be installed out of which 499 km of OPGW fiber shall be used for sharing with Powergrid Telecom Network. This original scope was subsequently revised into 5256 km of OPGW Fiber cable and out of which 2288 km of OPGW Fiber has been earmarked for sharing with POWERGRID Telecom network. Therefore, the apportioned actual cost of such OPGW links pertaining to telecom business should not be included in the Capital Cost for the purpose of transmission tariff. But in the instant case, the petitioner has claimed the tariff on the entire cost (i.e. including the shared portion) starting from its COD and thereafter reducing the written down value amount after 1-2 years in the name of decapitalisation. We are of the view that, since the investment approval itself includes sharing aspects of certain length of OPGW links with POWERGRID Telecom network and the actual installation of completed asset (including POWERGRID Telecom network part) was done accordingly, the apportioned cost of the asset meant for telecom business should be excluded from the capital cost as on COD of the asset. Although the delay in sharing was procedural, we are of the view that due to procedural delay of POWERGRID, beneficiaries should not be charged. Accordingly, the Original Book value as on COD of the shared assets as submitted by the petitioner in Form 10B are adjusted from the capital cost as on COD instead of de-capitalising the net value through Additional capitalization."

9. It is observed that PGCIL owns some OPGW fiber cable and its associate, PTN also owns some OPGW fiber cable. The fiber cable owned by PGCIL and PTN are shared by the other as per the requirement and the cost of the fiber cable is shared by them from the date of actual sharing of the fiber cable. In the instant case, the IA dated 29.5.2012 provides for PGCIL sharing the OPGW fiber optic owned by it with

PTN. Accordingly, Assets-4, 5, 6 and 7 owned by PGCIL and put into commercial

operation on 30.3.2015, 31.3.2015, 1.8.2016 and 30.3.2017 were shared by PTN from 1.4.2017 and 1.4.2016, which is after their COD. As Assets-4, 5, 6 and 7, owned by PGCIL, are shared by PTN after 1-2 years of their COD, PTN is liable to share the cost of the said assets from the date of sharing. Accordingly, the cost of Assets-4, 5, 6 and 7 from their date of COD to the date of sharing by PTN, should be borne by PGCIL. However, in the impugned order dated 20.2.2019, the capital cost of the links shared with PTN in Assets-4, 5, 6 and 7 was excluded from the capital cost as on the COD, which is an apparent error. The impugned order is modified to that extent and accordingly, the cost of PTN shared links in Assets-4, 5, 6 and 7 shall be included in the capital cost as on COD of respective Assets and they will decapitalised at 50% of the written down value on the date of their sharing by PTN.

10. PGCIL has also contended that mathematical errors have crept in tariff allowed on the basis of sharing of capital cost with PTN as on COD. As it has been already held that the cost will be shared from the date of actual commencement of sharing of the assets and not on COD of assets, the contention of PGCIL on this aspect has become infructuous.

11. The order dated 20.2.2019 is modified to the extent allowed above. Accordingly, the tariff allowed for Assets-4, 5, 6 and 7 shall be revised at the time of truing up of the tariff of 2014-19 period. All other terms of the order dated 20.2.2019 shall remain unchanged.

12. Review Petition No. 10/RP/2019 is disposed of in terms of the above.

sd/-(Dr. M.K. lyer) Member sd/-(P.K. Pujari) Chairperson

