CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Petition No. 61/MP/2022

Coram: Shri I. S. Jha, Member Shri Arun Goyal, Member Shri P. K. Singh, Member

Date: 26th September 2022

In the matter of:

Petition under Section 79(1)(c) and 79(1)(d) read with Sections 62 and 64 of The Electricity Act, 2003, Regulations 54 and 55 of The Tariff Regulations, 2014 and Regulations 76 and 77 of The Tariff Regulations, 2019 in regard to the non-inclusion/decapitalisation of assets which are not in use in the course of technical upgradations or modification of the Transmission Systems.

And in the matter of:

Power Grid Corporation of India Ltd. Registered office: B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi and Corporate office: "Saudamini", Plot No.: 2, Sector-29, Gurgaon (Haryana) - 122 001.

.....Petitioner

Versus

- Northern Regional Power Committee Through its Secretary 18-A, Qutab Institutional Area, Shaheed Jeet Singh Marg, Katwaria Sarai, New Delhi-110016
- Eastern Regional Power Committee Through its Secretary
 14, Golf Club Road Tollygunje Kolkata, West Bengal-700033
- 3. Western Regional Power Committee Through its Secretary F3 MIDC Area, Marol, Andheri East, Mumbai, Maharashtra-400093
- 4. North Eastern Regional Power Committee Through its Secretary

NERPC Complex, Dong Parmaw Lapalang, Shillong, Meghalaya – 793006

Southern Regional Power Committee Through its Secretary Race Course Cross Road, Bangalore, Karnataka-560009

- Ajmer Vidyut Vitran Nigam Ltd., 132 KV, GSS RVPNL Sub- Station Building, Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan)
- Jaipur Vidyut Vitran Nigam Ltd.,
 132 KV, GSS RVPNL Sub- Station Building,
 Caligiri Road, Malviya Nagar,
 Jaipur-302017 (Rajasthan)
- Jodhpur Vidyut Vitran Nigam Ltd., 132 KV, GSS RVPNL Sub- Station Building, Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan)
- Himachal Pradesh State Electricity Board, Vidyut Bhawan, Kumar House Complex Building II, Shimla-171004 (Himachal Pradesh), Through its Chairman.
- Punjab State Electricity Board, Thermal Shed Tia, Near 22 Phatak, Patiala-147001 (Punjab), Through its Chief Engineer.
- 11. Haryana Power Purchase Centre, Shakti Bhawan, Sector-6, Panchkula- 134109 (Haryana), Through its S.E./C&R-1.
- Power Development Department, Government of Jammu & Kashmir, Mini Secretariat, Jammu, Through its Commissioner.
- Uttar Pradesh Power Corporation Ltd., (Formerly Uttar Pradesh State Electricity Board), Shakti Bhawan, 14, Ashok Marg, Lucknow - 226001 (Uttar Pradesh), Through its Chairman.
- 14. BSES Yamuna Power Ltd., B-Block, Shakti Kiran, Bldg. (Near Karkadooma Courte), Karkadooma 2nd Floor, New Delhi-110092, Through its Chief Executive Officer.

15. BSES Rajdhani Power Ltd.,

BSES Bhawan, Nehru Place,

New Delhi-110019.

Though its Chief Executive Officer.

16. Tata Power Delhi Distribution Limited (TPDDL),

NDPL house, Hudson Lines Kingsway Camp

Delhi - 110009

Through its Chief Engineer

17. Chandigarh Administration,

Sector -9, Chandigarh,

Through its Chief Engineer.

18. Uttarakhand Power Corporation Ltd.,

Urja Bhawan,

Kanwali Road, Dehradun (Uttarakhand),

Through its Managing Director.

19. North Central Railways,

Allahabad (Uttar Pradesh),

Through its Chief Electrical Distribution Engineer.

20. New Delhi Municipal Council,

Palika Kendra, Sansad Marg,

New Delhi-110002,

Through its Chairman.

21. Bihar State Power (Holding) Company Ltd.,

(Formerly Bihar State Electricity Board -BSEB)

Vidyut Bhavan, Bailey Road, Patna - 800 001

Represented By its Chairman

22. West Bengal State Electricity Distribution Company Limited,

Bidyut Bhawan, Bidhan Nagar,

Block DJ, Sector-II, Salt Lake City,

Calcutta - 700 091.

Represented By its Chairman

23. Grid Corporation of Orissa Ltd.,

Shahid Nagar, Bhubaneswar - 751 007.

Represented By its Chairman cum Managing Director.

24. Jharkhand State Electricity Board,

In Front of Main Secretariat,

Doranda, Ranchi - 834002.

Represented By its Chairman

25. Damodar Valley Corporation,

DVC Tower, Maniktala.

Civic Centre, VIP road, Calcutta - 700 054,

Represented By its Chairman

26. Power Department,

Govt. of Sikkim, Gangtok - 737 101. Represented By its Commissioner & Secretary (POWER)

27. Madhya Pradesh Power Management Company Ltd.,Shakti Bhawan, Rampur,Jabalpur - 482 008.Represented By its MD

28. Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Ltd.. 3/54, Press Complex, Agra-Bombay Road, Indore-452 008

 Maharashtra State Electricity Distribution Co. Ltd., Hongkong Bank Building, 3RD Floor M.G. Road, Fort, Mumbai - 400 001. Represented By its MD

30. Gujarat Urja Vikas Nigam Ltd. Sardar Patel Vidyut Bhawan, Race Course Road, Vadodara - 390 007 Represented By its Chairman

31. Electricity Department
Govt. of Goa, Vidyut Bhawan, Panaji,
Near Mandvi Hotel, Goa - 403 001
Represented By its Chief Engineer (Electrical)

32. Electricity Department
Administration of Daman & Diu
Daman - 396 210
Represented By its Secretary (FIN.)

33. DNH Power Distribution Corporation Limited. Vidyut Bhawan, 66KV Road, Near Secretariat Amli, Silvassa - 396 230 Represented By its Secretary (FIN.)

34. Chhattisgarh State Power Distribution Co. Ltd. P.O. Sunder Nagar, Dangania, Raipur Chhattisgarh-492 013
Represented by Its Chairman

35. Kerala State Electricity Board (KSEB)
Vaidyuthi Bhavanam
Pattom, Thiruvananthapuram – 695 004
Represented by its Chairman

36. Tamil Nadu Generation and Distribution Corporation Ltd (Formerly Tamilnadu Electricity Board -TNEB)
NPKRR Maaligai, 800, Anna Salai, Chennai – 600 002
Represented by its Chairman And Others

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

Represented by Chief Engineer (Electrical)

38. Electricity Department

Govt of Pondicherry,

Pondicherry - 605001

Represented by its Chief Secretary

39. Eastern Power Distribution Company of Andhra Pradesh Limited (APEPDCL) P&TColony.

Seethmmadhara, VISHAKHAPATNAM

Andhra Pradesh.

Represented by its Managing Director

40. Southern Power Distribution Company of Telangana limited (TSSPDCL)

Corporate Office, Mint Compound,

HYDERABAD - 500 063

Telangana

Represented by its Managing Director

41. Central Power Distribution Company of Andhra Pradesh limited (APCPDCL)

Corporate Office, Mint Compound,

HYDERABAD - 500 063, Andhra Pradesh

Represented by its Managing Director

42. Northern Power Distribution Company of Telangana Limited (TSNPDCL)

Opp. NIT Petrol Pump

Chaitanyapuri, Kazipet,

WARANGAL - 506 004

Telangana

Represented by its Managing Director

43. Bangalore Electricity Supply Company Ltd., (BESCOM),

Corporate Office, K.R.Circle

BANGALORE – 560 001, Karanataka

Represented by its Managing Director

44. Gulbarga Electricity Supply Company Ltd., (GESCOM)

Station Main Road, GULBURGA, Karnataka-585102

Represented by its Managing Director

45. Hubli Electricity Supply Company Ltd., (HESCOM)

Navanagar, PB Road, HUBLI, Karnataka- 580025

Represented by its Managing Director

46. MESCOM Corporate Office,

Paradigm Plaza, AB Shetty Circle

MANGALORE - 575 001, Karnataka

Represented by its Managing Director

47. Chamundeswari Electricity Supply Corporation Ltd., (CESC)

927,L J Avenue,Ground Floor, New Kantharaj Urs Road

Saraswatipuram, MYSORE - 570 009, KARNATAKA

Represented by its Managing Director

48. Assam Electricity Grid Corporation Limited (Formerly Assam State Electricity Board) Bijulee Bhawan, Paltan Bazar, Guwahati – 781001, Assam Represented by its Chairman

49. Meghalaya Energy Corporation Limited (Formerly Meghalaya State Electricity Board) Short Round Road, "Lumjingshai" Shillong – 793001, Meghalaya Represented by its Chairman & M. D.

50. Government of Arunachal Pradesh Itanagar, Arunachal Pradesh-_791111 Represented by its Secretary & Commissioner Power

51. Power and Electricity Department Government of Mizoram Aizawl, Mizoram-796441 Represented by its Secretary Power

52. Manipur State Power Distribution Corporation Limited (Formerly Electricity Department, Government of Manipur) Keishampat, Imphal- 795001 Represented by its Chairman

53. Department of PowerGovernment of NagalandKohima, Nagaland- 797001Represented by its Commissioner and Secretary Power

54. Tripura State Electricity Corporation Limited Vidyut Bhawan, North Banamalipur, Agartala, Tripura (W) – 799001, Tripura Represented by its Chairman

.....Respondents

Parties Present: Shri M. G. Ramachandran, Senior Advocate, PGCIL

Shri Shubham Arya, Advocate, PGCIL Shri Poorva Saigal, Advocate, PGCIL Ms. Reeha Singh, Advocate, PGCIL

Shri S. Vallinayagam, Advocate, TANGEDCO

Shri Aditya Singh, Advocate, MPPMCL

Shri V. Chandrasekhar, PGCIL Shri Amit Kumar Chachan, PGCIL

Ms. Supriya Singh, PGCIL Shri Anindya Khare, MPPMCL Ms. B. Rajeswari, TANGEDCO Ms. R. Ramalakskmi, TANGEDCO Ms. R. Alamelu, TANGEDCO

ORDER

Power Grid Corporation of India Limited (PGCIL) (hereinafter to be referred as "the Petitioner") has filed the present Petition under Section 79(1)(c) and 79(1)(d) read with Sections 62 and 64 of The Electricity Act, 2003, Regulations 54 and 55 of The Tariff Regulations, 2014 and Regulations 76 and 77 of The Tariff Regulations, 2019 in regard to the non-inclusion/ decapitalisation of assets which are not in use in the course of technical upgradations or modification of the Transmission Systems. The Petitioner has made the following prayers:

- (a) Admit the Petition and initiate the proceedings to consider the aspects raised by POWER GRID in regard to continued servicing of the capital assets through tariff where such capital assets that are required to be replaced or taken out of service for reasons other than any default or failure attributable to transmission licensee like POWER GRID;
- (b) Evolve an appropriate methodology to effectively compensate the transmission licensees such as POWER GRID in regard to financial implication arising out of upgradation/modification of assets; and
- (c) Pass such further or other orders as may be considered just and proper in the facts and circumstances of the case.

Submissions of the Petitioner

- 2. The Petitioner has mainly submitted as under:
 - a) Transmission Planning agencies identify the transmission system requirement based on present and anticipated generation, load and grid requirements or at the request of States or based on operational reports of POSOCO. Individual Transmission elements and their technical specifications i.e. lines capacity/circuits/voltage, transformers capacity etc. are planned from time to time accordingly.
 - b) Transmission planning agencies have also been constantly upgrading the Inter-State Transmission system, taking into consideration the growing needs of the robust economical and efficient transmission system. The laying down of the new Transmission System in both as Green Field Project and the upgradation /improvement of the existing system has been a dynamic and ever-changing effort in view of the changes in the requirements for conveyance of power from the place of generation to the place of end use.

- c) The Inter-State Transmission system is also being upgraded from time to time in view of the growing need for providing evacuation and transmission facility for the renewable power development in the Country, which the Central Government and this Hon'ble Commission have been actively promoting in public interest and in substitution of the Fossil Fuel generation.
- d) The substantial changes in the Inter-State Transmission System is also required including by way of upgradation, by establishing alternative line capacity of different specification and standard, etc. on account of mandate of law such as environmental orders passed from time to time, the decision in the technical standards notified through Regulations by the Central Electricity Authority [CEA], the orders passed by the competent authority, including the Hon'ble Courts, the Hon'ble Tribunal, the Electricity Regulatory Commissions, the various departments of Central, State and Local Governments and other agencies.
- e) In the premise, as one of the possible avenues, System planners considers the Upgradation of existing transmission lines to higher voltage AC lines with multi circuits, replacing existing line conductor with conductor of higher capacity/ High Temperature Low Sag (HTLS) conductors, upgradation of transformer capacity etc. as these are economical and takes less time when compared with the construction of new transmission asset.
- f) In some of the cases, the System planners under various considerations decide to modify existing transmission lines either through Line in Line out (LILO) arrangements or extending original transmission line by bypassing original end substation to a different substations. Further, different combinations of above said modifications are considered on case-to-case basis. These modifications are planned to facilitate optimum utilization of resources such as Right-of-way (RoW), to address challenges being faced in accommodating additional ICTs, Reactors, Bays etc. in the existing Substation.

- g) Presently, the Transmission licensees are not involved in above planning process and are not party in this decision-making process. The upgradation of such assets or facilities by substituting another asset or upgrading or modifying alternative avenues has been for no reason on account of any deficiency, default, failure or otherwise any factor attributable to Transmission licensees including POWER GRID. Hence, it is necessary to consider the aspect of implementation of such works on prudent commercial principles.
- h) The Policy framework and Regulatory provisions have already considered the need for upgradation and modification of existing transmission infrastructure to meet the increasing load demand. The National Tariff Policy, 2016 notified by the Central Government, in exercise of the powers under Section 3 of the Electricity Act and which is also a guiding factor under Section 61 of the Act as well as under Section 79(4) in the exercise of the powers of this Hon'ble Commission.
- i) The Comptroller and Auditor General of India in its performance audit Report No. 9 of 2020 on planning and implementation of transmission projects by Power Grid Corporation of India Limited for the year ended March 2019 raised the issue of insufficient focus on up-gradation of existing lines in planning process.
- j) The recovery of the tariff of the above said transmission assets is decided by this Commission in accordance with the provisions of the Tariff Regulations applicable in the relevant Control Periods. This Hon'ble Commission has notified the Tariff Regulations, 2014, for the Control Period FY 2014 2019. Further the Commission has notified the Tariff Regulations, 2019, for the Control Period FY 2019 2024, which is currently in force.
- k) Upgradation or modification of transmission assets when implemented, may lead to upgradation or modification of existing transmission assets from time to time much before the relevant existing assets have been used for the period leading to non-recovery of the full depreciation on the assets. In some

cases, such transmission elements or part thereof may either become obsolete or unwarranted or cannot be put in use again e.g., Certain Compensation devices, Foundations, Tower parts, and Tower accessories i.e. Insulator, hardware etc. There will be substantial unrecovered depreciation and if the same is not allowed by considering such assets being no longer used in the system, there will be adverse financial implications on the investment made by the transmission licensees including Power Grid.

- In terms of the provisions of the Tariff Regulations, the depreciation is allowed at applicable rate and for the period of useful life to cover upto 90% of the value of the asset (excluding land) is one of the important tariff elements to service the cost of investment. The servicing of the 70% of the investment through interest on loan covers only the payment of money to the lenders in a deferred manner for the debt borrowed and not the principal amount of the loan taken. Similarly, the 30% of the investment made by equity is served only by way of return on equity and upon the assets being decapitalized the same also ceases. The depreciation admissible over the useful life is the only avenue to recoup the value of the investment.
- m) Petitioner submitted that there is a necessity to evolve a mechanism to ensure the servicing of the capital assets in the event if such capital assets are to be replaced or are not in use for reasons other than any default or failure or factors attributable to Transmission licenses including POWER GRID.
- n) Petitioner submits that, when the upgradation and modification are implemented on the directions of Transmission planning agencies as part of approved schemes, it would be harsh, unjust and counter-productive to deprive the Utility the recovery of tariff elements for the investment previously made on grounds that the assets are no longer put to use and/or decapitalized. Rather, the Utility should be encouraged to adopt such planned measures in such circumstances than be penalised by deprivation of the investment earlier made by servicing through tariff on grounds of the assets being no longer in use.

- o) The utilization of the replaced/existing equipment is not in the control of the transmission licensee and depends on the system requirements. Premature de-capitalization of any asset from the original gross block leads to adverse financial impact on the transmission licensees without any fault/failure on its part. Transmission licensees are as such not able to recover the balance cost of the asset/elements, which have been taken out of service due to upgradation/modification. In the absence of regulatory provisions, recovery of tariff for balance useful life including unrecovered depreciation, dismantling, carrying and other associated costs, has to be recognized and given effect to.
- p) Because of the under recovery as mentioned above, such projects result in huge financial loss, if the servicing of the investment made is discontinued and would discourage ISTS licensees to take up these projects. Although such schemes are implemented for optimal utilization of transmission system but if such schemes are not taken up due to any reason, whatsoever, it will lead to higher tariff. Additionally, other benefits as mentioned earlier will also be not available in such a case.
- q) Considering the above, Power Grid proposes the following for the consideration of this Commission:

Proposal: In the event of the existing asset being not utilized or usable or that it cannot be put into use again or its usage in future is uncertain, after upgradation or modification of transmission assets as per approved schemes and for reasons other than any default or failure attributable to Transmission Licensee including POWER GRID, it is submitted that the Transmission Licensee may be allowed to continue the servicing of the value of such assets as part of the capital cost of the upgraded and new system or in the alternative allow to recover the balance unrecovered depreciation and dismantling cost on one-time basis on de-capitalization of the existing assets in its gross block;

Submissions of the UPPCL:

3. In reply to the submissions of the Petitioner, UPPCL has submitted as follows:

- a) On account of upgradation/modification of the existing transmission system, the assets/parts/equipment becoming redundant, un-usable or obsolete may be attributed to the following works as below:-
 - i. <u>Part-A</u>: installation of additional ICTs, Reactors and Bays at Substations, construction of LILO and installation of active/reactive power compensation; and
 - ii. <u>Part-B</u>: replacement of conductor and converting line into higher voltage line with multiple circuits.
- b) Insofar as Part-A works are concerned, the issues and methodology of decapitalization on account of up-gradation/modification of the existing transmission is well established and had been followed by the Petitioner without any issue concerning with the stranded cost or carrying cost. Therefore, the concerns of the Petitioner in respect to Part-A assets are no issue as to the purpose and object of this Petition.
- c) When upgradation and modification of the existing transmission system involves Part-B works, then there is a definite issue of stranded cost arising from decapitalization of assets becoming redundant, un-usable or obsolete. The issues under this scenario can be addressed by:
- (i) amendments of the current Regulations and
- (ii) establishing a methodology for tracing the historical cost of the assets/parts/equipment rendered redundant, un-usable or obsolete so that the balance of depreciation could be estimated for the purpose of compensation.
- d) Tracing historical cost on the date of commercial operation of the assets/parts/equipment becoming redundant, un-usable or obsolete is essential in light of the mandate of Section-61 of the Electricity Act, 2003 read with the provisions of the National Electricity Policy and Tariff Regulations made by CERC under the Act, 2003. These provisions call upon the actual cost to be reflected in tariff for safeguarding the interest of consumers.

- e) As such, in light of the provisions of Section-61 the Act, 2003, the compensation for the stranded cost on account of capitalization cannot be allowed under the provisions of "Power to Relax" and "Power to Remove Difficulties" made under CERC Tariff Regulations.
- f) The Prayer of the Petitioner for compensation on account of decapitalization of the assets covered under Part-A works may be rejected for the reasons of it being contrary to Section-61 of the Act 2003 and other statutory provisions made under the Act-2003.
- g) The Commission may consider to initiate proceedings to make provisions for decapitalization of the assets covered under Part-B works and compensation thereof based on actual historical cost of such assets as on the date of their induction into commercial operation. The Petitioner might be directed to submit the manner it would trace the historical cost of such assets on the date of commercial operation because the transmission projects are executed by the Petitioner on turnkey basis on cost discovered through bids and it would be difficult to trace the individual costs of compensation, compensation devices, foundation, tower parts, tower accessories like insulators, hardware and substation equipment etc. becoming redundant, unusable or obsolete.
- h) UPPCL submits that the transmission licensee must be compensated for the uncovered cost due to decapitalization of assets rendered redundant, un-usable or obsolete only when there are remote chances of their use in future provided, (i) it is not on account of inefficiency or negligence of the transmission licensee and (ii) it is done on the recommendations of RPC/Standing Committee or any statutory Body, Court and Government instrumentality competent to issue directions of the nature involved in the present matter.
- i) Upgradation/modification of the transmission system by way of Part-A works i.e. installation of additional ICTs, Reactors and Bays at existing substations, construction of LILO and installation of active/reactive power compensation has been done by the Petitioner in past. But on these

occasions, the Petitioner has never raised the issue that these works have at any time led to redundancy, non-usability or obsolescence of certain assets/parts of the assets and consequential decapitalization caused under recovery of investment. Therefore, the Petitioner is required to explain the manner in which the issues of decapitalization were being addressed in such cases till now.

- j) In case of upgradation/modification involving Part-B works i.e., replacement of conductor and converting line into higher voltage line with multiple circuits, there is a definite issue of stranded cost on account of decapitalization. The Petitioner states that the stranded cost is on account of compensation devises, foundations, tower parts, tower accessories like insulators, hardware and substation equipment etc. In this connection, the answering Respondent submits as hereunder:
 - i. Initial cost estimates of the Petitioner are prepared based on works/supplies made under old contracts, high level of IDC, IEDC and contingency charges. The Commission in its several orders has observed that the cost estimates of the Petitioner are on higher side. Therefore, the cost of said assets/parts/equipment cannot be derived from these estimates.
 - ii. The scope of the project is generally split by the Petitioner in more than one package and bids invited on turnkey basis. The cost of the said assets/parts/equipment cannot be found out from the price discovered through bids.
 - iii. Section-61 of the Electricity Act, 2003 mandates that the tariff should reflect actual cost of supply. Therefore, it is necessary that the cost of assets/parts/equipment becoming redundant, un-usable or obsolete must be found as on the date of their being put into commercial use.
 - iv. The Petitioner has not put up any proposal or methodology as to the manner, the cost of the said assets/parts/equipment, as

on the date of their inception into commercial operation, shall be accurately ascertained for the purpose of decapitalization and compensation thereof. Therefore, the Petitioner may be directed to submit the manner the actual cost shall be traced from the historical cost.

- v. The prayer of the Petitioner to allow it to continue serving such assets/parts/equipment as part of capital cost of upgraded and new system is contrary to Section-61 of the Act, 2003 which mandate that the tariff should reflect actual cost of supply and also safeguards the interest of consumers. The prayer is not made based on actual cost nor safeguards the interest of consumers as such, can't be allowed.
- vi. Alternatively, the Petitioner has prayed to allow it to recover the "balance unrecovered depreciation" and dismantling cost on one time basis on decapitalization of the existing assets in its gross block. The Petitioner has not submitted mathematical model in support on this prayer. Even for this purpose, actual historical cost of assets/parts/equipment becoming redundant, un-usable or obsolete would be needed for computation of "balance uncovered depreciation" as such it cannot be allowed for being contrary to the provisions of Section-61 of the Act, 2003.
- vii. The dismantling cost cannot be case of "one time decapitalization" and should not be allowed. The dismantling cost is the matter of works related to upgradation/modification as such should be claimed under the cost of such works.

Hearing dated 28.06.2022:

4. The Learned counsel for the Petitioner made the following submissions:

- (a) The instant petition has been filed regarding non-inclusion/decapitalisation of transmission assets which are not in use due to technical up-gradation or modification of the Transmission Systems.
- (b) The proviso to Regulation 19(5) of the 2019 Tariff Regulations provides for certain exemptions in the case of upgradation of transmission assets is recommended by Regional Power Committee (RPC) and no need to decapitalise the assets when it is transferred from one project to another project. Further, tariff is also allowed for replaced/ upgraded transmission elements like ICTs/Reactors, which are agreed and approved as Regional Spares by RPCs.
- (c) The issue arises when there is an upgradation or modification of the transmission assets not on account of the default on the part of the licensee but for larger public interest. Decapitalisation of assets used for only three or five years leads to non-recovery of full depreciation of the assets. Thus, causing adverse financial implications on the investment made by the Petitioner. Accordingly, the Petitioner prayed to evolve a mechanism/ principle to ensure the servicing of the capital assets in the event if such capital assets are replaced or are not in use for reasons other than any default or failure or factors not attributable to transmission licensees including the Petitioner.
- 5. The Commission observed that it would not be appropriate to amend the existing Tariff Regulations towards the end of the 2019-24 tariff period. The Commission directed the Petitioner to submit its comments/ suggestions on this issue while framing the new Tariff Regulations for consideration of the Commission and an appropriate view would be taken after considering the comments of all the stakeholders.
- 6. The learned counsel for the Petitioner sought permission from the Commission to place on record the details of the assets/ projects which have been upgraded or

proposed to be upgraded upto 2024 and accordingly would seek relaxation/ relief on case to case basis.

- 7. The representative of the Petitioner citied few instances where the assets were upgraded like (i) series compensation on Panki Murandanagar line which was taken out of service after being in use for 15 years and (ii) loop-in loop-out for supply of power to Bangladesh. He requested that one time reimbursement of the unrecovered depreciation may be allowed in these cases.
- 8. The Commission permitted the Petitioner to place on record the details of the projects that have been upgraded or proposed to be upgraded upto March, 2024 and specific instances for which relaxation is being sought by the Petitioner.
- 9. Subject to the above, the Commission reserved the order on admissibility of the petition.

Additional submissions of the Petitioner:

- 10. In compliance to the RoP for hearing dated 28.06.2022, the Petitioner has made additional submissions as below:
 - (a) In regard to the suggestion of this Commission that the Petitioner should submit its comments/ suggestions on this issue while framing the new Tariff Regulations, the Petitioner has submitted that new tariff regulations shall be applicable on prospective basis i.e. the same will only address the cases occurring after 01.04.2024. However, the de-capitalization of such Transmission Assets already done without recovery of cost of the said Assets is resulting in serious financial consequences to the Transmission Licensee like POWER GRID without there being any fault or default attributable to it. A list of such assets where upgradation/ modification works were done and decapitalization of assets not in service was done is as below:

List of Assets already decapitalised before completion of its useful life					
SI. No.	Project	Asset Details as per Petition	Original Pet. No.	Life completed at the time of Decapitalization	Unrecovered Depreciation (Rs. Crs)
1	Series Compensatio n on Panki- Muradnagar 400 kV S/C Line of UPPCL in the Northern Region	Series Compensation on Panki- Muradnagar 400 kV S/C Line of UPPCL	358/TT/ 2019	11	2.69
2	Inter- connection between India and Bangladesh Electrical Grids for India portion in Eastern Region.	LILO of 400 kV S/C Farakka-Jeerat Transmission Line at Baharampur	171/TT/ 2020	6	Approx 6 Crs
3	EDOC I	Re- conductoring CktI of 400 kV D/C Siliguri-Purnea (HTLS Cond.) Transmission Line	703/TT/ 2020	14	5.99
4	ERSS I	Re- Conductoring Ckt- II of 400 KV D/C Siliguri – Purnea (HTLS Cond.) Transmission Line		14	3.08
5	SRSS VI	LILO of both circuits of 400kV D/C Gazuwaka-Vijayawada Transmission Line at Vemagiriand	141/TT/ 2020	10	11.05
6	FACT at Ballabgarh	400 kV Thyristor controlled series compensation project (Fact Device) on	07/TT/2 020	17	1.94

Kanpur-		
Ballabgarh 400		
kV S/C line at		
Ballabgarh in		

(b) Petitioner further submitted that in the case of Power Grid, the implications of the above are significantly higher and of an urgent nature considering the extent of the inter-state transmission system owned, operated and maintained by it throughout India. Power Grid in this regard, vide its letter dated 30.09.2021 has requested CTUIL to consider the issue of continuation of tariff or one-time reimbursement of unrecovered depreciation during planning stage only. However, high number of similar projects which involves upgradation and modification have already been planned and assigned to Power Grid for implementation and the same are expected to be commissioned up to March, 2024 and beyond. As number of such cases involve huge capital cost implications, Power Grid will have to suffer substantial financial loss if suitable relief is not provided at present as addressing the issue in next Tariff Regulations shall not be applicable for such projects. A list of such projects is as blow:-

Ongoing project involving upgradation and replacement of transmission equipment			
SL. NO.	NAME OF PROJECT	SCOPE OF WORKS	Expected COD
1	North Eastern Region Strengthening Scheme-XII	Re-conductoring of Siliguri – Bongaigaon 400kV D/c line with Twin HTLS conductor (approx 436 ckm)	
2		Re-conductoring of Alipurduar – Salakati 220kV D/c line with Single HTLS conductor (approx 202 ckm)	
3		Re-conductoring of BTPS – Salakati 220kV D/c line with Single HTLS conductor (approx 6 ckm)	by March 2023
4		Re-conductoring of Dimapur–Imphal 132kV S/c line with Single HTLS conductor (approx 169 ckm)	
5		Re-conductoring of Loktak–Jiribam 132kV S/c line with Single HTLS conductor (approx 83 ckm)	
6	Regional System Strengthening scheme to mitigate the overloading of 400 kV NP	1. Temporary Bypassing of Cudappah — NP Kunta 400 kV S/c line and NP Kunta — Kolar 400 kV S/c line with suitable arrangement at NP Kunta sub-station to form Cudappah — Kolar 400 kV S/c line	by Oct 2022

	Kunta- Kolar S/C line	2. Re-conductoring of the NP Kunta — Kolar 400 kV S/c 131 line (twin Moose) section with high capacity, conductors (like twin HTLS equivalent or Quad Moose) 131 km	
		3. Upgradation of 400 kV bays equipments at NP Kunta and Kolar for NP Kunta — Kolar 400 kV line section:	
		Kolar Substation: Bay equipments (Circuit Breaker, Isolators, CT, Wave traps, Erection hardware etc.) of complete 400kV diameter is to be upgraded to 3150A rating.	
		NP Kunta substation: 7 nos. 400KV, 2000A DBR existing Isolators and Existing erection hardware needs to be upgraded to suit proposed high capacity conductors (current rating of 3150A).	
		4. Restoration of LILO arrangement to form Cuddapah — NP Kunta 400 kV S/c line and NP Kunta — Kolar 400 kV S/c line upon completion of reconductoring works of NP Kunta — Kolar line.	
7	Transmission System strengthening beyond Kolhapur for export of power from Solar & Wind energy zones in Southern Region-Re- conductoring of Kolhapur (PG) - Kolhapur 400 kV D/c line	Re-conductoring of Kolhapur (PG) — Kolhapur 400 kV D/c line with conductor of minimum capacity of 2100 MVA/Ckt at nominal voltage along with bay up-gradation work at Kolhapur (MSETCL).Re-conductoring length — 79 ckm approx.	by Feb 2023
8	System Strengthening scheme for Re- conductoring of portion of Dulhasti- Kishtwar- Kishenpur 400kV (Quad) S/c	Re-conductoring of Dulhasti-Ratle LILO tap Point of Dulhasti - Kishenpur 400 kV line implemented through twin moose conductor, with Quad moose conductor in matching time frame of Pakaldul HEP generation approx 13 ckm	by Apr 2025

9	ERSS XVII, Part- B	Re-conductoring of Maithon RB - Maithon 400KV D/C line	By Sep 22
10	ERSS-XX	Re-conductoring of 220 kv D/C New Purnea -Purnea Ckt-I & Ckt-II transmission line alongwith modification of 220 kv bays equipments at New- Purnea & Purnea S/S	21.12.2019 & 31.03.2021 (Petition with Diary
11	LINGO XX	Re-conductoring of Rangpo-New Siliguri 400kV D/C line with twin HTLS conductor and modification of 400kV bay equipments at New Siliguri S/S.	no 238/2022 filed for total 11 assets)

- (c) Further, it is submitted that this Commission has the necessary powers available to it in terms of Sections 79(1) (c) and (d), 62 of the Electricity Act, 2003 and Tariff Regulations notified by this Hon'ble Commission (Power to Relax and Power to Remove Difficulties) and by exercise of such regulatory powers vested in the Commission the issue can be addressed suitably through necessary direction. The submission made by UPPCL that the mechanism as sought by Power Grid is to be introduced by bringing suitable amendments in the Regulations notified by the Hon'ble Commission is misplaced as it is well settled that this Hon'ble Commission can decide by an order on tariff aspects where there are no regulations or otherwise a gap in the regulations notified.
- (d) With regard to observation made by this Commission at para 6 of Record of Proceedings dated 28.06.2022 regarding specific instances for which relaxation is being sought by the Petitioner, it is submitted that at present the following petitions filed by Power Grid is in regard to the specific transmission system involving the above aspects are pending before this Hon'ble Commission. The same are detailed as under:

Project	Asset detail	Petition No.	Petition Status
ERSS XX (total 11 assets)	Asset III- Reconductoring of 220kV D/C New Purnea – Purnea CktI and CktII transmission line alongwith modification of 220kV bays equipments at New Purnea & Purnea substations.	Diary No 238/2022	Petition is yet to be registered
	Asset IX- Reconductoring of 400kV D/C Rangpo – New Siliguri transmission line alongwith modification of 400kV bays equipments at New Siliguri substations.	200/2022	

(e) Further, Power Grid, after approaching concerned RPCs/CTU/CEA etc. in line with direction of this Hon'ble Commission regarding requirement of subject assets, has filed revised petition for following assets.

Asset Details as per Petition	Revised Petition filed	Petition No. where decapitalization is done	Life completed at the time of Decapitalizati on	Unrecovered Depreciation (Rs. Crs)
Series Compensatio n on Panki- Muradnagar 400 kV S/C Line of UPPCL	Diary No 67/2022	358/TT/2019	11	2.69
400 kV Thyristor controlled series compensatio n project (Fact Device) on Kanpur- Ballabgarh 400 kV S/C line at Ballabgarh	Diary No 239/2022	07/TT/2020	17	1.94

- (f) As mentioned herein above, upgradation or modification of the transmission system being a regular feature, Power Grid and the other transmission licensee will be facing the same issues on a recurring basis as and when assets under implementation will be commissioned.
- (g) In these circumstances to avoid multiple petitions of similar nature being filed from time to time the subject Petition has been filed by Power Grid seeking the redressal from the Commission for all such upgradation or modernization being undertaken by and will be undertaken progressively. The Power Grid is seeking that in such cases it may be allowed to continue the servicing of the value of such assets as part of the capital cost of the upgraded and new system or in an alternative allow to recover the balance unrecovered depreciation and

dismantling cost on one-time basis on de-capitalization of the existing assets in its gross block.

- (h) The financial implications of the above in the control period 2019-24 is substantial and there is a need to consider the matter on urgent basis in the current tariff block itself before the implementation of the Tariff Regulations applicable to the next control period.
- (i) POWER GRID submits that the scope of the present Petition is limited to the aspect where the transmission assets become obsolete or unwarranted or cannot be put to use on account of upgradation/modification of transmission assets before completing their useful life and the transmission licensees including POWER GRID may not be able to recover the full depreciation. POWER GRID is seeking the methodology to be laid down so that it can be commonly applied to all cases of upgradations or modernization. POWER GRID respectfully submits that this Hon'ble Commission may direct its staff to formulate suitable methodology on the subject issue.

Analysis and decision

- 11. The issue raised by the Petitioner is that in the event existing asset is not being utilized, after upgradation or modification of transmission assets, as per approved schemes and for reasons other than any default or failure attributable to Transmission Licensee, the Transmission Licensee may be allowed to continue the servicing of the value of such assets as part of the capital cost of the upgraded and new system or in the alternative Transmission Licensee may be allowed to recover the balance unrecovered depreciation and dismantling cost on one-time basis on de-capitalization of the existing assets in its gross block.
- 12. The Petitioner has further submitted that if the same is not allowed by considering such assets being no longer used in the system, there will be adverse

financial implications on the investment made by the transmission licensees including Power Grid.

- 13. UPPCL in his reply submitted that, on account of upgradation/modification of the existing transmission system, the assets/parts/equipment becoming redundant, un-usable or obsolete may be attributed to the following works as below:
 - iii. <u>Part-A</u>: installation of additional ICTs, Reactors and Bays at Substations, construction of LILO and installation of active/reactive power compensation; and
 - iv. <u>Part-B</u>: replacement of conductor and converting line into higher voltage line with multiple circuits.

Insofar as Part-A works are concerned, the issues and methodology of decapitalization on account of up-gradation/modification of the existing transmission is well established and had been followed by the Petitioner without any issue concerning with the stranded cost or carrying cost.

However, when upgradation and modification of the existing transmission system involves Part-B works, then there is a definite issue of stranded cost arising from decapitalization of assets becoming redundant, un-usable or obsolete. The issues under this scenario can be addressed by (i) amendments of the current Regulations and (ii) establishing a methodology for tracing the historical cost of the assets/parts/equipment rendered redundant, un-usable or obsolete so that the balance of depreciation could be estimated for the purpose of compensation.

14. UPPCL further submitted that the transmission licensee must be compensated for the uncovered cost due to decapitalization of assets rendered redundant, unusable or obsolete only when there are remote chances of their use in future provided,

- (i) it is not on account of inefficiency or negligence of the transmission licensee and (ii) it is done on the recommendations of RPC/Standing Committee or any statutory Body, Court and Government instrumentality competent to issue directions of the nature involved in the present matter.
- 15. Power Grid in his additional submissions submitted that high number of similar projects which involve upgradation and modification have already been planned and assigned to Power Grid for implementation and the same are expected to be commissioned up to March, 2024 and beyond. As number of such cases involve huge capital cost implications, Power Grid will have to suffer substantial financial loss.
- 16. Petitioner has also submitted that Petitions seeking such relaxation for some specific instances have also been filed and Pending before this Commission.
- 17. We have considered the submissions of the Petitioner as well as of the UPPCL and perused the documents available on record. The issue which arises for consideration in the present Petition is that whether an existing asset which is not in use due to system upgradation requirements can be serviced as a part of Capital Cost or the petitioner can be compensated for unrecovered depreciation.
- 18. We have perused the regulatory provisions. Regulation 19 of the 2019 Tariff Regulations provides as follows:-

"19. Capital Cost:

. .

- (5) The following shall be excluded from the capital cost of the existing and new projects:
- (a) The assets forming part of the project, but not in use, as declared in the tariff petition:
- (b) De-capitalised Assets after the date of commercial operation on account of replacement or removal on account of obsolescence or shifting from one project to another project:

Provided that in case replacement of transmission asset is recommended by Regional Power Committee, such asset shall be decapitalised only after its redeployment;

Provided further that unless shifting of an asset from one project to another is of permanent nature, there shall be no de-capitalization of the concerned assets.

- (c) In case of hydro generating stations, any expenditure incurred or committed to be incurred by a project developer for getting the project site allotted by the State Government by following a transparent process;
- (d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy; and
- (e) Any grant received from the Central or State Government or any statutory body or authority for the execution of the project which does not carry any liability of repayment."
- 19. Further Regulation 33 of the 2019 Tariff Regulations provides as under:-

"33. **Depreciation**:

(1) Depreciation shall be computed from the date of commercial operation of a generating station or unit thereof or a transmission system or element thereof including communication system. In case of the tariff of all the units of a generating station or all elements of a transmission system including communication system for which a single tariff needs to be determined, the depreciation shall be computed from the effective date of commercial operation of the generating station or the transmission system taking into consideration the depreciation of individual units:

Provided that effective date of commercial operation shall be worked out by considering the actual date of commercial operation and installed capacity of all the units of the generating station or capital cost of all elements of the transmission system, for which single tariff needs to be determined.

- (2) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. In case of multiple units of a generating station or multiple elements of a transmission system, weighted average life for the generating station of the transmission system shall be applied. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis.
- (3) The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset:

Provided that the salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered depreciable;

Provided further that in case of hydro generating stations, the salvage value shall be as provided in the agreement, if any, signed by the developers with the State Government for development of the generating station:

Provided also that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciated value shall correspond to the

percentage of sale of electricity under long-term power purchase agreement at regulated tariff:

Provided also that any depreciation disallowed on account of lower availability of the generating station or unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life or the extended life.

- (4) Land other than the land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing depreciable value of the asset.
- (5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I to these regulations for the assets of the generating station and transmission system:

Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.

- (6) In case of the existing projects, the balance depreciable value as on 1.4.2019 shall be worked out by deducting the cumulative depreciation as admitted by the Commission up to 31.3.2019 from the gross depreciable value of the assets.
- (7) The generating company or the transmission licensee, as the case may be, shall submit the details of proposed capital expenditure five years before the completion of useful life of the project along with justification and proposed life extension. The Commission based on prudence check of such submissions shall approve the depreciation on capital expenditure.
- (8) In case of de-capitalization of assets in respect of generating station or unit thereof or transmission system or element thereof, the cumulative depreciation shall be adjusted by taking into account the depreciation recovered in tariff by the decapitalized asset during its useful services."

As per the above, the existing regulations do not have any specific provision for recovery of such assets or part thereof.

20. The Petitioner has contended that de-capitalization due to upgradation or modification of existing transmission assets much before the assets have completed their useful life is leading to non-recovery of the full depreciation of the assets and results in adverse financial implications on the investment made by the transmission licensees including Power Grid. Accordingly Petitioner has requested to compensate the transmission licensee by allowing the recovery of the balance unrecovered

depreciation and dismantling cost on one-time basis on de-capitalization of the existing assets in its gross block. Petitioner has further submitted that large number of similar projects which involves upgradation and modification have already been planned and assigned to Power Grid for implementation and the same are expected to be commissioned up to March, 2024, as mentioned in Para No. 10 of this Order.

- 21. We are of the view that issue needs a careful consideration and views of respondents at large need to be solicited and considered. Accordingly, the Petition is admitted.
- 22. The Petitioner is directed to serve the petition and this Order on all the respondents and the Respondents may file their reply to the Petition, if any, by 17.10.2022 after serving copy of the same to the Petitioner, who may file its rejoinders by 30.10.2022 thereafter. Petitioner may also separately submit reply to contentions of UPPCL including possible mathematical model by 17.10.2022.
- 23. The Petitioner is further directed to submit its comments/ suggestions on this issue while framing the new Tariff Regulations for consideration of the Commission and an appropriate view would be taken after considering the comments of all the stakeholders.
- 24. Petition No. 61/MP/2022 is admitted in accordance with above discussions and shall be listed for hearing in due course for which separate notice will be issued.

Sd/ Sd/ Sd/ (P. K. Singh) (Arun Goyal) (I. S. Jha)
Member Member Member