

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No. 728/MP/2020

Coram:

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

Date of order: 15.12.2022

In the matter of:

Miscellaneous Petition under Regulations 24, 111 and 113 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Regulation 76 (Power to Relax) and Regulation 77 (Power to Remove Difficulty) of the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2019 for removal of difficulty with regard to tariff recovery for Unified Network Management System (U-NMS) project.

And in the matter of:

Power Grid Corporation of India Limited,
"Saudamini", Plot No. 2,
Sector-29, Gurgaon-122 001 (Haryana).

.....Petitioner

Vs

1. Rajasthan Rajya Vidyut Prasaran Nigam Limited,
Vidyut Bhawan, Vidyut Marg,
Jaipur-302005 (Rajasthan).
2. Ajmer Vidyut Vitran Nigam Limited,
132 KV, GSS RVPNL Sub- Station Building,
Caligiri Road, Malviya Nagar,
Jaipur-302017 (Rajasthan).
3. Jaipur Vidyut Vitran Nigam Limited,
132 KV, GSS RVPNL Sub- Station Building,
Caligiri Road, Malviya Nagar,
Jaipur-302017 (Rajasthan).
4. Jodhpur Vidyut Vitran Nigam Limited,
132 KV, GSS RVPNL Sub- Station Building,
Caligiri Road, Malviya Nagar,
Jaipur-302017 (Rajasthan).



5. Himachal Pradesh State Electricity Board,
Vidyut Bhawan, Kumar House Complex Building II,
Shimla-171004 (Himachal Pradesh).
6. Punjab State Electricity Board,
Thermal Shed Tia,
Near 22 Phatak,
Patiala-147001 (Punjab).
7. Haryana Power Purchase Centre,
Shakti Bhawan, Sector-6,
Panchkula-134109 (Haryana).
8. Power Development Department,
Government of Jammu & Kashmir,
Mini Secretariat, Jammu.
9. Uttar Pradesh Power Corporation Limited,
(Formerly Uttar Pradesh State Electricity Board),
Shakti Bhawan, 14, Ashok Marg,
Lucknow-226001 (Uttar Pradesh).
10. Delhi Transco Limited,
Shakti Sadan, Kotla Road,
New Delhi-110002.
11. BSES Yamuna Power Limited,
B-Block, Shakti Kiran Building. (Near Karkadooma Court),
Karkadooma 2nd Floor,
New Delhi-110092.
12. BSES Rajdhani Power Limited,
BSES Bhawan, Nehru Place,
New Delhi-110019.
13. Tata Power Delhi Distribution Limited,
NDPL House, Hudson Lines Kingsway Camp,
Delhi-110009.
14. Chandigarh Administration,
Sector-9, Chandigarh.
15. Uttarakhand Power Corporation Limited,
Urja Bhawan,
Kanwali Road, Dehradun (Uttarakhand).
16. North Central Railway,
Allahabad (Uttar Pradesh).



17. New Delhi Municipal Council,
Palika Kendra, Sansad Marg,
New Delhi-110002.
18. Bihar State Power (Holding) Company Limited,
(Formerly Bihar State Electricity Board-BSEB)
Vidyut Bhavan, Bailey Road, Patna-800001.
19. West Bengal State Electricity Distribution Company Limited,
Bidyut Bhawan, Bidhan Nagar,
Block DJ, Sector-II, Salt Lake City,
Calcutta-700091.
20. Grid Corporation of Orissa Limited,
Shahid Nagar, Bhubaneswar-751007.
21. Jharkhand State Electricity Board,
In Front of Main Secretariat
Doranda, Ranchi-834002.
22. Damodar Valley Corporation,
DVC Tower, Maniktala,
Civic Centre, VIP Road, Calcutta-700054.
23. Power Department,
Government of Sikkim, Gangtok-737101.
24. Madhya Pradesh Power Management Company Limited,
Shakti Bhawan, Rampur,
Jabalpur-482008.
25. Madhya Pradesh Power Transmission Company Limited,
Shakti Bhawan, Rampur
Jabalpur-482008.
26. Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Limited,
3/54, Press Complex, Agra-Bombay Road,
Indore-452008.
27. Maharashtra State Electricity Distribution Company Limited,
Hongkong Bank Building, 3rd Floor,
M.G. Road, Fort, Mumbai-400001.
28. Maharashtra State Electricity Transmission Company Limited,
Prakashganga, 6th Floor, Plot No. C-19, E-Block,
Bandra Kurla Complex, Bandra (EAST) Mumbai-400051.
29. Gujarat Urja Vikas Nigam Limited,
Sardar Patel Vidyut Bhawan,
Race Course Road, Vadodara-390007.



30. Electricity Department,
Government of Goa, Vidyut Bhawan, Panaji,
Near Mandvi Hotel, Goa-403001.
31. Electricity Department,
Administration of Dadra Nagar Haveli and Daman & Diu,
Daman-396210.
32. Chhattisgarh State Power Transmission Company Limited,
State Load Despatch Building,
Dangania, Raipur-492013.
33. Chhattisgarh State Power Distribution Company Limited,
P.O. Sunder Nagar, Dangania, Raipur,
Chhattisgarh-492013.
34. Karnataka Power Transmission Corporation Limited,
Kaveri Bhavan, Bangalore-560009.
35. Transmission Corporation of Andhra Pradesh Limited,
Vidyut Soudha, Hyderabad-500082.
36. Kerala State Electricity Board,
Vaidyuthi Bhavanam,
Pattom, Thiruvananthapuram-695004.
37. Tamil Nadu Generation and Distribution Corporation Limited,
(Formerly Tamil Nadu Electricity Board-TNEB)
NPKRR Maaligai, 800, Anna Salai, Chennai-600002.
38. Electricity Department,
Government of Goa,
Vidyut Bhawan, Panaji,
Goa-403001.
39. Electricity Department,
Govt of Pondicherry,
Pondicherry-605001.
40. Eastern Power Distribution Company of Andhra Pradesh Limited,
P&T Colony,
Seethmmadhara, Vishakhapatnam,
Andhra Pradesh.
41. Southern Power Distribution Company of Telangana Limited,
Corporate Office, Mint Compound,
Hyderabad-500063,
Telangana.



42. Central Power Distribution Company of Andhra Pradesh Limited,
Corporate Office, Mint Compound,
Hyderabad-500063, Andhra Pradesh.
43. Northern Power Distribution Company of Telangana Limited,
Opp. NIT Petrol Pump
Chaitanyapuri, Kazipet,
Warangal-506004,
Telangana.
44. Bangalore Electricity Supply Company Limited,
Corporate Office, K. R. Circle,
Bangalore-560001.
45. Gulbarga Electricity Supply Company Limited,
Station Main Road, Gulbarga, Karnataka.
46. Hubli Electricity Supply Company Limited,
Navanagar, PB Road, Hubli, Karnataka.
47. MESCOM Corporate Office,
Paradigm Plaza, AB Shetty Circle,
Mangalore-575001, Karnataka.
48. Chamundeswari Electricity Supply Corporation Limited,
927, L J Avenue, Ground Floor, New Kantharaj Urs Road,
Saraswatipuram,
Mysore-570009, Karnataka.
49. Transmission Corporation of Telangana Limited,
Vidhyut Sudha, Khairatabad,
Hyderabad, 500082.
50. Tamilnadu Electricity Board
NPKRR Maligai, 800, Anna Salai
Chennai- 600002
51. Assam Electricity Grid Corporation Limited,
(Formerly Assam State Electricity Board),
Bijulee Bhawan, Paltan Bazar,
Guwahati-781001, Assam.
52. Meghalaya Energy Corporation Limited,
(Formerly Meghalaya State Electricity Board),
Short Round Road, "Lumjingshai",
Shillong-793001, Meghalaya.
53. Government of Arunachal Pradesh,
Itanagar, Arunachal Pradesh.



54. Power and Electricity Department,
Government of Mizoram,
Aizawl, Mizoram.

55. Manipur State Power Distribution Corporation Limited,
(Formerly Electricity Department, Government of Manipur),
Keishampat, Imphal.

56. Department of Power,
Government of Nagaland,
Kohima, Nagaland.

57. Tripura State Electricity Corporation Limited,
Vidyut Bhawan, North Banamalipur,
Agartala, Tripura (W)-799001, Tripura.

58. Central Transmission Utility,
"Saudamini", Plot No. 2,
Sector-29, Gurgaon-122 001 (Haryana).

...Respondent(s)

For Petitioner : Ms. Suparna Srivastava, Advocate, PGCIL
Ms. Aastha Jain, Advocate, PGCIL
Ms. Somya Singh, Advocate, PGCIL
Shri V. C. Sekhar, PGCIL
Shri Prashant Kumar, PGCIL

For Respondents : Shri H.S. Kaushal, CTU
Shri Swapnil Verma, CTU
Shri Ranjeet Singh Rajput, CTU
Ms. Muskan Agarwal, CTU

ORDER

The instant petition has been filed by Power Grid Corporation of India Limited (hereinafter referred to as 'the PGCIL'), a deemed transmission licensee, under Regulation 24, Regulation 111 and Regulation 113 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999 and Regulation 76 (Power to Relax) and Regulation 77 (Power to Remove Difficulty) of the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2019 for removal of difficulty with regard to tariff recovery for Unified Network Management System (hereinafter referred to as the "U-NMS") project.



2. The Petitioner has submitted that the Unified Network Management Systems (U-NMS) is more in the nature of IT equipment and hence its useful life has to be considered as 7 years and accordingly the depreciation should be allowed @15%, specified for IT equipment in the 2019 Tariff Regulations. The Petitioner has further submitted that the Operation & Maintenance Expenses (O&M Expenses) in case of the U-NMS is more than the 2% specified in the 2019 Tariff Regulations and the O&M Expenses should be allowed on actual basis subject to prudence check.

3. The Petitioner has made the following prayers in this petition:

- a. *Approve the useful life of the U-NMS system as 07 years.*
- b. *Approve the O&M charges for U-NMS system on actual basis subject to prudence check, without limiting to 2% of Project cost as per Tariff Regulations, 2019.*
- c. *Pass such other orders as Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice."*

Submissions of the Petitioner

4. The Petitioner has made the following submissions in the present petition:

- a) The Petitioner is the Nodal Agency for supervision of Communication System in respect of Inter-State Communication System and implementation of centralized supervision for quick fault detection and restoration.
- b) The Central Electricity Authority (Technical Standards for Communication System in Power System Operations) Regulations, 2020 and Manual of Communication Planning criteria provides for centralized supervision for quick fault detection and restoration of communication network of ISTS and all other utilities by integrating its Network Management System (NMS) with other users' NMS.



- c) The guidelines framed by National Power Committee (NPC) on availability of Communication System for ISTS requires a unified Network Management System to support computation of availability of communication channel as the present NMS are not supporting the same.
- d) Accordingly, the Petitioner has conceived the project for establishment of state-of-the-art Unified Network Management System (U-NMS) at Regional and National level for management of ISTS and Intra-State Communication Systems.
- e) The U-NMS System acquires information/data from existing NMS and network elements and such acquired information/data will be processed for various application services such as network resource management, fault management with analytics and trending, network configuration, performance management, trouble ticketing, web portal and planning, dash boarding and reporting etc. The U-NMS will be used for management of Communication System and consist of Computer System hardware and software in Control Centre environment, and that these elements are covered under IT equipment and software.
- f) Clause 73 of Regulation 3 of the 2019 Tariff Regulations provides the norms, inter alia, for useful life in relation to transmission system and Communication System from the date of commercial operation for 15 years and Regulation 35(3) (4) of the 2019 Tariff Regulations provides that in respect of Communication System O&M Expenses shall be worked out at 2.0% of the original project cost related to such Communication System, and that the transmission licensee shall submit the actual O&M Expenses for truing up.
- g) The nature of U-NMS is different from the Communication System based on which its norms have been considered in the tariff regulations and as such it requires a different consideration. Therefore, useful life and O&M Expenses as



provided in the 2019 Tariff Regulations are not adequate for U-NMS because of various reasons as communication usually covers fibre optic cable, communication equipment, DC power supply etc. for establishing Communication System while U-NMS largely consists of computer system hardware & software etc. which are similar to SCADA/EMS systems or IT equipment. Considering the obsolescence and technological changes in Information and Technology as well as rapid growth in Power System necessities, the frequent replacement of above services is usually done in five years span.

- h) The Task Force Committee constituted by Ministry of Power, Government of India in its report in March, 2009 had recommended to consider the life of IT equipment from 3 to 7 years.
- i) The Appendix-I to the 2019 Tariff Regulations provides the depreciation schedule for various assets and depreciation rate provided for IT equipment including software is 15%, therefore, capital cost of IT related equipment is required to be recovered in approximately 7 years.
- j) Annexure-III to the Central Electricity Regulatory Commission for RLDC fees and charges and other related matters Regulations, 2019 provides for depreciation rates of various assets. Depreciation rate for IT equipment and software i.e. similar to U-NMS assets is given as 15% in Annexure-III, therefore, the capital cost of IT related assets is required to be recovered in approximately 7 years. Recovery of the capital cost as per the 2019 Tariff Regulations may be allowed to the Petitioner with liberty to replace the IT equipment on requirement basis.
- k) The U-NMS to be established consists of computer hardware and software system in a Control Centre environment which will be used for monitoring and



managing of Communication System round the clock. Further, CEA Technical Standard for Communication Regulations, 2020 has provided for cyber security audit and compliance as part of a maintenance services and once centralized NMS is established various miscellaneous expenses shall be incurred.

- l) The Commission in Petition No. 68 of 2010 had allowed actual recovery of O&M Expenses for Communication System already in operation under ULDC schemes. Accordingly, the Commission is allowing the O&M Expenses on actual basis for communication assets in 2009-14 and 2014-19 tariff blocks.
- m) Section 61 of the Act provides the objectives for tariff determination and the intention is to ensure recovery of the costs of the entities. If the Petitioner fails to recover its costs in relation to U-NMS, the same would be contrary to the objective of Section 61 of the Act.

Hearing dated 3.9.2021

5. The matter was heard through video conference on 3.9.2021 the learned counsel for the petitioner had mainly submitted as follows:

- (i) the Petitioner is implementing the project for establishment of Unified Network Management System (U-NMS) at regional and national level for management of ISTS & Intra-State communication systems.(ii)the nature of U-NMS system is different from the communication system, based on which the norms have been prescribed in the 2019 Tariff Regulations, and as such it has to be examined on different footing..(iii) The useful life and the O&M Expenses prescribed under the 2019 Tariff Regulations for the communication system cannot be applied to U-NMS as the same is not adequate for proposed U-NMS system and has sought reconsideration of the same.



6. It is pointed out that O&M Expenses for the communication system is 2% of the original project cost of the communication system which is not adequate to meet the U-NMS system's O&M expenses. The useful life of the communication system as per Regulation 3(73) of the 2019 Tariff Regulations is 15 years. The communication system usually covers fiber optic cable, communication equipment, etc. being procured for establishing communication system. However, U-NMS system largely consists of computer system hardware and software and services like data acquisition, data processing, running various application for managing communication system being used for data storage, data retention, data centre, which are similar to SCADA/EMS systems or IT equipment. The obsolescence and technological changes in IT and rapid growth in power system necessitates the frequent replacement of above services usually in 5 years' span.

7. She further submitted that Task Force was constituted by Ministry of Power (MoP), vide order dated 13.10.2008 which in its report has recommended that the life of IT equipment is to be considered as 3 to 7 years. The 2019 Tariff Regulations and the RLDC Fees and charges Regulations provide depreciation rate for the IT equipment similar to U-NMS as 15%. This implies that the useful life for such assets is approximately 7 years. As U-NMS is different from the traditional communication system, she requested to approve useful life of U-NMS as 7 years and to consider O&M Expenses based on actuals instead of normative O&M expenses of 2% as provided in the 2019 Tariff Regulations. She requested to admit the petition and find a solution on the above said issues after hearing the beneficiaries as the project is being implemented progressively in all parts of the country.

8. In response to a query of Commission regarding the statutory provisions under



which U- NMS is being implemented, she submitted that the CERC (Communication System in Inter- state Transmission of Electricity) Regulations, 2017 has identified that CTU shall be the Nodal Agency for supervision of communication system in respect of inter-State communication system and will implement centralized supervision for quick fault detection and restoration. She submitted that CEA (Technical Standards for Communication System in Power System Operations) Regulations, 2020 and Manual of Communication Planning Criteria being published by CEA provides provision of centralized supervision for quick fault detection and restoration of communication network of ISTS and all other utilities by integrating its Network Management System (NMS) with other users of NMS. Further, guidelines framed by National Power Committee (NPC) on availability of communication system for ISTS require U-NMS to support computation of availability of communication channel. She further submitted that regional U-NMS scheme pertaining to Northern Region and NER region has been approved.

9. In response to another query, learned counsel for the Petitioner clarified that initially the plan was made by CTU and after the approval of plan by the Commission, PGCIL will be implementing the project and will be the owner of U-NMS project.

10. After hearing the learned counsel for the Petitioner, the Commission admitted the petition and directed to issue notice to the Respondents. The Commission further directed the Petitioner to implead CTU as party and to file amended memo of parties.

11. The Commission directed the Petitioner to submit the following information on affidavit by 23.9.2021 with an advance copy to the Respondents. The Commission also directed the Respondents to file reply in the matter on affidavit by 30.9.2021 and the Petitioner to file its rejoinder, if any, by 11.10.2021:



- a. A comprehensive report clarifying the U-NMS system and equipments installed in same and the overlap of communication system installed at ISTS sub-stations and U- NMS communication system to be installed for national and regional centres for management of ISTS & Intra-State communication systems, if any.
- b. A certified copy of item-wise breakup of the project cost as per the depreciation schedule of the 2019 Tariff Regulations and a net weightage average of depreciation rate for such equipment of the Project.
- c. Plan prepared by CTU for implementing of U-NMS project.

Submissions of Respondent

12. MPPMCL has made the following submissions vide Affidavit dated 16.1.2021:
 - a) The plea of the Petitioner for considering the useful life for U-NMS as 7 years instead of 15 years as given in the regulation is baseless and contradictory. The Petitioner has claimed that many of the equipment with reference to computer system hardware and software used for U-NMS will require the replacement usually in five years. However, the license fee to the software normally comes with the regular updates and it will definitely be a part of the O&M Expenses. The data processing, data analytical tools etc., are all software supported programmes and regular up-dation is the part of O&M and useful life cycle cannot be determined on above factors. Thus, the plea of the Petitioner to revise the useful life to 7 years is inappropriate and should be rejected.
 - b) The pleas given by the Petitioner to raise O&M Expenses from the existing normative ceiling of 2.0% as provided in the 2019 Tariff Regulations is unjustified, irrelevant and pre-mature. The Petitioner had the option to



represent the issue during finalization of 2019 Tariff Regulations. Had the Petitioner represented the issue before the Commission during finalization of the 2019 Tariff Regulations, the Commission would have taken appropriate action after prudent check. The Commission after prudence check has issued 2019 Tariff Regulations whereby it has fixed a ceiling of 2% on Communication System.

- c) The plea of the Petitioner to allow O&M Expenses on actual basis should not be considered. However, expenditure on actual basis may be passed in truing up subject to maximum ceiling of 2% as per the 2019 Tariff Regulations.

Submissions of Petitioner

13. In response, the Petitioner has filed its rejoinder vide affidavit dated 8.4.2021 and has submitted that U-NMS hardware consists of Computer System and other IT equipment including software. The Petitioner has further submitted that U-NMS is combination of both hardware and software and it requires replacement of equipment in five years span considering the obsolescence and technological changes in information technology and rapid growth in Power System. The Petitioner has submitted that U-NMS Control Centres are similar to SCADA EMS System implemented in RLDC/ NLDC whose life is 7 years. The Petitioner has further submitted that sensing the usefulness of above said equipment, the Commission in the 2019 Tariff Regulations has provided depreciation rate for IT equipment as 15% with salvage value as 0%. The Petitioner has also submitted that U-NMS is being implemented in India for the first time and as such no past data or awarded rates are available for similar system to work out the required O&M Expenses.

14. The Petitioner, vide affidavit dated 23.9.2021, has furnished additional



information sought by the Commission during the hearing on 3.9.2021. The Petitioner has submitted that it has impleaded CTU as the Respondent and has submitted a fresh “Memo of Parties”. The Petitioner has further submitted that CTU took the scheme of Unified Central Network Management System (U-NMS) for ISTS and State Utility Communication Network for approval of different RPCs forum and the same was approved by NRPC during 46th NRPC meeting held on 24.9.2019, NERPC during 20th NERPC meeting held on 12.9.2019 and by ERPC during 43rd ERPC meeting held on 26.3.2021. It has been submitted that CTU shall take up the matter of approval of the scheme in Southern Region and Western Region with SRPC and WRPC respectively.

Hearing dated 27.9.2022

15. During the hearing on 27.9.2022, the learned counsel for the Petitioner submitted that the instant petition is filed for approval of the useful life of U-NMS system as 7 years. She submitted that the system consists of IT hardware and IT software and in the case of RLDC, the useful life of the system is recognised as 7 years and the same treatment may be given to the Petitioner as well. The 2019 Tariff Regulations provides for O&M Expenses @ 2% of the original project cost and the transmission licensees are given the liberty to submit the actual expenses at the truing up. The quotations received for O&M of the U-NMS in ER, NER and NR is 5.39%. Hence, at least 5% of the project cost may be allowed as O&M Expenses after prudence check. The learned counsel submitted that this is a new software and hence the Petitioner is not able to contain the O&M Expenses within 2%. The Petitioner has anticipated that 2% O&M Expenses was not sufficient even at the planning stage and at the time of framing of the 2019 Tariff Regulations. Taking into consideration the concerns of the Petitioner, the Commission provided for submission of the actual O&M Expenses at the time of truing up in the 2019 Tariff Regulations. As the actual O&M Expenses are



more than 5% of the project cost, 5% O&M Expenses may be granted subject to actuals and if the actuals are lower, the Petitioner will claim lower O&M Expenses.

Analysis and Decision

16. We have considered the rival submissions and have perused the record. After considering the submissions following issues arise for our consideration:

Issue No 1: Whether Petitioner as PGCIL can implement the UNMS scheme or CTU is to implement the UNMS Scheme? Who shall have the operational control of the UNMS post commissioning?

Issue No 2: What should be the useful life of UNMS assets and O&M expenses for same under Tariff Regulations?

The above issues are dealt in subsequent paragraphs.

Issue No 1: Whether Petitioner as PGCIL can implement the UNMS scheme or CTU is to implement the UNMS Scheme? Who shall have the operational control of the UNMS post commissioning?

17. The Petitioner has submitted that Petitioner is the Nodal Agency for supervision of Communication System in respect of Inter-State Communication System and implementation of centralized supervision for quick fault detection and restoration.

18. The U-NMS System acquires information/data from existing NMS and network elements and such acquired information/data will be processed for various application services such as network resource management, fault management with analytics and trending, network configuration, performance management, trouble ticketing, web portal and planning, dash boarding and reporting etc. The U-NMS will be used for management of Communication System and consist of Computer System hardware



and software in Control Centre environment, and that these elements are covered under IT equipment and software.

19. During hearing held on 3.9.2021, in response to a query of Commission regarding the statutory provisions under which U- NMS is being implemented, Petitioner submitted that the CERC (Communication System in Inter- state Transmission of Electricity) Regulations, 2017 has identified that CTU shall be the Nodal Agency for supervision of communication system in respect of inter-State communication system and will implement centralized supervision for quick fault detection and restoration. Petitioner further stated that initially the plan was made by CTU and after the approval of plan by the Commission, PGCIL will be implementing the project and will be the owner of U-NMS project.

20. We have perused the provisions of various regulations as follows:

(a) Clause 7.2 (vii) of Central Electricity Regulatory Commission (Communication System Inter-State Transmission of Electricity) Regulations, 2017 is reproduced as below;

“7.2 (vii) CTU shall be the Nodal Agency for supervision of communication system in respect of inter-State communication system and will implement centralized supervision for quick fault detection and restoration. CTU shall prepare Procedure for same and submit to Commission for approval within 60 days of notification of these Regulations.”

(b) Statement of Reasons to Central Electricity Regulatory Commission (Communication System Inter-State Transmission of Electricity) Regulations, 2017 provides as follows:

“19.7 We agree with suggestion of PGC IL regarding establishment of NMS for Communication System. POSOCO has suggested that NMS shall aid in quick fault restoration. Since the nodal agency for quick fault restoration is CTU, the responsibility for establishing integrated NMS shall be that of C TU. A console may be provided at NLDC/SLDC/RLDC/NTAMC. However, the operating rights shall be decided by CTU in consultation with NLDC/RLDCs.”



(c) Central Electricity Authority (Technical Standards for Communication System in Power System Operations) Regulations, 2020 & Manual of Communication Planning Criteria being published by CEA provides provision of centralized supervision for quick fault detection and restoration of communication network of ISTS and all other Utilities by integrating its network management system (NMS) with other users' NMS. Relevant extracts are as follows;

“19. Centralised monitoring. (1) Control Centre shall have centralised supervision and monitoring system by integrating its network management system with network management system of other users and standalone network elements, which are not being monitored on network management system within its jurisdiction on national and regional basis.”

21. We observe as per above, CTU is the nodal agency for quick fault restoration. We also observe that Petitioner had taken up UNMS Scheme in NER, ER and after approval of respective RPCs in its capacity as CTU. Petitioner has submitted that scheme was approved by NRPC during 46th NRPC meeting held on 24.9.2019, NERPC during 20th NERPC meeting held on 12.9.2019 and by ERPC during 43rd ERPC meeting held on 26.3.2021. We observe that Petitioner has submitted that CTU shall obtain approval of scheme from WRPC and SRPC before implementation. CTU is hereby directed to obtain the approval from respective RPCs as submitted by Petitioner.

22. We observe now CTUIL has been formed as a separate entity. Since CTUIL formation is in nascent stage and that Petitioner has already taken implementation of the scheme in its capacity as CTU after approval of RPCs, Petitioner may implement the scheme, wherever approved by RPCs. We also observe that since the UNMS will cover the communication system of various ISTS licensees including Petitioner PGCIL,



the operational control of UNMS shall be with CTUIL. Accordingly the questions raised are answered.

Issue No 2: What should be the useful life of UNMS assets and O&M expenses for same under Tariff Regulations?

23. The Petitioner has sought two reliefs in the present petition. The first relief is that the useful life of UNMS may be considered as 7 years instead of 15 years provided for Communication System in the 2019 Tariff Regulations and to allow depreciation of 15% as is applicable to IT equipment in the 2019 Tariff Regulations. The second relief is that the O&M Expenses for the Communication System should be allowed on actual basis subject to prudence check and should not be restricted to 2% of the original project cost as provided in Regulation 35(3)(4) of the 2019 Tariff Regulations, as the same is not adequate to meet its O&M Expenses.

24. As regards the useful life of UNMS, the Petitioner has contended that UNMS is used for management of Communication System and it consists of Computer System hardware and software in Control Centre, and that these elements are covered under IT equipment and software. The UNMS acquires information/data from existing NMS and network elements and such acquired information/data would be processed for various application services such as network resource management, fault management with analytics and trending, network configuration etc. whose nature resembles with IT equipment. The Petitioner has submitted that the management of Communication System of UNMS is a blend of hardware and software in Control Centre Environment and thus it qualifies to be considered as IT equipment as per the 2019 Tariff Regulations. Therefore, its life span should be 7 years with 15% depreciation as per Appendix-I of the 2019 Tariff Regulations. MPPMCL has resisted



contentions of the Petitioner that licence fee for the software comes with regular updates, it is part of O&M Expenses and thus data processing, data analytical tool etc. are all software related activities which are updated under licence fee. Therefore, the same cannot be the basis to consider the life span of UNMS as 7 years.

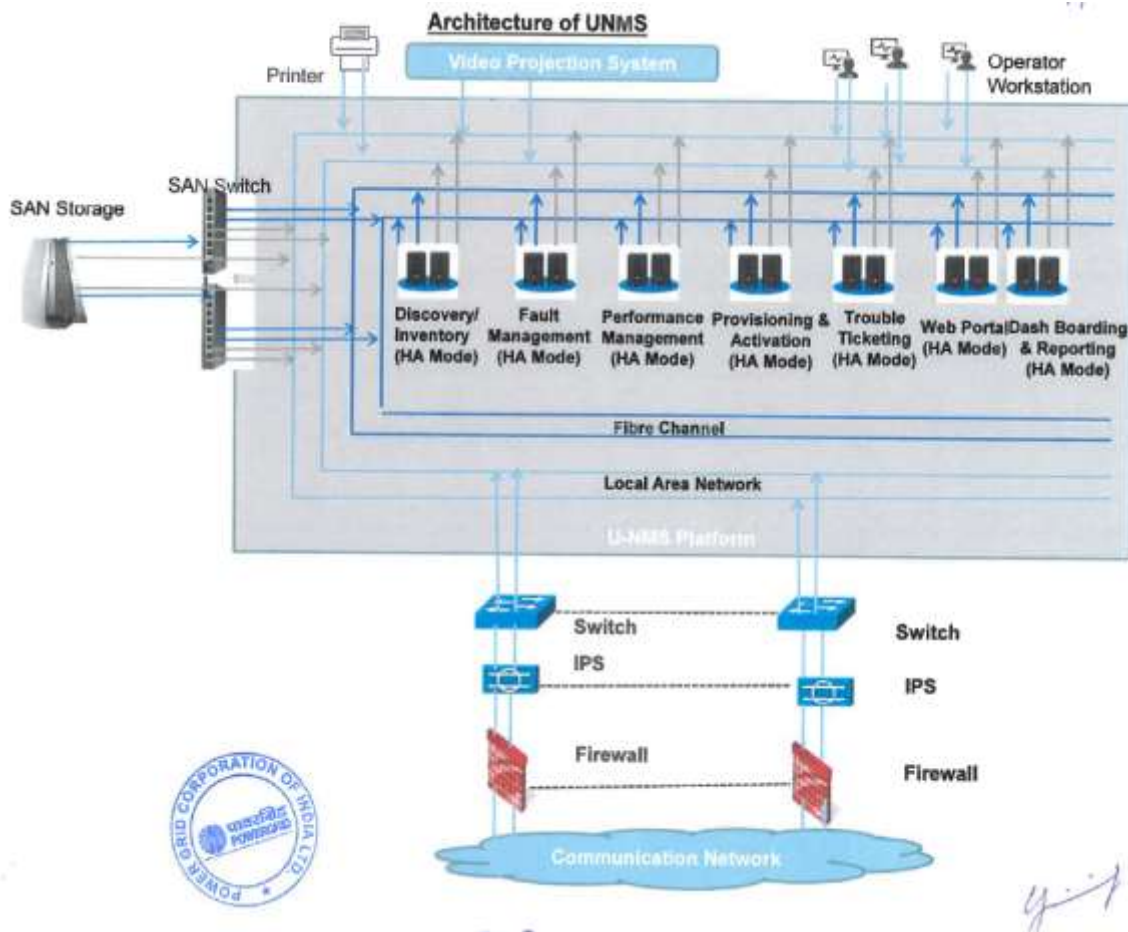
25. As regards the O&M Expenses for the U-NMS, the Petitioner has submitted that the O&M Expenses of U-NMS are higher than 2% of the original project cost of the Communication System as specified in the 2019 Tariff Regulations. According to the Petitioner, the O&M Expenses of U-NMS are currently at 5.39% of the original project cost of the Communication System as per the lowest bid received by it for NER and ER.

26. Therefore, the Petitioner has pleaded for allowing O&M Expenses for UNMS on actual basis subject to prudence check without limiting the norm of 2% of the capital cost of the U-NMS.

27. In the instant case, the Petitioner wants to extend the norms applicable for the IT equipment regarding the useful life and the depreciation to the U-NMS while at the same time states that the 2% norm for O&M Expenses for Communication System in 2019 Tariff Regulations is not sufficient and the O&M Expenses should be allowed on the actual basis after prudence check. In short, the Petitioner is seeking a declaration by the Commission that the U-NMS as a whole to be categorised as IT equipment and accordingly apply the norms specified for IT equipment in the Tariff Regulations and to also allow the actual O&M Expenses.

28. Petitioner has submitted the Architecture of the UNMS as follows:





Petitioner has also submitted that the UNMS System shall have following components:

- a. Servers and Software for UNMS Application
- b. Servers and Software for Storage System
- c. Hardware of Networking Equipment.
- d. Other accessories such as consoles and furniture etc.

29. We observe that UNMS System is a new system which is completely an IT system and cannot be categorised as under Communication system within the meaning of definition as 2019 Tariff Regulations. We observe that Appendix-I to 2019 Tariff Regulations provides depreciation rate for IT equipment and software as 15%. Considering depreciation rate of 15% converts to useful life of 7 years. Hence, we in exercise of our regulatory power inclined to direct that useful life of UNMS system shall be considered as 7 years with depreciation rate as 15%.



30. Further 2019 Tariff regulations does not cover a separate category of O&M expenses for IT system. Since UNMS is a new scheme, we do not have any baseline data to determine norms for same. We consider it appropriate to consider O&M expenses for such schemes on actual basis after due prudence check. Hence, we hereby allow O&M expenses upto 5% of capital cost which shall be subject to true up based on actuals at time of truing up.

31. In the light of above discussions and findings, this order disposes of Petition No. 728/MP/2020.

sd/-
(P.K. Singh)
Member

sd/-
(Arun Goyal)
Member

sd/-
(I.S. Jha)
Member

