CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

Petition No. 36/TT/2021

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

Date of Order: 05.12.2022

In the matter of:

Petition for approval under sub-section 4 of Section 28 of the Electricity Act, 2003 for truing up of annual fees and charges for 2014-19 tariff period and determination of annual fees and charges for the period 2019-24 tariff period for Communication Scheme under National Load Despatch Centre (PowerGrid Portion).

And in the matter of:

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

.....Petitioner

Vs.

- NTPC Limited, NTPC Bhawan, Core-7, Scope Complex, 7, Institutional Area, Lodhi Road, New Delhi – 110 003.
- 2. NHPC Limited, NHPC Office Complex, Sector 33, Faridabad, Haryana.
- Satluj Jal Vidyut Nigam Limited, Power Project, Jhakri, Rampur, District Shimla, Himachal Pradesh – 172 201.
- THDC India Limited, Bhagirath Puram, Tehri, Uttarakhand – 249 001.
- Nuclear Power Corporation of India Limited, Nabhkiya Bhawan, Anu-Shakti Nagar, Mumbai – 400 094.
- 6. ADHPL, Bhilwara Towers, A-12, Sector-1, Noida 201 301.
- 7. Aravali Power Company Private Limited, Indira Gandhi Super Thermal Power Project, PO: Jharli, District Jhajjar.



- 8. Jaypee Karchan Hydro Corporation Limited, Sector-128, Noida 201 304.
- Everest Power Private Limited, 1st Floor, Hall-1, NBCC Tower, Bhikaji Cama Place, New Delhi – 110 066.
- 10. Shree Cement Limited,PO Box No. 33, Bangur Nagar,Beawar 305 901, District: Ajmer (Rajasthan).
- 11. Chandigarh (Electricity Department), UT Chandigarh, Sector-9 D, Chandigarh 160 019.
- 12. Delhi Transco Limited, SLDC Building (Behind Jakir Husain College), Tagore Hostel Lane, Minto Road, New Delhi – 110 002.
- 13. Haryana Vidyut Prasaran Nigam Limited, Room No.-213, Shakti Bhawan, Sector-6, Panchkula – 134 109, Haryana.
- 14. Himachal Pradesh State Electricity Board, Totu, Shimla 171 011, Himachal Pradesh.
- 15. Power Development Department, Narwal Bala, Gladni – 180 004, Jammu.
- 16. PSTCL, SLDC Building, 220 kV Sub-station Ablowal, Patiala – 147 001, Punjab.
- 17. RVPN, Vidyut Bhawan, Jyoti Nagar, Vidyut Marg, Jaipur – 302 015, Rajasthan.
- 18. U.P. Power Corporation Limited,
 Electricity Import-Export & Payment Circle,
 11th Floor, Shakti Bhawan Extension,
 14-Ashok Marg, Lucknow 226 001, Uttar Pradesh.
- 19. Northern Central Railway, Nawabyusuf Road, Allahabad, Uttar Pradesh.
- 20. Uttranchal Power Corporation Limited, Kanwali Road, Urja Bhawan, Dehradun – 248 001, Uttrakhand.
- 21. Powerlinks Transmission Limited, 10th Floor, DLF Tower-A, District Centre, Jasola, New Delhi – 110 044.



- 22. Orissa Hydro Power Corporation Limited, Burla Power House, District Sambalpur, Burla – 768 017.
- 23. Mejia Thermal Power Station, DVC, P.O. MTPS, District Bankura – 722 183.
- 24. West Bengal State Electricity Distribution Comapny Limited, Bidyut Bhawan, 8th Floor (A Block), Block DJ, Salt Lake City, Kolkata 700 091.
- 25. Bihar State Electricity Board, Vidyut Bhawan, Bailey Road, Patna – 800 001.
- 26. Gird Corporation of Orissa Limited, Vidyut Bhawan, Janpath, Bhubaneshwar – 751 007.
- 27. Power Department, Government of Sikkim, Gangtok – 727 102.
- 28. Jharkhand State Electricity Board, Engineering Building, HEC Township, Dhurwa, Ranchi – 834 004.
- 29. Damodar Valley Corporation, DVC Tower, VIP Road, Calcutta – 700 054.
- 30. North-Eastern Electric Power Corporation Limited, 15, NBCC Tower, Bhikaji Cama Place, New Delhi.
- 31. Arunachal Pradesh State Electricity Board Department of Power,
 Government of Arunachal Pradesh,
 Itanagar 791 111, Arunachal Pradesh.
- 32. Assam Power Distribution Company Limited, Bijulee Bhawan, Paltan Bazar, Guwahati – 781 001, Assam.
- 33. Manipur State Electricity Board, Department of Power, Government of Manipur, Imphal – 795 001, Manipur.
- 34. Meghalaya Electricity Corporation Limited, Lumjingshai, Short Round Road, Shillong – 793 001, Meghalaya.
- 35. Mizoram State Electricity Board, Power & Electricity Department, Government of Mizoram, Khatla, Aizwal – 796 001, Mizoram.



- 36. Nagaland State Electricity Board, Department of Power, Government of Nagaland, Kohima – 791 001, Nagaland.
- 37. Tripura State Electricity Corporation Limited, Bidyut Bhawan, North Banamalipur, Agartala – 799001, Tripura.
- 38. Neyvelli Lignite Corporation Limited, P.O. Neyvelli 607 801, Cuddalore District, Tamil Nadu.
- 39. LANCO-Kondapalli Power Private Limited, Plot No. 4, Software Units Layout, Hitech City, Madhapur, Hyderabad – 500 081.
- 40. Transmission Corporation of Andhra Pradesh Limited, Vidyut Soudha, Gunadala, Eluru Road, Vijayawada, Andhra Pradesh – 520 004.
- 41. Power Company of Karnataka Limited, Room No; 503, KPTCL Building, Kaveri Bhavan, Bangalore – 560 009, Karnataka.
- 42. Kerala State Electricity Board, Vydyuthi Bhavanam, Pattom, Thiruvananthapuram – 695 004.
- 43. TANGEDCO, 7th Floor, Eastern Wing, 144, Anna Salai, Chennai – 600 002.
- 44. Electricity Department, Government of Puducherry, Puducherry – 605 001.
- 45. Electricity Department, Government of Goa, Curti-Ponda-Goa – 403 401.
- 46. Narmada Control authority, Narmada Sadan, Sector-B, Scheme No. 74, Vijaynagar, Indore, Madhya Pradesh – 452 010.
- 47. Jindal Power Limited, O.P. Jindal STPS, P.O. Tamnar, Tehsil-Gjarghoda, District Raigarh, Chattisgarh – 496 107.
- 48. Chhattisgarh State Power Distribution Company Limited, P.O. Sunder Nagar, Dangania, Raipur 492 013



- 49. Lanco Amarkantak Power Private Limited, Plot No. 397, Phase-III, Udyog Vihar, Gurgaon – 122 016, Haryana.
- 50. Gujarat Urja Vikas Nigam Limited, Sardar Patel Vidyut Bhawan, Race Course Road, Vadodara – 390 007.
- 51. Maharashtra State Electricity Distribution Company Limited, Hongkong Bank Building, 3rd Floor, M.G. Road, Fort, Mumbai – 400 001.
- 52. Electricity Department, Government of Goa, Vidyut Bhavan, Panaji, Near Manndvi Hotel, Goa – 403001.
- 53. Electricity Department, Administration of Daman and Diu, Daman – 396 210.
- 54. Madhya Pradesh Power Management Company Limited, Shakti Bhawan, Rampur, Jabalpur – 482 008.
- 55. Madhya Pradesh Power Transmission Company Limited, Shakti Bhawan, Rampur, Jabalpur – 482 008.
- 56. Madhya Pradesh Audyogik Kendra, 3/54, Press Complex, Agra-Bombay Road, Indore 452 008.

....Respondents

For Petitioner : Shri S. S. Raju, PGCIL

Shri D. K. Biswal, PGCIL

Shri Ved Prakash Rastogi, PGCIL

Shri A. K. Verma, PGCIL

For Respondents : Shri Anindya Khare, MPPMCL

<u>ORDER</u>

Power Grid Corporation of India Limited, a deemed transmission licensee, has filed the instant petition under Section 28(4) of the Electricity Act, 2003 (hereinafter referred to as the "Act") for truing up of annual fees and charges for 2014-19 period



based on actual expenditure for the period 1.4.2014 to 31.3.2019 and for determination of fees and charges for the period from 1.4.2019 to 31.3.2024 for Communication Scheme under National Load Despatch Centre (NLDC) (PowerGrid portion i.e. communication system portion under NLDC retained by PowerGrid after formation of POSOCO) (hereinafter referred to as the "communication assets").

- 2. The Petitioner has made the following prayers in the instant petition:
 - a. Approve the Fees and charges for 2014-19 block for the Communication Scheme under NLDC covered under this petition, as per Para-9 above.
 - b. Approve the Fees and charges for 2019-24 block for the Communication Scheme under NLDC covered under this petition, as per Para-10 above.
 - c. Approve lease charges as claimed in Para 8 and 10.1 above.
 - d. Approve the reimbursement of expenditure by the petitioner towards any other expenditure (if any) in relation to the filing of petition and petition filing fee.
 - e. Allow the Petitioner to bill and recover Service tax on Transmission Charges separately from the respondents, if at any time exemption from service tax is withdrawn and transmission is notified as a taxable service.
 - f. Allow to recover the shortfall or refund the excess Annual Fixed Charges, on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly from the beneficiaries.
 - g. Allow the petitioner to bill and recover License fee separately from the respondents.
 - h. Allow the petitioner to recover the applicable Income Tax from the respondents separately.
 - i. Allow the petitioner to bill and adjust impact on Interest on Loan due to change in Interest rate on account of floating rate of interest applicable during 2019-24 period, if any, from the respondents.

and pass such other relief as Hon'ble Commission deems fit and appropriate under the circumstances of the case and in the interest of justice.

Background

- 3. The brief facts of the case are as follows:
 - a) As per the directives of Government of India vide order dated 4.7.2008, Power System Operation Corporation Limited (POSOCO), a wholly owned subsidiary of the Petitioner was created for system operation of National Load Despatch Centre (NLDC) and Regional Load Despatch Centres (RLDCs).



- b) Ministry of Power (MoP), Government of India, vide letter dated 13.10.2009, constituted a Task Force under the Chairmanship of Shri Satnam Singh, the then CMD, Power Finance Corporation, to look into the financial aspects for augmentation and up-gradation of the State Load Despatch Centres (SLDC) and issues related to emoluments for the personnel engaged in the system operation. The Task Force made certain recommendations with regard to the ownership of the assets. The Petitioner constituted committees at the regional level, subsequent to the Task Force's report, to identify the assets to be transferred to POSOCO.
- c) Thereafter, the Petitioner filed a Miscellaneous Petition No. 68/2010 under Section 28(4) of the Act, and Regulation 44 "Power to Relax" of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 (hereinafter referred to as the "2009 Tariff Regulations") for fixation of tariff norms for recovery of cost for the assets ("Communication System" and "Sub-Load Dispatch Centre System") to be retained/to be installed by the Petitioner after formation of POSOCO for 2009-14 period.
- d) The Commission vide order dated 8.12.2011 in Petition No. 68/2010, had observed as follows:
 - "9...........Since the communication system and SLDC system form part of the assets of the CTU, there is a requirement to specify regulations for determination of tariff of these assets. We direct the staff of the Commission to undertake the exercise separately and include these assets of CTU in the tariff regulations applicable for the next tariff period i.e.2014-19. As regards the tariff of these assets for the period 2009-14, we are not inclined to determine the tariff of these assets by exercising our power to relaxation under Regulation 44 of the 2009 regulations since there is no provision for determination of tariff for the assets covered under the communication system and ULDC system. We are of the view that the tariff of these assets shall be determined under our general power of determination of tariff for inter-State transmission system under section 79(1)(d) of the Act......."
 - ".......It clearly emerges from the above judgment that the Central Commission can specify the terms and conditions of tariff even in the absence of the regulations. Since no regulation was specified for determination of tariff of the communication system and the ULDC system, the Commission determined the tariff of these assets during the period 2004-09 on levelised basis by adopting some of the parameters of 2004 tariff regulations. We have decided to continue with the levelised tariff for the existing assets in the absence of any provision in 2009 regulations



regarding determination of tariff of communication system and ULDC system of the petitioner. For the new assets, the tariff will be decided as per the regulations for communication systems to be framed. Accordingly, we direct the staff of the Commission to take necessary action to prepare draft regulations for determination of tariff for the communication system and ULDC system of the petitioner."

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- "21. We have considered the submission of the petitioner and the respondents. We are of the view that replacement of microwave links with fibre optic links should be implemented as agreed by the beneficiaries to ensure safe and reliable operation of the power system. Moreover, the petitioner has submitted that surrender of the microwave frequencies would save substantial cost and the fibre optic system would be beneficial in the long run as the fibre optic communication network is required for implementation of new technologies like Wide Area Measurement System (WAMS), Special Protection Schemes (SPS) etc. in view of fast development and complexity of the power system in the country. As regards the regulatory approval, we are of the view that since the project has been agreed to be implemented by the constituents of each of the regions, regulatory approval is not considered necessary. The petitioner is granted liberty to approach the Commission for determination of tariff for the fibre optic network being installed in lieu of microwave links for each of the region separately. As regards the submission of UPPTCL, it is clarified that if the state portion is not being implemented by it separately as proposed earlier, the same shall be implemented by the petitioner and UPPTCL would be required to share the tariff in proportion to the assets being utilised by it. It is however made clear that the timeline for replacement of the digital microwave by optical fibre should be strictly complied with."
- e) The administrative approval and expenditure sanction for establishment for NLDC was accorded by MoP vide letter dated 24.5.2005 at an estimated cost of ₹4496 lakh including IDC of ₹177 lakh at 4th quarter, 2004 price level. As per original project approval letter dated 24.5.2005, the NLDC Scheme was scheduled to be put into commercial operation within 36 months from the date of approval, i.e. by 1.6.2008. However, the NLDC Scheme was declared under commercial operation on 1.4.2009, with a time over-run of ten months, which had been condoned vide order dated 27.1.2014 in Petition No. 74/TT/2012.
- f) The Commission vide order dated 14.9.2016 in Petition No. 23/TT/2015 had trued-up the fees and charges for 2009-14 tariff period and determined the tariff for 2014-19 period.
- g) The scope of work under NLDC Scheme is as follows:
 - Establishment of control centre at New Delhi with backup at ERLDC Kolkata.



- ii. Interface equipment like routers and hub for data acquisition from RLDCs at RLDCs and NLDC/ back-up NLDC.
- iii. Communication Systems for data, voice and fax between RLDCs, NLDCs and back-up NLDC through dedicated wideband networks on fiber optics.
- iv. Auxiliary Power Supply System.
- v. Other infrastructural facilities such as air-conditioning, firefighting, DG set construction/renovation of buildings, etc.
- h) In the absence of any provision in the 2009 Tariff Regulations regarding determination of tariff of Communication System and SLDC System of the Petitioner and to continue with the levelised tariff for the communication assets, the annual fees and charges of the NLDC system retained by the Petitioner were allowed vide order dated 27.1.2014 in Petition No. 74/TT/2012, in terms of the principles approved by the Commission vide order dated 8.12.2011 in Petition No 68/2010.
- i) The details of annual fees and charges for 2014-19 tariff period allowed by the Commission vide order dated 14.9.2016 in Petition No. 23/TT/2015 for Central Portion are as follows:

(₹ in lakh)

Particulars	Central Portion					
Faiticulais	2014-15	2015-16	2016-17	2017-18	2018-19	
Annual Capital Recovery Charge-Total	77.13	83.10	83.10	83.10	83.10	
O&M Expenses	8.69	8.97	9.26	9.56	9.87	
Interest on Working Capital	2.26	2.41	2.42	2.44	2.46	
Total fee and charges	88.08	94.48	94.78	95.10	95.43	

4. The Petitioner has served the petition on the Respondents and notice regarding filing of this application has also been published in the newspapers in accordance with Section 64 of the Act. No comments or suggestions have been received from the general public in response to the aforesaid notices published in the newspapers by the Petitioner. Madhya Pradesh Power Management Company Limited (MPPMCL), i.e., Respondent No. 54 has filed its reply vide affidavit dated 23.9.2021 and has raised issues such as O&M Expenses, lease charges and GST.

In response, the Petitioner has filed rejoinder vide affidavit dated 6.7.2022. The issues raised by MPPMCL and the clarifications given by the Petitioner have been dealt in the relevant paragraphs of the instant order.

- 5. The hearing in the matter was held on 1.8.2022 through video conference and the order was reserved.
- 6. Having heard the representatives of the Petitioner, the representative of MPPMCL and having perused the material on record, we proceed to dispose of the petition.
- 7. This order has been issued considering the submissions made by the Petitioner in the petition and affidavit dated 7.9.2021, the reply of MPPMCL vide affidavit dated 23.9.2021 and the Petitioner's rejoinder thereto vide affidavit dated 6.7.2022.

TRUING-UP OF FEES AND CHARGES FOR 2014-19 TARIFF PERIOD

8. As per the directions of the Commission vide order dated 8.12.2011 in Petition No. 68/2010, the scope of the 2014 Tariff Regulations has been widened to include the Communication System and SLDC System used for inter-State transmission of electricity. However, as per Regulation 6(1)(iii) of the 2014 Tariff Regulations, the tariff of the existing communication assets forming part of the transmission system is to be determined as per the methodology followed prior to 1.4.2014. The said Regulation provides as follows:

"6(1)(iii) the tariff of the existing communication system forming part of transmission system shall be as per the methodology followed by the Commission prior to 1.4.2014."

9. The communication assets were put into commercial operation on 1.4.2009 and in view of above provision in the 2014 Tariff Regulations, the tariff of the

communication assets and NLDC System of the Petitioner, we continue to allow levelised tariff for the communication assets in terms of the principles approved by the Commission vide order dated 8.12.2011 in Petition No. 68/2010. Accordingly, the annual fees and charges of communication system are trued-up/determined in this order.

Capital cost

- 10. The net capital cost of ₹489.59 lakh as allowed vide order dated 14.9.2016 in Petition No. 23/TT/2015 has been considered as on 1.4.2014 for the purpose of truing up of fees and charges for the communication assets. The Petitioner has claimed Additional Capital Expenditure (ACE) of ₹35.79 lakh during 2014-15 on account of balance and retention payments.
- 11. The Petitioner vide Auditors' Certificate dated 15.12.2014 has submitted the ACE incurred for 2014-15 tariff period and the Petitioner vide affidavit dated 7.9.2021 has submitted the vendor-wise and package details. The details are as follows:

Amount (₹ in lakh)	Package Name	Vendor Name	Remarks
35.79	LOA - 2071 to 73, Communication Equipment, PLCC	WRIPT, PR China	Balance and retention payment claimed under Regulation 14(3)(v) of the 2014 Tariff Regulations

- 12. We have considered the submissions of the Petitioner. ACE of ₹35.79 lakh during 2014-15 period as claimed by the Petitioner, is towards balance and retention payments and the same is allowed under Regulation 14(3)(v) of the 2014 Tariff Regulations.
- 13. Accordingly, the capital cost allowed for 2014-19 tariff period is as follows:

Capital Cost as on 1.4.2014	ACE - 2014-15	Total Capital Cost as on 31.3.2019
489.59	35.79	525.38

Debt-Equity ratio

14. Debt- equity ratio as on 31.3.2014 was allowed by the Commission vide order dated 14.9.2016 in Petition No. 23/TT/2015 is as follows:

		(₹ in lakh)			
Funding	Central Portion				
Funding	Amount (in %)				
Loan/ Debt	332.58	67.93			
Equity	157.01	32.07			
Total	489.59	100.00			

15. Debt-equity ratio allowed as on 31.3.2019 for the communication system is as follows:

		(₹ in lakh)		
Eunding	Central Portion			
Funding	Amount (in %)			
Loan/Debt	211.65	64.79		
Equity	115.01	35.21		
Total	326.66	100.00		

16. The difference in net capital cost is due to ACE during 2014-19 tariff period and capital cost recovered during 2014 - 19 tariff period is explained as follows:

Rates for Recovery of /Loan and Equity

(a) The Capital Recovery Factor (CRF) for loan in respect of the communication assets has been calculated by applying weighted average rate of interest (WAROI) on the basis of the impact due to change in floating rate of interest of loan and it works out to be 6.9620%, 7.0302%, 7.0870%, 7.2831% and 7.5342% for 2014-15, 2015-16, 2016-17, 2017-18 and 2018-19 respectively for the communication assets. Thus, the rates considered on annual basis, have been converted to monthly rates. Accordingly, monthly recovery factors for loan in respect of the communication assets are as follows:

CRF for loan to be considered for Fees & Charges						
Particulars 2014-15 2015-16 2016-17 2017-18 2018-19						
Central Portion	0.011591	0.012522	0.013677	0.015231	0.017307	

(b) The CRF for equity has been considered on the same basis as allowed vide order dated 14.9.2016 in Petition No. 23/TT/2015 and on post-tax return on

equity of 15.50%. Thus, the rates considered on annual basis, have been converted to monthly rates and the same are as follows:

CRF for equity to be considered for Fees & Charges					
Particulars 2014-15 2015-16 2016-17 2017-18 201					
Central Portion	0.016441	0.017224	0.018236	0.019578	0.021417

(c) In view of above, the amount of monthly capital recovery charges for loan and equity for the communication assets on account of central portion have been considered by using respective CRF and the same are as follows:

(₹ in lakh)

Monthly capital recovery charges for loan					
Particulars 2014-15 2015-16 2016-17 2017-18 2018-					
Central Portion	3.86	4.18	4.19	4.21	4.24

(₹ in lakh)

Monthly capital recovery charges for equity						
Particulars 2014-15 2015-16 2016-17 2017-18 2018-19						
Central Portion	2.58	2.77	2.77	2.77	2.77	

17. Accordingly, the recovery of capital during 2014-19 tariff period has been worked out as follows:

(₹ in lakh)

Particulars	Capital	Central Portion
Capital Cost Recovered during	Loan	145.99
2014-19	Equity	52.74
2014-19	Total	198.73

Operation & Maintenance Expenses ("O&M Expenses")

18. The Commission vide order dated 14.9.2016 in Petition No. 23/TT/2015 had allowed the O&M Expenses considering the actual O&M Expenses of ₹8.42 lakh for 2013-14 period along with escalation of 3.32% per annum. O&M Expenses claimed by the Petitioner and allowed by the Commission vide order dated 14.9.2016 in Petition No. 23/TT/2015 are as follows:

Y	'ear	2014-15	2015-16	2016-17	2017-18	2018-19
O&M claimed	Expenses	34.04	23.54	23.54	23.54	23.54
O&M allowed	Expenses	8.69	8.97	9.26	9.56	9.87



- 19. The Petitioner has submitted its revised claim of O&M Expenses on actual basis for 2014-19 tariff period and has submitted the Auditors' Certificate in support of the same.
- 20. MPPMCL has submitted that the O&M Expenses have increased by ₹6.99 lakh in 2014-15, ₹12.01 lakh in 2015-16 and by ₹2.02 lakh in 2017-18 but the Petitioner has not explained the reasons and break up for the same. MPPMCL has further submitted that the Petitioner is required to submit the same and has requested to allow the O&M Expenses after prudence check.
- 21. In response, the Petitioner has submitted that during implementation of the NLDC project in 2008-09, communication system was established at E1 interface and communication equipment supported only E1 cards. However, at later stage, based on system requirements and upgradation of existing SCADA system of RLDCs, communication between RLDCs to NLDC needed upgradation from E1 to Ethernetbased solutions for smooth integration. The Petitioner has further provided the details of O&M Expenses. The Petitioner has submitted that in Petition No. 23/TT/2015, it had claimed estimated O&M Expenses of ₹34.04 lakh for 2014-15 and ₹23.54 lakh for 2015-16, 2016-17, 2017-18 and 2018-19 respectively. The Petitioner has claimed the estimated O&M Expenses for central portion based on Auditors' Certificate dated 15.12.2014 submitted in Petition No. 23/TT/2015. However, the Commission allowed the O&M Expenses by considering the actual O&M expenditure of ₹8.42 lakh for 2013-14 along with the escalation of 3.32% per annum. In addition, the Commission, at para 44 of the tariff order in Petition No. 23/TT/2015, opined that O&M Expenses allowed in that order, will be reviewed at the time of truing-up. Accordingly, Petitioner has submitted the Auditor's Certificate in the instant petition showing actual O&M expenditure for 2014-19 tariff period.

22. We have considered the submissions of the Petitioner and MPPMCL. The actual O&M Expenses claimed by the Petitioner have been allowed. Accordingly, the details of O&M Expenses allowed for the purpose of truing up of fee and charges during 2014-19 are as follows:

(₹ in lakh)

					,
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Claimed by the Petitioner	15.68	20.98	7.15	11.58	7.52
Allowed by the Commission	15.68	20.98	7.15	11.58	7.52

Lease Charges

23. The Commission vide order dated 14.9.2016 in Petition No. 23/TT/2015 had allowed the following Dark Fibre lease charges and the same is as follows:

(₹ in lakh)

					(
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Estimated Lease					
Charges allowed vide					
order dated 15.12.2014	515.98	515.98	515.98	515.98	515.98
in Petition No.					
23/TT/2015					

24. The Petitioner in the instant true-up Petition has submitted its claim for lease charges for 2014-19 period and has submitted Auditors' Certificate in support of the same. The lease charges claimed by the Petitioner for 2014-19 period are as follows:

(₹ in lakh)Particulars2014-152015-162016-172017-182018-19Lease Charges251.28252.29228.54264.69319.22

25. MPPMCL has pointed out that the Petitioner has claimed the lease charges for the 2014-19 tariff period. The tariff in respect of a transmission system may be determined for the whole of the transmission system or transmission line or substation or communication system forming part of transmission system as per the 2014 Tariff Regulations. The transmission tariff as per the 2014 Tariff Regulations is inclusive of the communication system. MPPMCL has further submitted that during

2014-19 tariff period, the Petitioner has not disclosed the lease charges and whether the lease charges recovered from the beneficiaries have been passed on or not in relevant transmission tariff petition. The Auditor's Certificate also did not disclose the said information. MPPMCL has requested that lease charges may be allowed by the Commission only after obtaining the required information and prudence check in the respective transmission tariff order.

- 26. In response, the Petitioner has submitted that vide order dated 14.9.2016 in Petition No. 23/TT/2015, the Commission had allowed the Petitioner to reimburse the Dark Fibre lease charges directly from the beneficiaries or the long-term transmission customers/DICs and the same is in line with the order dated 14.2.2011 in Petition No. 83/2010 dealing with determination of NLDC charges (POSOCO portion) for the tariff period 2009-14. The Petitioner has submitted that the same approach has been followed for Dark Fibre Lease charges in the instant petition and Auditor's Certificate for the same has been submitted indicating the actual amount.
- 27. We have considered the submissions of the Petitioner and MPPMCL. The Commission vide order dated 14.9.2016 in Petition No. 23/TT/2015 had allowed Dark Fibre lease charges on estimated basis and held that Dark Fibre lease charges can be recovered directly from the beneficiaries or the long-term transmission customers/ DICs, as the case maybe. The relevant portion of the order is as follows:

"28. The petitioner has also referred to order dated 14.2.2011 in Petition No. 83/2010 in the matter of determination of NLDC charges (POSOCO portion) for the tariff period 2009-14 and has submitted that an amount of ₹569.13 lakh, on account of leasing of fibres was not allowed to be capitalised, as it did not add to the capital asset of the petitioner. However, it was ordered that the said amount would be directly reimbursed by the beneficiaries/users on pro-rata basis as these expenses were incurred in connection with the commissioning of NLDC project. The petitioner further submitted that as the communication system of NLDC has been retained by it, as per the recommendation of Satnam Singh Committee, the lease charges for fibres awarded to NLDC (POSOCO) may please be passed on to it now and allowed. The petitioner has submitted Chartered Accountants' certificate dated 15.12.2014 for actual expenditure for Dark Fibre lease charges and the same are allowed on actual basis in the instant petition to be recovered directly from the beneficiaries or the long term transmission customers/DICs, as the case maybe."



28. The Petitioner has submitted actual leased line charges/ Dark Fibre lease charges duly certified by the Auditor's Certificate dated 24.10.2019. Accordingly, actual expenditure for Dark Fibre lease charges are allowed on actual basis in the instant petition to be recovered directly from the beneficiaries or the long-term transmission customers/DICs, as the case may be.

Interest on Working Capital ("IWC")

29. The Petitioner has claimed IWC as per Regulation 28(1)(c) of the 2014 Tariff Regulations. IWC is worked out for the transmission assets as provided in Regulation 28(1)(c) of the 2014 Tariff Regulations as follows:

Maintenance Spares:

Maintenance spares have been worked out based on 15% of Operation and Maintenance Expenses.

O & M Expenses:

O&M Expenses have been considered for one month of the allowed O&M Expenses.

Receivables:

The receivables have been worked out on the basis of 2 months of annual transmission charges as worked out above.

Rate of Interest on Working Capital:

Rate of interest on working capital is considered on normative basis in accordance with Clause (3) of Regulation 28 of the 2014 Tariff Regulations.

30. Accordingly, the trued-up IWC in respect of the communication assets allowed is as follows:

	Particulars	Central Portion						
	Faiticulais	2014-15	2015-16	2016-17	2017-18	2018-19		
Α	Working Capital for O&M Expenses (O&M expenses for one month)	1.31	1.75	0.60	0.97	0.63		
В	Working Capital for Maintenance Spares	2.35	3.15	1.07	1.74	1.13		



	(15% of O&M expenses)					
С	Working Capital for Receivables					
	(Equivalent to two months of annual fixed	15.93	17.90	15.49	16.32	15.67
	cost / annual transmission charges)					
D	Total of Working Capital (A+B+C)	19.59	22.80	17.15	19.02	17.42
Е	Rate of Interest on working capital (in %)	13.50	13.50	13.50	13.50	13.50
F	Interest of working Capital (D*E)	2.64	3.08	2.32	2.57	2.35

Annual Fees and Charges for 2014-19

31. The detailed computation of the various components of the trued-up annual fees and charges for the communication assets for the 2014-19 tariff period is as follows:

Central Port					
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Gross Capital Cost	589.85	625.64	625.64	625.64	625.64
Opening Gross Notional Loan	412.90	437.95	437.95	437.95	437.95
Opening Gross Equity	176.96	187.69	187.69	187.69	187.69
Recovered Gross Capital Cost (As on 1st April)	100.26	131.25	167.73	207.64	251.23
Recovered Gross Notional Loan	80.31	104.17	131.73	161.24	192.70
Recovered Gross Equity	19.95	27.08	36.00	46.40	58.53
Opening Net Capital Cost	489.59	494.39	457.91	418.00	374.41
Opening Net Notional Loan	332.58	333.78	306.21	276.71	245.25
Opening Net Equity	157.01	160.61	151.69	141.29	129.16
Recovered Capital Cost (During the Year)	30.99	36.48	39.90	43.59	47.75
Recovered Notional Loan	23.86	27.56	29.50	31.46	33.60
Recovered Equity	7.13	8.92	10.40	12.13	14.15
Closing Net Capital Cost	458.60	457.91	418.00	374.41	326.66
Closing Net Notional Loan	308.72	306.21	276.71	245.25	211.65
Closing Net Equity	149.87	151.69	141.29	129.16	115.01
Additional Capital Cost	35.79	0.00	0.00	0.00	0.00
Additional Notional Loan	25.05	0.00	0.00	0.00	0.00
Additional Equity	10.74	0.00	0.00	0.00	0.00
Years (Capital to be recovered up to 31.3.2024)	10.00	9.00	8.00	7.00	6.00
Months	120.00	108.00	96.00	84.00	72.00
Weighted Average Rate of Interest p.a. (in %)	6.9620	7.0302	7.0870	7.2831	7.5342
Weighted Average Rate of Interest p.m. (in %)	0.5802	0.5859	0.5906	0.6069	0.6279
Monthly Recovery Factors – Loan	0.011591	0.012522	0.013677	0.015231	0.017307
Monthly Capital Recovery Charge-Loan	3.86	4.18	4.19	4.21	4.24
Annual Capital Recovery Charge-Loan	46.26	50.15	50.26	50.58	50.93
Rate of Return on Equity p.a. (in %)	15.500	15.500	15.500	15.500	15.500
Rate of Return on Equity p.m. (in %)	1.292	1.292	1.292	1.292	1.292



Monthly Recovery Factors-Equity	0.016441	0.017224	0.018236	0.019578	0.021417
Monthly Capital Recovery Charge-Equity	2.58	2.77	2.77	2.77	2.77
Annual Capital Recovery Charge-Equity	30.98	33.20	33.20	33.20	33.20
Monthly Capital Recovery Charge-Total	6.44	6.95	6.95	6.98	7.01
Annual Capital Recovery Charge-Total	77.24	83.35	83.45	83.77	84.13
O&M Expenses (Annualized)	15.68	20.98	7.15	11.58	7.52
Allowa	ble Fees & 0	Charges			
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Annual Capital Recovery Charge-Loan	46.26	50.15	50.26	50.58	50.93
Annual Capital Bassyon, Charge Equity	20.00	22.22	22.22	00.00	00.00
Annual Capital Recovery Charge-Equity	30.98	33.20	33.20	33.20	33.20
Annual Capital Recovery Charge-Equity Annual Capital Recovery Charge-Total	77.24	83.20 83.35	83.45	83.77	84.13
, , ,					
Annual Capital Recovery Charge-Total	77.24	83.35	83.45	83.77	84.13

DETERMINATION OF ANNUAL FEES AND CHARGES FOR 2019-24 TARIFF PERIOD

32. The annual fees and charges in respect of the communication assets claimed by the Petitioner for 2019-24 tariff period are as follows:

(₹ in lakh)

Central Portion								
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24			
Annual Capital Recovery Charges-Total	84.13	84.13	84.13	84.13	84.13			
O&M Expenses	12.51	12.51	12.51	12.51	12.51			
Interest on Working Capital	1.81	1.81	1.81	1.81	1.81			
Total Annual Charges	98.45	98.45	98.45	98.45	98.45			

Capital cost

33. The net capital cost as trued-up and allowed in the instant order for 2014-19 tariff period has been considered as on 1.4.2019 for the purpose of determination of fees and charges for the communication assets. The Petitioner has not claimed any ACE during 2019-24 tariff period. Accordingly, the capital cost considered for determining fees and charges for 2019-24 tariff period is as follows:

		(* iii iaitii)
Particulars	Capital	Central Portion
	Loan	412.90
Gross Capital Cost as on 1.4.2014	Equity	176.96
	Total	589.85
	Loan	25.05
Gross add-cap during 2014-19	Equity	10.74
	Total	35.79
Gross Capital Cost as on 31.3.2019	Loan	437.95



	Equity	187.69
	Total	625.64
	Loan	226.30
Capital Cost Recovered up to 31.3.2019	Equity	72.68
	Total	298.98
	Loan	211.65
Net Capital Cost as on 31.3.2019	Equity	115.01
	Total	326.66

Debt-equity ratio

34. The debt-equity ratio determined as on 31.3.2019 has been considered as on 1.4.2019 for determination of fees and charges for 2019-24 period and the same is as follows:

	(₹ in lakh)		
Eunding	Central Portion			
Funding	Amount	(in %)		
Loan/Debt	211.65	64.79		
Equity	115.01	35.21		
Total	326.66	100.00		

35. The difference in total capital cost recovered as on 31.3.2024 and the net capital cost, is due to the capital cost recovered during 2019-24 period and the same is explained as follows:

Rates for Recovery of Loan and Equity

(a) The Capital Recovery Factor (CRF) for loan in respect of the communication assets have been calculated by applying WAROI and it works out to be 7.5342% in case of the communication assets. The rates considered on annual basis, have been converted to monthly rates and are as follows:

CRF for loan to be considered for Fees & Charges						
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	
Central Portion	0.020054	0.024195	0.031122	0.045015	0.086773	

(b) The CRF for equity has been considered on the same basis as allowed vide order dated 14.9.2016 in Petition No. 23/TT/2015 and on post-tax return on equity of 15.50%. Thus, the rates considered on annual basis, have been converted to monthly rates and the same are as follows:



CRF for loan to be considered for Fees & Charges						
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	
Central Portion	0.024053	0.028085	0.034911	0.048725	0.090494	

(c) In view of the above, the amount of monthly capital recovery charges for loan and equity for the communication assets on account of central portion have been considered by using respective CRF and the same are as follows:

(₹ in lakh)

Monthly capital recovery charges for loan						
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	
Central Portion	4.24	4.24	4.24	4.24	4.24	

(₹ in lakh)

Monthly capital recovery charges for equity							
Particulars 2019-20 2020-21 2021-22 2022-23 2023-2							
Central Portion	2.77	2.77	2.77	2.77	2.77		

36. Accordingly, the recovery of capital during 2019-24 period has been worked out. The date of commercial operation (COD) of the communication assets was 1.4.2009, hence, the communication assets shall complete 15 years as on 31.3.2024. Further, in line with order dated 8.12.2011 in Petition No. 68/ 2010, the total capital cost in respect of communication system shall be fully recovered upto 31.3.2024 i.e. during 2023-24.

Operation & Maintenance Expenses ("O&M Expenses")

- 37. The Petitioner has claimed O&M expenditure of ₹12.51 lakh in 2019-24 tariff period in the instant petition. The Petitioner has submitted that O&M Expenses for 2019-24 period has been worked out as 2% of original project cost of concerned communication system in line with the 2019 Tariff Regulations and has prayed to allow the O&M Expenses as claimed.
- 38. The Petitioner vide affidavit dated 6.7.2022 has submitted the actual O&M Expenses for 2019-20, 2020-21, 2021-22 and estimated O&M Expenses for 2022-23 and 2023-24 duly certified by the Auditor's Certificate dated 5.7.2022 and the same

is as follows:

(₹ in lakh)

Partic	culars	3	2019-20	2020-21	2021-22	2022-23 (Estimated)	2023-24 (Estimated)
Claimed Petitioner	by	the	9.34	14.28	13.12	13.12	13.12

39. We have considered the submissions of the Petitioner with regard to the O&M Expenses. The actual O&M Expenses claimed by the Petitioner for 2019-20, 2020-21, 2021-22 as certified by the Auditor's Certificate dated 5.7.2022 is allowed. The projected O&M Expenses for 2022-23 and 2023-24 is allowed subject to review at the time of truing-up. The details of allowable O&M Expenses are as follows:

(₹ in lakh)

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Amount allowed	9.34	14.28	13.12	13.12	13.12

Lease charges

40. The Petitioner has claimed for lease charges for 2019-24 tariff period and the same are as follows:

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	l
Lease Charges	319.22	319.22	319.22	319.22	319.22	l

- 41. MPPMCL has submitted that the lease charges for the 2019-24 tariff period may only be considered after the Petitioner discloses the required information as mentioned above (2014-19 period) and after verifying the same from relevant tariff petitions if filed by the Petitioner or the same may be taken up at truing up stage.
- 42. We have considered the submissions of the Petitioner and MPPMCL. The Petitioner has submitted that lease charges applicable for 2018-19 is projected to be paid for 2019-24 period. Accordingly, expenditure for Dark Fibre lease charges are allowed on projected basis in the instant petition subject to true up on actual basis and is to be recovered directly from the beneficiaries or the long-term transmission

- 43. Regulation 34(1)(c), Regulation 34 (3), Regulation 34 (4) and Regulation 3(7) of the 2019 Tariff Regulations provide as follows:
 - "34. Interest on Working Capital: (1) The working capital shall cover:
 - (c) For Hydro Generating Station (including Pumped Storage Hydro Generating Station) and Transmission System:
 - (i) Receivables equivalent to 45 days of annual fixed cost; (ii) Maintenance spares @ 15% of operation and maintenance expenses including security expenses; and
 - (iii) Operation and maintenance expenses, including security expenses for one month."
 - (3) Rate of interest on working capital shall be on normative basis and shall be considered as the bank rate as on 1.4.2019 or as on 1st April of the year during the tariff period 2019-24 in which the generating station or a unit thereof or the transmission system including communication system or element thereof, as the case may be, is declared under commercial operation, whichever is later:

Provided that in case of truing-up, the rate of interest on working capital shall be considered at bank rate as on 1st April of each of the financial year during the tariff period 2019-24.

- (4) Interest on working capital shall be payable on normative basis notwithstanding that the generating company or the transmission licensee has not taken loan for working capital from any outside agency."
- "3. **Definition** In these regulations, unless the context otherwise requires:-
- (7) 'Bank Rate' means the one year marginal cost of lending rate (MCLR) of the State Bank of India issued from time to time plus 350 basis points;"
- The Petitioner has submitted that it has computed the IWC for 2019-24 period considering the SBI Base Rate plus 350 basis points as on 1.4.2019. The Petitioner has considered the rate of IWC as 12.05%. IWC is worked out in accordance with Regulation 34 of the 2019 Tariff Regulations. The rate of IWC considered is 12.05% (SBI 1 year MCLR applicable as on 1.4.2019 of 8.55% plus 350 basis points) for 2019-20, 11.25% (SBI 1 year MCLR applicable as on 1.4.2020 of 7.75% plus 350 basis points) for 2020-21, 10.50% (SBI 1 year MCLR applicable as on 1.4.2021 of 7.00% plus 350 basis points) for 2021-24. The components of the working capital and interest allowed thereon are as follows:



(₹ in lakh)

	Ce	entral Porti	on		,	•
	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Α	Working Capital for O&M Expenses (O&M expenses for one month)	1.40	2.14	1.97	1.97	1.97
В	Working Capital for Maintenance Spares (15% of O&M expenses)	0.78	1.19	1.09	1.09	1.09
С	Working Capital for Receivables (Equivalent to 45 days of annual fixed cost / annual transmission charges)	11.70	12.35	12.19	12.19	12.15
D	Total of Working Capital (A+B+C)	13.88	15.68	15.25	15.25	15.21
Е	Rate of Interest for Working Capital (in %)	12.05	11.25	10.50	10.50	10.50
F	Interest of working capital (D*E)	1.67	1.76	1.60	1.60	1.60

Annual Fees and charges

45. The detailed computation of the various components of the annual fees and charges allowed for the communication assets for 2019-24 tariff period is as follows:

Central Portion – Fees and charges								
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24			
Opening Gross Capital Cost	625.64	625.64	625.64	625.64	625.64			
Opening Gross Notional Loan	437.95	437.95	437.95	437.95	437.95			
Opening Gross Equity	187.69	187.69	187.69	187.69	187.69			
Recovered Gross Capital Cost (As on 1st April)	298.98	351.71	410.02	474.58	546.16			
Recovered Gross Notional Loan	226.30	262.52	301.57	343.66	389.03			
Recovered Gross Equity	72.68	89.19	108.45	130.92	157.12			
Opening Net Capital Cost	326.66	273.93	215.62	151.06	79.48			
Opening Net Notional Loan	211.65	175.43	136.38	94.29	48.91			
Opening Net Equity	115.01	98.50	79.24	56.77	30.57			
Recovered Capital Cost (During the Year)	52.73	58.31	64.56	71.58	79.48			
Recovered Notional Loan	36.22	39.05	42.09	45.38	48.91			
Recovered Equity	16.51	19.26	22.47	26.21	30.57			
Closing Net Capital Cost	273.93	215.62	151.06	79.48	0.00			
Closing Net Notional Loan	175.43	136.38	94.29	48.91	0.00			
Closing Net Equity	98.50	79.24	56.77	30.57	0.00			
Additional Capital Cost	0.00	0.00	0.00	0.00	0.00			
Additional Notional Loan	0.00	0.00	0.00	0.00	0.00			
Additional Equity	0.00	0.00	0.00	0.00	0.00			
Years (Capital to be recovered up to 31.3.2024)	5.00	4.00	3.00	2.00	1.00			
Months	60.00	48.00	36.00	24.00	12.00			
Weighted Average Rate of Interest p.a. (in %)	7.5342	7.5342	7.5342	7.5342	7.5342			
Weighted Average Rate of Interest p.m. (in %)	0.6279	0.6279	0.6279	0.6279	0.6279			
Monthly Recovery Factors – Loan	0.020054	0.024195	0.031122	0.045015	0.086773			



Monthly Capital Recovery Charge-Loan	4.24	4.24	4.24	4.24	4.24
Annual Capital Recovery Charge-Loan	50.93	50.93	50.93	50.93	50.93
Rate of Return on Equity p.a. (in %)	15.500	15.500	15.500	15.500	15.500
Rate of Return on Equity p.m. (in %)	1.292	1.292	1.292	1.292	1.292
Monthly Recovery Factors-Equity	0.024053	0.028085	0.034911	0.048725	0.090494
Monthly Capital Recovery Charge-Equity	2.77	2.77	2.77	2.77	2.77
Annual Capital Recovery Charge-Equity	33.20	33.20	33.20	33.20	33.20
Monthly Capital Recovery Charge-Total	7.01	7.01	7.01	7.01	7.01
Annual Capital Recovery Charge-Total	84.13	84.13	84.13	84.13	84.13
O&M Expenses (Annualized)	9.34	14.28	13.12	13.12	13.12
Allowak	ole Fees & 0	Charges			
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Annual Capital Recovery Charge-Loan	50.93	50.93	50.93	50.93	50.93
Annual Capital Recovery Charge-Equity	33.20	33.20	33.20	33.20	33.20
Annual Capital Recovery Charge-Total	84.13	84.13	84.13	84.13	84.13
O&M Expenses	9.34	14.28	13.12	13.12	13.12
Interest on Working Capital	1.67	1.76	1.60	1.60	1.60
Total Fee & Charges	95.14	100.17	98.85	98.85	98.85

Filing Fee and Publication Expenses

46. The Petitioner has sought reimbursement of fee paid by it for filing the petition and publication expenses in terms of Regulation 70(1) of the 2019 Tariff Regulations. The Petitioner shall be entitled for reimbursement of the filing fees and publication expenses in connection with the present petition, directly from the beneficiaries on pro-rata basis in accordance with Regulation 70(1) of the 2019 Tariff Regulations.

Licence Fee and Charges

47. The Petitioner shall be entitled for reimbursement of licence fee in accordance with Regulation 70(4) of the 2019 Tariff Regulations for 2019-24 tariff period.

Goods and Services Tax

48. The Petitioner has submitted that if GST is levied at any rate and at any point of time in future on charges of transmission of electricity, the same shall be borne and additionally paid by the Respondent(s) to the Petitioner and the same shall be charged and billed separately by the Petitioner. Further additional taxes, if any, are to be paid by the Petitioner on account of demand from Government/ Statutory authorities, the same may be allowed to be recovered from the beneficiaries.



MPPMCL has submitted that the claim of GST is premature and need not be considered. In response, the Petitioner has reiterated its submissions.

49. We have considered the submissions of Petitioner and MPPMCL. GST is not levied on transmission service at present. Therefore, we are of the view that Petitioner's prayer is premature.

Sharing of Transmission Charges

50. The trued-up fees and charges for 2014-19 tariff period and fees and charges determined for 2019-24 tariff period in respect of the communication assets in this order shall be recovered on monthly basis and billing collection and disbursement of transmission charges shall be governed by the provisions of the Regulation 43(2) of the 2014 Tariff Regulations and Regulation 57(2) of the 2019 Tariff Regulations respectively.

51. To summarise:

a. The trued-up Annual Fixed Charges (AFC) approved for the Central
 Portion for 2014-19 tariff period are as follows:

					(₹ in lakh)
Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Total Fee & Charges	95.56	107.41	92.92	97.92	94.00

b. AFC allowed for the Central Portion for 2019-24 tariff period are as follows:

				(₹	₹ in lakh)
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Total Fee & Charges	95.14	100.17	98.85	98.85	98.85

52. This order disposes of Petition No. 36/TT/2021 in terms of the above discussions and findings.

sd/-sd/-(P. K. Singh)(Arun Goyal)(I. S. Jha)MemberMemberMember

