# CENTRAL ELECTRIICTY REGULATORY COMMISSION NEW DELHI

## Petition No. 260/MP/2020

Coram: Shri P.K. Pujari, Chairperson Shri I.S. Jha, Member Shri Pravas Kumar Singh, Member

Date of Order: 03.08.2021

#### In the matter of

Petition under Regulation 35(3)(c) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 for approval and recovery of security expenses from 1.4.2019 to 31.3.2024.

#### And in the matter of

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

....Petitioner

### Vs

- 1. Delhi Transco Limited, Shakti Sadan, Kotla Road, New Delhi-110 002.
- 2. BSES Yamuna Power Limited, BSES Bhawan, Nehru Place, New Delhi.
- 3. BSES Rajdhani Power Limited, BSES Bhawan, Nehru Place, New Delhi.
- Tata Power Delhi Distribution Limited, Power Trading & Load Dispatch Group, Cennet Building, Adjacent to 66/11kV Pitampura-3 Grid Building, Near PP Jewellers, Pitampura, New Delhi – 110034.
- Rajasthan Rajya Vidyut Prasaran Nigam Limited, Vidyut Bhawan, Vidyut Marg, Jaipur - 302 005.



- Ajmer Vidyut Vitran Nigam Limited, 132 kV, GSS RVPNL Sub-station Building, Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan).
- Jaipur Vidyut Vitran Nigam Limited, 132 kV, GSS RVPNL Sub-station Building, Caligiri Road, Malviya Nagar, Jaipur-302017 (Rajasthan).
- Jodhpur Vidyut Vitran Nigam Limited, 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-171 004.
- 10. Punjab State Power Corporation Limited, (Formerly Punjab State Electricity Board), Thermal Shed Tia, Near 22 Phatak, Patiala-147001.
- 11. Haryana Power Purchase Centre, Shakti Bhawan, Sector-6, Panchkula (Haryana) 134 109.
- 12. Power Development Department, Government of Jammu & Kashmir, Mini Secretariat, Jammu.
- 13. Uttar Pradesh Power Corporation Limited, (Formerly Uttar Pradesh State Electricity Board), Shakti Bhawan, 14, Ashok Marg, Lucknow - 226 001.
- 14. Chandigarh Administration, Sector -9, Chandigarh.
- 15. Uttarakhand Power Corporation Limited, Urja Bhawan, Kanwali Road, Dehradun.
- 16. New Delhi Municipal Council, Palika Kendra, Sansad Marg, New Delhi-110002.



- 17. Madhya Pradesh Power Management Company Limited, Shakti Bhawan, Rampur, Jabalpur-482008.
- Maharashtra State Electricity Distribution Company Limited, Prakashgad, 4th Floor, Andheri (East), Mumbai-400052.
- Gujarat Urja Vikas Nigam Limited, Sardar Patel Vidyut Bhawan, Race Course Road, Vadodara - 390 007.
- Electricity Department, Government of Goa, Vidyut Bhawan, Panaji, Near Mandvi Hotel, Goa - 403 001.
- 21. Electricity Department, Administration of Daman & Diu, Daman - 396 210.
- 22. Electricity Department, Administration of Dadra Nagar Haveli, U.T., Silvassa - 396 230.
- 23. Chhattisgarh State Electricity Board, P.O. Sunder Nagar, Dangania, Raipur, Chhatisgaarh-492013.
- Madhya Pradesh Audyogik Kendra Vikas Nigam (Indore) Limited, 3/54, Press Complex, Agra-Bombay Road, Indore-452 008.
- Assam Electricity Grid Corporation Limited, (Formerly Assam State Electricity Board), Bijulee Bhawan, Paltan Bazar, Guwahati – 781001, Assam.
- Meghalaya Energy Corporation Limited, (Formerly Meghalaya State Electricity Board), Short Round Road, "Lumjingshai", Shillong – 793001, Meghalaya.
- 27. Government of Arunachal Pradesh, Itanagar, Arunachal Pradesh,
- 28. Power and Electricity Department, Government of Mizoram,



Aizawl, Mizoram.

- 29. Manipur State Power Distribution Company Limited, (Formerly Electricity Department, Government of Manipur), Keishampat, Imphal.
- 30. Department of Power, Government of Nagaland, Kohima, Nagaland.
- Tripura State Electricity Corporation Limited Vidyut Bhawan, North Banamalipur, Agartala, Tripura (W) – 799001, Tripura.
- Tamil Nadu Generation and Distribution Corporation Limited, (Formerly Tamil Nadu Electricity Board -TNEB), NPKRR Maaligai, 800, Anna Salai, Chennai – 600 002.
- Karnataka Power Transmission Corporation Limited, Kaveri Bhavan, Bangalore – 560 009.
- Transmission Corporation of Andhra Pradesh Limited Vidyut Soudha, Hyderabad– 500082.
- 35. Kerala State Electricity Board, Vaidyuthi Bhavanam, Pattom, Thiruvananthapuram – 695 004.
- 36. Electricity Department, Government of Pondicherry, Pondicherry – 605001.
- Eastern Power Distribution Company of Andhra Pradesh Limited, APEPDCL, P&T Colony, Seethmmadhara, Vishakhapatnam, Andhra Pradesh.
- Southern Power Distribution Company of Andhra Pradesh Limited, Srinivasasa Kalyana Mandapam Backside, Tiruchanoor Road, Kesavayana Gunta, Tirupati - 517 501, Chittoor District, Andhra Pradesh.
- Central Power Distribution Company of Andhra Pradesh Limited, Corporate Office, Mint Compound, Hyderabad – 500 063, Andhra Pradesh.



- 40. Northern Power Distribution Company of Andhra Pradesh Limited, Opp. NIT Petrol Pump, Chaitanyapuri, Kazipet, Warangal – 506 004, Andhra Pradesh.
- 41. Transmission Corporation of Telangana Limited, Vidhyut Sudha, Khairatabad, Hyderabad, 500082,
- 42. Bangalore Electricity Supply Company Limited, Corporate Office, K. R. Circle, Bangalore – 560 001, Karanataka.
- 43. Gulbarga Electricity Supply Company Limited, Station Main Road, Gulburga, Karnataka.
- 44. Hubli Electricity Supply Company Limited, Navanagar, PB Road, Hubli, Karnataka.
- 45. Mangalore Electricity Supply Company Limited, MESCOM Corporate Office, Paradigm Plaza, AB Shetty Circle, Mangalore – 575 001, Karnataka.
- Chamundeswari Electricity Supply Corporation Limited, 927, L J Avenue, Ground Floor, New Kantharaj Urs Road, Saraswatipuram, Mysore – 570 009, Karnataka.
- 47. North Bihar Power Distribution Company Limited, 2nd Floor, Vidyut Bhawan, Bailey Road, Patna – 800 001.
- 48. South Bihar Power Distribution Company Limited, 2nd Floor, Vidyut Bhawan, Bailey Road, Patna – 800 001.
- 49. Energy and Power Department, Government of Sikkim, Kaji Road, Gangtok – 727101, Sikkim.



- 50. Jharkhand State Electricity Board, Engineering Bhawan, HEC Building, Dhurwa, Ranchi – 834002, Jharkhand.
- 51. West Bengal State Electricity Distribution Company, 7th Floor, DJ Block, Vidyut Bhavan, Salt Lake City, Kolkata – 700091.
- 52. GRIDCO Limited, Bidyut Bhawan, 4th Floor, Saheed Nagar, Bhubaneswar – 751 007.

....Respondents

For Petitioner: Ms. Ranjitha Ramachandran, Advocate, PGCIL Ms. Anushree Bardhan, Advocate, PGCIL Shri Ravi Nair, Advocate, PGCIL Shri S.S. Raju, PGCIL Shri V.C. Shekhar, PGCIL

For Respondent: None

# <u>ORDER</u>

The instant petition has been filed by the Petitioner, Power Grid Corporation of India Limited (PGCIL), under Regulation 35(3)(c) of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as "the 2019 Tariff Regulations") for approval and recovery of security expenses already incurred or to be incurred in relation to the transmission systems of the Petitioner from 1.4.2019 to 31.3.2024.

- 2. The Petitioner has made the following prayers:
  - "a) Approve the estimated security expenses, as mentioned at para 23 above, for the period 01.04.2019 to 31.03.2024 along with the Interest on Working Capital at prevailing bank rate as on 1<sup>st</sup> April of respective financial year;
  - b) Allow the Petitioner to bill the approved annual security expenses on monthly basis alongwith the interest on working capital;



- c) Allow the Petitioner to adjust the amounts based on actual expenses on a year on year basis and approach the Hon'ble Commission after the end of the control period 2019-24 with actual audited figures for truing up of security expenses for 5 years period along with carrying cost;
- d) Approve the reimbursement of the petition filing fee;
- *b)* Pass such other order(s) as the Hon'ble Commission deems fit and appropriate under the circumstances of the case."

# **Background**

3. The Petitioner has submitted that the security expenses incurred/ to be incurred by the transmission licensees have been excluded from the norms of the Operation and Maintenance Expenses (O&M Expenses) specified in the 2019 Tariff Regulations and are to be allowed separately after prudence check. The Petitioner has further submitted that as per the Statement of Objects and Reasons for the 2019 Tariff Regulations, the security expenses for the transmission system for the 2019-24 tariff period has to be approved on estimated basis based on the actual expenditure of the past period, which will be trued up. Accordingly, the Petitioner has filed the instant petition seeking approval of security expenses for the 2019-24 tariff period on consolidated basis for the transmission assets owned by the Petitioner.

# Submissions of the Petitioner

4. The gist of the submissions made by the Petitioner in support of its claim are as follows:

a. The security arrangement is generally provided for whole installation which includes many assets of same or of separate projects and it is not possible to segregate security expenses of a particular installation on element-wise/ asset-wise basis. Therefore, while claiming truing up of the 2014-19 tariff period and tariff of the 2019-24 tariff period, security expenses are not being claimed in the tariff petitions and it was submitted that a separate petition will be filed claiming the overall security expenses and consequential Interest on Working Capital (IWC) on the same as envisaged in the 2019 Tariff Regulations



and Statement of Objects and Reasons thereof. Accordingly, the security expenses are being claimed separately on consolidated basis through the instant petition.

b. The security requirements for manning the establishments of the Petitioner are of three types, viz. (i) sub-stations with general security, (ii) sub-stations with additional security by way of deployment of special security forces (CISF) and (iii) Corporate Centre and Regional headquarters and other offices.

c. The security requirement is decided based on the location of the substation, vulnerability of law and order of the area, the size and area covered, number of bays, security threat for the state-of-the-art technology like HVDC systems, etc. The transmission systems of the Petitioner are spread all over the country and many of these traverse through inhospitable terrain and are highly vulnerable and exposed to insurgencies and sabotage. Majority of the establishments require general security arrangements. However, there are some transmission sub-stations/ HVDC installations that face severe law and order problems and threats from militancy/ terrorism. Accordingly, personnel from CISF have been deployed at such sub-stations/ HVDC installations. The security expenses of such sub-stations/ HVDC installations are higher than others.

d. The requirement of additional security/ CISF is reviewed on a continuous basis depending on the security situation and in consultation with various security agencies viz., CISF/ IB/ State Police, etc. The Wagoora Sub-station in Kashmir valley in Northern Region and Bongaigaon and Salakati Sub-stations in North-Eastern Region are facing severe law and order problem since its inception and are under constant threat of militancy/ terrorism. The cost of such security expenditure has been approved for reimbursement by the Commission vide orders dated 20.3.2017 in Petition No. 136/MP/2016 and 31.5.2017 in Petition No. 36/MP/2016.

e. The Petitioner is seeking approval of estimated security expenses based on the actual costs incurred in 2018-19 (as per Audited accounts) and escalated for five years as per the escalation rates for O&M Expenses provided in the 2019 Tariff Regulations. The additional estimated security expenses for new sub-stations anticipated to be added in each of the financial year during the 2019-24 tariff period have been considered and escalated yearly for arriving at the estimated security expenses for each of the years. The difference, if any, between the estimated security expenses and actual security expenses as per Audited accounts, on year to year basis may be allowed to be recovered from/ refunded to the beneficiaries, as the case may be, as per the 2019 Tariff Regulations. After completion of the 2019-24 tariff period, a separate petition would be filed based on the actual Audited figures for approval of the truing up security expenses.

f. The details of the actual security expenses incurred during 2018-19 for managing various sub-stations/ establishments of the Petitioner are as follows:

/<del>\*</del> · · · · · ·

		(₹ in lakh)
Sr. No	Region/ CC	Amount
1	Northern Region	8935.71
2	Eastern Region	4350.32
3	Western Region	3222.12
4	Southern Region	3679.97
5	North-Eastern Region	2748.42
6	Corporate Centre	541.75
	Total	23478.30

g. The category-wise details of actual security expenses incurred during FY2018-19 for AC and HVDC sub-stations and as per type of security deployed(general security or CISF) are as follows:

				(र	t in lakh)
Region	AC Sub	-stations	HVDC	Total	
	General security	Additional Security - CISF	General Security	Additional Security - CISF	
Northern Region	6790.35	1072.32	750.98	533.13	9146.77
Eastern Region	3985.35	0	467.73	0	4453.08
Western Region	3137.51	0	160.71	0	3298.23
Southern Region	3522.28	0	244.61	0	3766.89
North-Eastern Region	1362.91	993.11	457.32	0	2813.34
Grand Total	18798.40	2065.43	2081.35	533.13	23478.30



h. Security expenses of Corporate Centre amounting to 541.75 lakh has been apportioned among the regions in the ratio of total expenses and included in the AC portion under general security. Similarly, security expenses for regional headquarters and other offices of each region have also been included in the AC portion under general security.

i. The project-wise details of the security expenses incurred during 2018-19 for HVDC stations are as follows:

				(₹ in lakh)
Sr. No.	Name of the project	HVDC station	Type of security	Amount
1	Rihand Transmission System	Rihand	CISF	308.34
2		Dadri	CISF/General Security	151.77/35.25
3	HVDC Back to Back at Vindhyachal between NR and WR	Vindhyachal	CISF	73.02
4	Transmission System associated with Talcher-II	Kaniha (Talcher)	General security	125.88
5	Project in Southern Region & Up-gradation of transfer capacity of Talcher-Kolar HVDC Bi-pole in Southern Region	Kolar	General security	105.46
6	500 MW HVDC back to back stations at Gazuwaka in Southern Region, Augmentation of capacity of Gazuwaka HVDC back to back project (500 MW) & Spare converter transformer for Vizag back to back HVDC station	Gazuwaka	General security	139.15
7	Bhadrawati (Chandrapur) HVDC back to back station (2x500MW) in Western Region and Southern Region	Bhadrawati	General security	138.47
8	Transmission system associated with Barh STPP in	Balia	General security	142.38
9	Northern, Eastern and Western Region	Bhiwadi	General security	331.36
10	Eastern Northern Inter- regional HVDC Transmission System in Eastern Region	Pusauli	General security	103.61
11	Transmission system associated with North East-	Biswanth Chariali	General security	457.32
12	Northern/Western Interconnector - I Project	Agra	General security	111.30



13	Transmission System for development of pooling station in Northern part of West Bengal and transfer of power from Bhutan to NR/WR	Alipurduar	General security	238.24
14	WR-NR HVDC Interconnector for IPP Projects in Chhattisgarh in Northern Region and Western Region	Champa	General security	119.84
15		Kurukshetra	General security	33.08
	Total			2614.48

j. The security is being strengthened in Wagoora Sub-station after the military attack in October, 2018 in consultation with various security agencies. Accordingly, a proposal for estimated additional expenditure of 503.81 lakh at Wagoora Sub-station is under consideration of the management of the Petitioner. Similarly, deployment of CISF is under consideration in view of security threat at New Wanpoh in J&K. Two bullet proof vehicles are being procured as per the requirement of CISF for Wagoora and Wanpoh sub-stations. Further, installation of CCTV cameras is proposed to be implemented in a phased manner at various locations of the Petitioner in all the regions. After approval of the proposals and based on the actual expenses, the additional expenses incurred will be claimed at the end of control period at the time of true-up.

k. The security expenses for 2019-20 to 2023-24 are estimated based on the escalation rate of 3.52% per annum as per the 2019 Tariff Regulations. The estimated security expenses for the existing 220 AC sub-stations and 18 HVDC sub-stations and the 13 corporate centres/ Regional Headquarters/ Other offices in various regions are as follows:

<b>2019-20</b> 8139.43	<b>2020-21</b> 8425.94	2021-22	2022-23	2023-24
8139.43	8425.04	0700 50		
8139.43	8125 01	0700 50		
	0423.94	8722.53	9029.57	9347.41
4125.63	4270.86	4421.19	4576.82	4737.92
3247.95	3362.28	3480.63	3603.15	3729.98
3646.27	3774.62	3907.48	4045.03	4187.41
2438.95	2524.80	2613.67	2705.67	2800.91
21598.24	22358.49	23145.51	23960.24	24803.64
	4125.63 3247.95 3646.27 2438.95	4125.634270.863247.953362.283646.273774.622438.952524.80	4125.634270.864421.193247.953362.283480.633646.273774.623907.482438.952524.802613.67	4125.634270.864421.194576.823247.953362.283480.633603.153646.273774.623907.484045.032438.952524.802613.672705.67



Northern Region	1329.30	1376.09	1424.53	1474.67	1526.58
<u> </u>		1370.09			
Eastern Region	484.19	501.24	518.88	537.15	556.05
Western Region	166.37	172.22	178.29	184.56	191.06
Southern Region	253.22	262.13	271.36	280.91	290.80
North Eastern Region	473.42	490.08	507.33	525.19	543.68
Total HVDC Stations	2706.50	2801.77	2900.39	3002.48	3108.17
All India	24304.74	25160.26	26045.90	26962.72	27911.81

I. Bikaner Sub-station was put into commercial operation in 2019-20 and seven AC sub-stations and three HVDC sub-stations are under implementation and are anticipated to be put into commercial operation in the 2019-24 tariff period. The details of sub-stations added/ to be added during 2019-24 tariff period are as follows:

Region		Name of the Sub-station	Project name	Status (anticipated COD)
Northern Region	1.	765/400 kV Bikaner Sub-station.	Green Energy Corridor ISTS- Part –D.	Already executed in July, 2019
	2.	765/400 kV Tehri Pooling Sub-station (GIS).	Transmission System associated with Tehri Pump Storage Plant (PSP).	March, 2020
	3.	400/220 kV Dwarka -I Sub-station (GIS).	Creation of 400/220 kV sub- station in NCT of Delhi during 12th Plan Period (Part-A).	March, 2020
	4.	220/66 kV UT Chandigarh (GIS) Sub- station.	Establishment of 220/66 kV GIS at UT Chandigarh along with 220 kV D/C line from Chandigarh GIS to 400/220 kV Panchkula (PG) Sub- station.	March, 2020
	5.	400/220 kV Jauljivi (GIS) Sub- station.	System Strengthening Scheme in Northern Region – XXXVII.	March, 2020
	6.	Establishment of 765/400 kV Bhadla-II PS.	Transmission System for Solar Energy Zones in Rajasthan	December, 2020
	7.	Establishment of 765/400 kV Fatehgarh- II PS.	Transmission System for Solar Energy Zones in Rajasthan.	December, 2020
	8.	400/220 kV Banaskantha (Radhanesda) Pooling station GIS.	Supplementary Transmission System for Ultra Mega Solar Power Park at Banaskantha (Radhanesda) Gujarat.	March, 2020
Eastern Region	Nil		-	-
Western Region	1.	800 kV HVDC Raigarh station with 6000 MW HVDC Terminal.	HVDC Bipole link between Western Region (Raigarh, Chhattisgarh) and Southern Region (Pugalur, TM) - North Trichur (Kerala)-Scheme-I : Raigarh-Pugalur 6000 MW HVDC System.	February, 2020



Southern Region	1.	800 kV HVDC Pugalur station with 6000 MW HVDC Terminal.	HVDC Bipole link between Western Region (Raigarh, Chhattisgarh) and Southern Region (Pugalur, TM) - North Trichur (Kerala) - Scheme-I : Raigarh-Pugalur 6000 MW HVDC System.	February, 2020
	2.	+/- 320 kV VSC based HVDC Terminal at North Trichur (2000 MW).	HVDC Bipole link between Western Region (Raigarh, Chhattisgarh) and Southern Region (Pugalur, TM) - North Trichur (Kerala) - Scheme-III : Pugalur - Trichur 2000 MW VSC based HVDC System.	April, 2020
North- Eastern Region		Nil	-	-

m. The additional security expenses towards new sub-stations anticipated to be executed in each year are estimated by proportioning the estimated expenses of the relevant year in relation to estimated expenses for existing sub-stations. The security expenses for each of the five years period are estimated separately for AC and HVDC sub-stations and escalated as per the escalation norms of O&M Expenses provided in the 2019 Tariff Regulations. All the new sub-stations expected to be executed are considered to have general security. After the execution of the sub-stations, security expenses will be adjusted based on the actual amount on year on year basis as per the type of security deployed and the expenses will be claimed and trued up as per actual expenses after the completion of the 2019-24 tariff period.

n. The estimated security expenses for additional sub-stations with escalation @3.52% in line with 2019 Tariff Regulations are as follows:

						(₹ in lakh)
		2019-20	2020-21	2021-22	2022-23	2023-24
AC Sub-sta	ations					
Northern	Additional Sub-stations	6	2	0	0	0
Region	(General) (Number)					
-	Cumulative additional	6	8	8	8	8
	sub-stations (Number)					
	Expenses for Additional	529.34	730.63	756.35	782.97	810.53
	Sub-stations (General)					
HVDC Sub	-stations					
Western	Additional Sub-stations	1	0	0	0	0
Region	(General) (Number)					
	Cumulative additional	1	1	1	1	1



Total		705.79	1004.62	1039.98	1076.59	1114.48
	Expenses for Additional Sub-stations (General)	88.22	182.66	189.09	195.74	202.63
	Cumulative additional sub-stations (Number)	1	2	2	2	2
Region	(General security) (Number)					
Southern	Additional Sub-stations	1	1	0	0	0
	Expenses for Additional Sub-stations (General)	88.22	91.33	94.54	97.87	101.32
	sub-stations (Number)					

o. The total security expenses claimed in the instant petition are as follows:

						(₹ in lakh)
Parameter	Number of substations offices	2019-20	2020-21	2021-22	2022-23	2023-24
Security Expenses for existing AC, HVDC and Office establishments	251	24304.74	25160.26	26045.90	26962.72	27911.81
Security Expenses for New sub- stations addition during 2019-24	11	705.79	1004.62	1039.98	1076.59	1114.48
Total	262	25010.53	26164.88	27085.89	28039.31	29026.29

p. The security expenses claimed may be shared on a monthly basis and there may be a gap of two months in recovering the same after raising the invoices. Therefore, IWC may be allowed as per the 2019 Tariff Regulations at the bank rate as on 1<sup>st</sup> April of each year. The Statement of Objects and Reasons for the 2019 Tariff Regulations provides for inclusion of security expenses in O&M Expenses for computing normative working capital requirement.

q. The estimated security expenses may be trued up/ adjusted annually against the actual expense for the year and the amount may be recovered/ refunded, as the case may be, as per the 2019 Tariff Regulations.

5. The petition was heard through video conferencing and was admitted on 6.8.2020 and notices were issued to the Respondents directing to file reply.

6. In response to the queries in Record of Proceedings of hearing on 6.8.2020, the Petitioner vide affidavit dated 27.8.2020 has submitted that the security expenses claimed by the Petitioner in the instant petition pertains only to the Petitioner and it is not shared by any other entity. The CISF Security at Dadri, Vindhyachal and Rihand is provided by NTPC and security expenses are paid to NTPC and the same is claimed by the Petitioner.

7. The matter was heard on 25.6.2021 through video conferencing and the order was reserved in the matter. During the hearing held on 25.6.2021, in response to the query of the Commission as to the how the said expenses will be apportioned between the beneficiaries, learned counsel submitted that the security expenses of HDVC sub-stations will be shared as a national component and AC sub-stations will be shared on regional basis. She further submitted that up to 30.10.2020, it will be shared as per the 2019 Tariff Regulations and after 1.11.2020, it will be shared as per the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020.

8. None of the Respondents have filed reply in the matter.

### Analysis and decision

9. We have considered the submissions of petitioner. The Petitioner has prayed to recover the security expenses incurred/ projected to be incurred towards security of its transmission assets and office establishments for the period from 1.4.2019 to 31.3.2024 in accordance with 2019 Tariff Regulations.

10. The Petitioner has submitted an Auditor's certificate dated 5.2.2020 wherein the Auditor has certified the region-wise actual security expenses incurred by the Petitioner for AC sub-stations and HVDC sub-stations in 2018-19.

11. The Petitioner has further submitted that the Petitioner escalated the audited security expenses in order to project security expenses for 2019-20 with escalation rate of 3.52% per annum and for subsequent years as per the 2019 Tariff Regulations. The consolidated security expenses claimed by the Petitioner in the instant petition are as follows:

						(₹ in lakh)
Parameter	Number of substations and offices	2019-20	2020-21	2021-22	2022-23	2023-24
Security Expenses for existing AC, HVDC, and Office establishments	251	24304.74	25160.26	26045.90	26962.72	27911.81
Security Expenses for New sub- stations addition during 2019-24*	11	705.79	1004.62	1039.98	1076.59	1114.48
Total	262	25010.53	26164.88	27085.89	28039.31	29026.29

\*The additional amount of security expenses related to the new sub-stations anticipated to be commissioned in each year are estimated by proportioning the estimated expenses for the relevant year in relation to estimated expenses for existing sub-stations.

12. The Petitioner has submitted that it has deployed CISF personnel at a few sub-stations and HVDC installations keeping in view their vulnerability to militant/ sabotage activity, which may totally disrupt evacuation of power from generation projects of national importance. CISF is deployed at present as additional security in the following sub-stations:



Particulars	Name of Sub-station	Region
AC	Wagoora	Northern Region
	Bongaigaon	North Eastern Region
	Salakati	North Eastern Region
HVDC	Rihand *	Northern Region
	Vindhyachal *	Northern Region
	Dadri *	Northern Region
Office Establishment	NR-I RHQ/ NLDC **	Northern Region

\* These HVDC stations are located within the premises of Generation projects of NTPC Limited where CISF was deployed. Exclusive security arrangement was not deployed for these HVDC stations. Petitioner is only sharing the proportionate expenses as claimed by NTPC Limited.

\*\* Considering the security threat for National Load Dispatch Centre (NLDC), situated in Northern Region-I, Regional Headquarters and Registered Office of the Petitioner, which is monitoring the grid operation of the entire country, special security by CISF was deployed.

13. The Petitioner has submitted that CISF security at Dadri, Vindhyachal and Rihand is provided by NTPC and security expenses are paid to NTPC by the Petitioner. Accordingly, the Petitioner has claimed the same through the instant Petition. The Petitioner vide affidavit dated 27.8.2020 has submitted that the security expenses claimed by the Petitioner in the instant petition pertains only to the Petitioner and it is not shared by any other entity.

14. The Petitioner has submitted that considering the security threat for National Load Dispatch Centre (NLDC), situated in Northern Region-I, Regional Headquarters and Registered Office of the Petitioner, which is monitoring the grid operation of the entire country, special security by CISF was deployed. We direct the Petitioner to confirm at the time of true-up that security expenses pertaining to NLDC are being paid for by NLDC and the share of expense pertaining to Petitioner is claimed by the Petitioner.

15. Regulation 35(3)(c) of the 2019 Tariff Regulations provides as follows:

"(c) The Security Expenses and Capital Spares for transmission system shall be allowed separately after prudence check:

Provided that the transmission licensee shall submit the assessment of the security requirement and estimated security expenses, the details of year-wise actual capital spares consumed at the time of truing up with appropriate justification."

As per the above Regulation, security expenses for transmission system shall be allowed separately after prudence check which shall be trued-up after assessment of the year-wise details submitted by the Petitioner with proper justification.

16. We note that escalation rate of 3.51% has been provided for O&M Expenses in respect of transmission systems for projecting O&M expenses norms for the tariff period from 2019-20 to 2023-24 and the same is explained in the Statement of Objects and Reasons ("SOR") dated 22.3.2019 for the 2019 Tariff Regulations as follows:

"10.7.2.....Keeping in view the rising trend of indices, the Commission has decided to provide an additional margin of 3.00%, thereby fixing the escalation rate of 3.51% for thermal generating stations and transmission systems and 4.77% for hydro generating stations. These escalation rates have now been considered for projecting O&M expenses norms for the tariff period from FY 2019-20 to FY 2023-24.

"

Accordingly, the escalation rate of 3.51% has been considered for projecting

O&M Expenses norms for transmission system for the 2019-24 tariff period.

17. In view of the fact that security expenses are also O&M expenses and in line with the escalation rate for O&M expenses as provided in the 2019 Tariff Regulations, we approve the security expenses for the period from 1.4.2019 to 31.3.2024 with escalation rate of 3.51% per annum with respect to base rate of security expenses for 2019-20. The methodology followed to work out the projected security expenses for period 2019-24 is as follows:



a) The actual security expenses incurred by the Petitioner in 2018-19 as certified by the auditor certificate dated 5.2.2020, have been escalated at 3.51% annually to project for security expenses for the 2019-24 period.

b) The said projected security expenses have been distributed proportionately among regions and AC/ HVDC sub-stations in proportion to the respective actual security expenses in 2018-19.

18. Accordingly, following security expenses are allowed for the existing substations for the 2019-24 tariff period:

	2019-20	2020-21	2021-22	2022-23	2023-24		
1.0 AC Sub-stations							
Northern Region	8138.64	8424.31	8720.00	9026.08	9342.89		
Eastern Region	4125.23	4270.04	4419.91	4575.05	4735.63		
Western Region	3247.64	3361.63	3479.62	3601.76	3728.18		
Southern Region	3645.92	3773.89	3906.35	4043.47	4185.39		
North Eastern Region	2438.71	2524.31	2612.91	2704.62	2799.56		
Total AC Sub-stations	21596.15	22354.18	23138.81	23950.98	24791.66		
2.0 HVDC stations							
Northern Region	1329.18	1375.83	1424.12	1474.11	1525.85		
Eastern Region	484.14	501.14	518.73	536.95	555.78		
Western Region	166.35	172.19	178.24	184.49	190.97		
Southern Region	253.20	262.08	271.28	280.80	290.66		
North Eastern Region	473.38	489.99	507.18	524.99	543.42		
Total HVDC Stations	2706.25	2801.24	2899.56	3001.34	3106.68		
All India	24302.40	25155.41	26038.37	26952.31	27898.34		

(₹ in lakh)

19. The Petitioner has further claimed the following estimated security expenses for additional sub-stations that are likely to be put into commercial operation during the 2019-24 period:



						(₹ in lakh)
		2019-20	2020-21	2021-22	2022-23	2023-24
AC Sub-s	tations					
Northern Region	Additional Sub-stations (General) (Number)	6	2	0	0	0
	Cumulative additional sub-stations (Number)	6	8	8	8	8
	Expenses for Additional Sub-stations (General)	529.34	730.63	756.35	782.97	810.53
HVDC Sul	b-stations					
Western Region	Additional Sub-stations (General) (Number)	1	0	0	0	0
	Cumulative additional sub-stations (Number)	1	1	1	1	1
	Expenses for Additional Sub-stations (General)	88.22	91.33	94.54	97.87	101.32
Southern Region	Additional Sub-stations (General security) (Number)	1	1	0	0	0
	Cumulative additional sub-stations (Number)	1	2	2	2	2
	Expenses for Additional Sub-stations (General)	88.22	182.66	189.09	195.74	202.63
Total		705.79	1004.62	1039.98	1076.59	1114.48

20. The Petitioner has submitted that only general security expenses have been considered for new sub-stations.

21. The security expenses for projected additional sub-stations have been allowed considering per sub-station expenses for year 2018-19 excluding additional security and considering escalation rate of 3.51% as follows:

					(	₹ in lakh)
		2019-20	2020-21	2021-22	2022-23	2023-24
AC Sub-st	ationa					
		1	1	1	1	1
Northern	Additional Sub-	6	2	0	0	0
Region	stations (General)					
g	(Number)					
	Cumulative additional	6	8	8	8	8
	sub-stations (Number)	Ŭ	0	0	0	0
	/					
	Expenses for Additional					
	Sub-stations (General)	529.29	730.49	756.13	782.67	810.14
HVDC Sub	-stations					
Western	Additional Sub-	1	0	0	0	0
Region	stations (General)					
<u> </u>	(Number)					
	Cumulative additional	1	1	1	1	1



	sub-stations (Number)					
	Expenses for Additional					
	Sub-stations (General)	88.21	91.31	94.52	97.83	101.27
Southern	Additional Sub-	1	1	0	0	0
Region	stations (General					
	security) (Number)					
	Cumulative additional	1	2	2	2	2
	sub-stations (Number)					
	Expenses for Additional	88.21	182.62	189.03	195.67	202.54
	Sub-stations (General)	00.21	102.02	103.05	135.07	202.54
Total		705.72	1004.42	1039.68	1076.17	1113.94

22. The consolidated security expenses allowed are as follows:

Parameter	Number of substations offices	2019-20	2020-21	2021-22	2022-23	(₹ in lakh) 2023-24
Security Expenses for existing AC, HVDC and Office establishments	251	24302.40	25155.41	26038.37	26952.31	27898.34
Security Expenses for New sub- stations addition during 2019-24*	11	705.72	1004.42	1039.68	1076.17	1113.94
Total	262	25008.12	26159.84	27078.05	28028.49	29012.29

23. The Petitioner is directed to submit the audited year-wise actual security expenses incurred along with their cost break-up at the time of true-up. The Petitioner is also directed to submit correspondences with the security agencies to substantiate its claim regarding need for deployment of CISF personnel at the time of true-up.

24. The Petitioner has prayed to bill security expenses along with interest on working capital. Regulation 34(1)(c) of the 2019 Tariff Regulations provides as follows:

"(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."

25. Accordingly, O&M Expenses including security expenses for one month shall

be considered to work out the interest on working capital. Further, the rate of interest

on working capital shall be calculated as per Regulation 34(3) and Regulation 34(4)

of the 2019 Tariff Regulations, which provide as follows:

"(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. "

26. The Petitioner has submitted that the security expenses of HDVC sub-stations

may be shared as a national component and AC sub-stations may be shared on

regional basis.

27. We observe that there are broadly two components of security expenses viz.

AC and HVDC sub-stations. The sharing of transmission charges is governed by

provisions of the Central Electricity Regulatory Commission (Sharing of inter-State

Transmission Charges and Losses) Regulations, 2020 (in short, "the 2020 Sharing

Regulations"). Relevant provisions of the Sharing Regulations are as follows:

### *"5. Components and sharing of National Component (NC)*

(1) National Component shall be sum of the following components:

(a) National Component-Renewable Energy (NC-RE); and

(b) National Component-HVDC (NC-HVDC).

(3) National Component-HVDC shall comprise of the following:

(a) 100% of Yearly Transmission Charges for "back-to-back HVDC" transmission system;

(b) 100% of Yearly Transmission Charges for Biswanath-Chariali/ Alipurdwar to Agra HVDC transmission system;

(c) Yearly Transmission Charges of Mundra–Mohindergarh 2500 MW HVDC transmission system corresponding to 1005 MW capacity:

Provided that Yearly Transmission Charges corresponding to 1495 MW for the said transmission system shall be borne by M/s Adani Power (Mundra) Limited or its successor company; and

(d) 30% of Yearly Transmission Charges for all other HVDC transmission systems except those covered under sub-clauses (a), (b) and (c) of this clause of this Regulation.

(4) The Yearly Transmission Charges for the National Component shall be shared by all drawee DICs and injecting DICs with untied LTA in proportion to their quantum of Long Term Access plus Medium Term Open Access and untied LTA respectively.

#### 6. Components and sharing of Regional Component (RC)

(1) Regional Component shall be sum of the following components:

(a) Regional Component of HVDC (RC-HVDC) comprising of 70% of Yearly Transmission Charges of HVDC transmission systems planned to supply power to the concerned region, except HVDC transmission systems covered under sub clauses (a), (b) and (c) of Clause (3) of Regulation 5; and

(2) Yearly Transmission Charges covered under sub-clause (a) of Clause (1) of this Regulation shall be shared by drawee DICs of the receiving region and injecting DICs with untied LTA in the receiving region, in proportion to their quantum of Long Term Access plus Medium Term Open Access and untied LTA, respectively.

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### 8. Components and sharing of AC System Component (ACC)

(1) AC System Component shall comprise of the Yearly Transmission Charges, excluding the Yearly Transmission Charges covered under Regulations 5 to 7 of these regulations.

(2) AC System Component shall have following components:
(i) Usage Based Component (AC-UBC); and
(ii) Balance Component (AC-BC).

(3) The Yearly Transmission Charges of AC-UBC shall be shared by drawee DICs and injecting DICs with untied LTA corresponding to their respective usage



of the transmission lines, in accordance with Regulation 9 of these regulations.

(4) The Yearly Transmission Charges under AC-BC shall be the balance Yearly Transmission Charges for AC System Component after apportioning the charges for AC-UBC.

(5) Transmission charges under AC-BC shall be shared by all drawee DICs and injecting DICs with untied LTA in proportion to their quantum of Long Term Access plus Medium Term Open Access and untied LTA respectively.

#### 15. Billing.

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(2) The bills for transmission charges for the DICs shall be raised by the Central Transmission Utility under the following three categories:

(a) The first bill of each billing month shall contain the transmission charges for the billing period in accordance with Regulations 5 to 8 of these Regulations.

(b) The second bill shall be raised in the months of April, July, October and January every year for the quarter ending on 31st March, 30th June, 30th September and 31st December respectively to adjust variations on account of any revision in transmission charges allowed by the Commission, including incentives as applicable:

Provided that under-recovery or over-recovery of any amount on account of such revision in transmission charges in respect of a billing period shall be billed by the Central Transmission Utility to DICs in proportion to their first bill in the relevant billing month.

-----"

28. In terms of the above-quoted provisions of the 2020 Sharing Regulations, the

security expenses allowed under the instant order shall be billed as follows:

(i) From 1.4.2019 till the billing month of August, 2021 (month of issue of this order): Through Bill 2 under Regulation 15(2)(b) of the 2020 Sharing Regulations.

(ii) <u>From the billing month of September, 2021</u>: Security expenses for AC substations shall be shared under AC System Component (ACC) as per Regulation 8 of the 2020 Sharing Regulations. Further, security expenses for HVDC substations shall be shared amongst respective head of RC-HVDC and NC-HVDC System in terms of Regulation 5(3) and Regulation 6(1) of the 2020 Sharing Regulations.



29. The Petitioner has also prayed for reimbursement of filing fees paid by it for filing the instant petition. The instant petition is filed for approval of security expenses for the 2019-24 tariff period and it is categorised as a Miscellaneous Petition. The 2019 Tariff Regulations do not provide for reimbursement of filing fee in case of Miscellaneous Petitions. Accordingly, the Petitioner's prayer for reimbursement of filing fee is not allowed.

30. The security expenses allowed for the 2019-24 tariff period are as under:

							(₹ in lakh)
Parameter	Number of substations and offices	Amount claimed and allowed	2019-20	2020-21	2021-22	2022-23	2023-24
Security Expenses for existing AC,	251	Claimed	24304.74	25160.26	26045.90	26962.72	27911.81
HVDC and Office establishments		Allowed	24302.40	25155.41	26038.37	26952.31	27898.34
Security Expenses for new sub-stations	11	Claimed	705.79	1004.62	1039.98	1076.59	1114.48
addition during 2019-24		Allowed	705.72	1004.42	1039.68	1076.17	1113.94
Total	262	Claimed	25010.53	26164.88	27085.89	28039.31	29026.29
		Allowed	25008.12	26159.84	27078.05	28028.49	29012.29

31. This order disposes of Petition No. 260/MP/2020 in terms of the above discussions and findings.

sd/-(P.K. Singh) Member sd/-(I.S. Jha) Member <sub>sd/-</sub> (P.K. Pujari) Chairperson



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