# CENTRAL ELECTRICITY REGULATORY COMMISSION **NEW DELHI** Petition No. 05/MP/2022

Coram:

Shri Jishnu Barua, Chairperson Shri Arun Goyal, Member Shri P. K. Singh, Member

Date of Order: 18.05.2024

## In the matter of:

Petition for approval of the Central Electricity Regulatory Commission for inclusion of 33/220 kV GIS Sub Station Karian along with 220 kV D/C Transmission line from Karian to Rajera of H.P. Power Transmission Corporation Limited under PoC mechanism for recovery of transmission charges under CERC (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 (hereinafter referred to as 2020 Sharing Regulations).

## And in the matter of:

# H.P. Power Transmission Corporation Limited,

Himfed Bhawan, Panjari, Shimla-171005.

...Petitioner

#### Versus

## 1. Himachal Pradesh State Electricity Board,

Limited Vidvut Bhawan. Shimla Himachal Pradesh - 171004

...Respondent No. 1

## Northern Regional Load Despatch Centre,

18-A, Shaheed Jeet Singh Sansanwal Marg, Katwarai Sarai. New Delhi -110016

...Respondent No. 2

# 3. Central Transmission Utility of India Limited,

First Floor, Saudamini, Plot No. 2, Sector 29 Near IFFCO Chowk Metro Station. Gurgaon - 122 001, Haryana

...Respondent No. 3

## Northern Regional Power Committee,

18-A, Qutab Institutional Area, Shaheed Jeet Singh Marg. Katwaria Sarai. New Delhi-110 016

...Respondent No. 4

## **Parties Present:**

Shri Amal Nair, Advocate, HPPTCL

Ms. Shivani Verma, Advocate, HPPTCL

Shri Anand K. Ganesan, Advocate, HPPTCL

Shri Prashant Garg, NRLDC

Shri Sunil Kanaujiya, NRLDC

Shri Gajendra Singh, NRLDC

Shri Alok Mishra, NRLDC

Ms. Ankita Singh, CTUIL

Shri Ranjeet Rajput, CTUIL

Ms. Kavya Bhardwaj, CTUIL

## **ORDER**

The instant petition has been filed by the Petitioner, Himachal Pradesh Power Transmission Corporation Limited (HPPTCL), for the inclusion of 33/220 kV GIS Sub Station Karian along with 220 kV D/C Transmission line from Karian to Rajera of HPPTCL under PoC mechanism for recovery of transmission charges under the 2020 Sharing Regulations.

The Petitioner has made the following prayers:

- (a) Admit the instant Petition.
- (b) Approve the request of HPPTCL to include the instant assets in PoC mechanism for recovery of transmission charges of the instant asset.
- (c) Allow for recovery of payment made for filing of instant Petition and Petition filed before Hon'ble HPERC.
- (d) Pass suitable directions, with regard to the Appropriate Commission which shall determine the true up of the instant asset.
- (e) 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.

## **Submissions of the Petitioner:**

- 1. The Petitioner has mainly submitted as follows:
  - (a) HPPTCL owns, operates, and maintains 66 kV and above Transmission lines. HPPTCL developed certain transmission systems which were incidental to interstate transmission of power, and one of such transmission schemes developed by HPPTCL was 33/220 kV, 50/63 MVA GIS Substation at Karian and 220 kV Transmission line from Karian to PGCIL Pooling Substation at Chamera-II (Rajera).

- (b) HPPTCL had filed a Petition (550/TT/2014) on 16.12.2014 before the CERC seeking a determination of tariff of the above transmission system, anticipating it to be Commissioned by December 2014. CERC had disposed of the above Petition (550/TT/2014) vide its Order dated 23.09.2015 with a liberty to file a fresh Petition for inclusion of line in PoC computation after the Commercial Operation of the lines and approval of the tariff of the instant asset by the State Commission and further directed the Petitioner to obtain a certificate from the NRPC to the effect that the instant assets are being used for inter-state transmission of power. Accordingly, HPPTCL had submitted a petition before the State Commission for approval of capital cost and determination of transmission tariff of instant asset and has also applied for NRPC certification in this regard.
- (c) The assets under consideration are 33/220 kV, 50/63 MVA GIS Substation at Karian, and 220 kV Transmission line from Karian to PGCIL Pooling Substation at Chamera-II (Rajera) in District Chamba of Himachal Pradesh. The Scheme was also approved in the 29th Standing Committee Meeting for the Northern Region held on 29.12.2020. The details of the transmission scheme are as follows:

**Details of Transmission Line** 

Name of the Line	Type of Line	S/C or D/C	No. of Sub- Conductor	Voltage Level (kV)	Line Length (Ckt. km)	Line Length (km)	CoD
220 kV D/C Transmission line from Karian GIS substation to PGCIL Pooling station at Rajera	AC	D/C*	Single Conductor	220	1x3.7	3.7	12.05.2018

<sup>\*</sup>Presently, single circuit has been commissioned and work on second work is in progress

## **Details of Sub-Station**

			No. of	Bays		
Name of the Line	Type of Substation	Voltage level (kV)	220 kV 33 kV		CoD	
33/220 kV, 50/63MVA GIS substation at Karian	GIS	220	3	9	12.05.2018	

(d) The above project was envisaged to evacuate power developed from Hydro and other generations within the State of Himachal Pradesh connected to PGCIL's

- 220 kV Pooling Station which will further evacuate power through PGCIL's Jalandhar line. The works for the Substation and Transmission Line were awarded in the months of March 2011 and September 2011, respectively, and were to be completed in 6 months and 18 months, respectively. However, owing to various factors, the project was energized on load on 12.05.2018.
- (e) As per the Minutes of the Meeting of 32<sup>nd</sup> TCC and 36<sup>th</sup> NRPC meeting held on 23<sup>rd</sup> and 24<sup>th</sup> December 2015, a transmission line would be construed as an interstate line only if average utilization for inter-state purposes based on the studies for 2<sup>nd</sup> (July-September) and 4<sup>th</sup> (January to March) guarter comes out to be more than 50%. The studies based on the 2<sup>nd</sup> and 4<sup>th</sup> quarter for a particular year will be used for certification of state-owned lines as inter-state lines for next year. For example, certification for the year 2019-20 will be done based on studies for quarters July-September 2018 and January-March 2019.
- (f) The assets under the instant Petition were commissioned in the month of May 2018. Accordingly, the complete actual data of Q2 and Q4 was available for FY 2018-19, and the Petitioner was eligible to apply for certification of its assets as non-ISTS lines carrying ISTS power for FY 2019-20.
- (g) Since the above methodology of certification, considering the actual data would take time, and there shall be no recovery of tariff until the certification, therefore, HPPTCL decided simultaneously to request for certification before NRPC and also file a Petition for approval of capital cost and MYT ARR for the period from CoD, i.e., May 12, 2018, till FY 2023-24 before the HPERC in July 2020.
- (h) During the proceedings of MYT Petition before the State Commission, NRPC vide 45th TCC & 48th NRPC meeting dated September 2, 2020, has approved the inclusion of 220 kV Karian-Rajera Transmission line under PoC mechanism for FY 2019-20 along with assets owned by other Northern State utilities viz. RVPN and PTCUL. Even though NRPC has only certified that the transmission line carries inter-state power, it is to be noted that both the transmission line and GIS substation were commissioned simultaneously and have a common beneficiary. Accordingly, the ARR corresponding to the substation and transmission line has to be included under the PoC mechanism.

- (i) In reply to the HPPTCL's letter dated August 6, 2020, in a similar matter of certification of 220kV Charor-Banala Transmission line as ISTS, NRPC, vide its letter dated August 24, 2021, informed that the work of certification of non-ISTS lines carrying ISTS power had been withdrawn with effect from notification of the 2020 Sharing Regulations from November 1, 2020. NRPC had categorically stated that HPPTCL might approach the CERC for getting the certification of the instant asset as an inter-state asset, considering that the 2020 Sharing Regulations, which came into effect on November 1, 2020, clearly does not provide the mechanism for certification or recovery of such intra state lines incidental to the inter-state flow of power.
- (j) HPERC vide Order dated November 1, 2021 has approved the following capital cost and Annual Transmission Charges.

Capital Cost claimed and approved for the 33/220 kV GIS Sub Station Karian along with 220 kV D/C Transmission line from Karian to Raiera

Particular	Actual Claimed by HPPTCL (Rs. Lakh)	Approved by HPERC (Rs. Lakh)
Transmission Line	(NS. Lakii)	
Hard Cost (Land, Supply, Erection and Civil Works)	769.58	769.58
Departmental	117.08	67.49
IDC	130.72	55.24
Total (As on CoD)	1017.38	892.31
Sub Station		
Hard Cost (Land, Supply, Erection and Civil Works)	3232.32	3096.62
Departmental	271.06	271.06
IDC	666.36	330.76
Total (As on CoD)	4169.74	3698.44
Total expenditure incurred by HPPTCL for construction of instant Transmission line and Substation	5187.12	4590.75

Additional capitalization claimed by HPPTCL vis-à-vis approved by Commission (INR Lakh)

Particulars		Claimed		Approved			
	FY20	FY21	FY22	FY20	FY21	FY22	
Emergency Restoration Works	123.89	-		123.89	-	-	
Stringing of 2nd circuit on exiting line	-	-	-	-	239.16	-	
Construction of residential accommodation	-	216.46	216.46	-	-	432.92	
Total	123.89	216.46	216.46	123.89	239.16	432.92	

ARR claimed and approved for the 33/220 kV GIS Sub Station Karian along with 220 kV D/C Transmission line from Karian to Rajera

	FY 20	18-19	FY 20	19-20	FY 20	20-21	FY 20	21-22	FY 20	22-23	FY 20	23-24	
Particular	(Rs. I	(Rs. Lakh)		(Rs. Lakh)									
	Claime d	Approv ed											
Depreciation	217.46	182.28	248.24	208.39	257.61	217.34	264.84	233.90	268.45	244.57	268.45	244.57	
Interest on Loan	382.80	370.59	415.51	402.09	413.43	377.45	414.83	385.52	406.16	380.85	387.88	355.17	
Return on Equity	210.24	59.24	338.21	67.70	349.37	70.51	363.57	75.72	370.67	79.07	370.67	79.07	
O&M	144.65	128.61	190.82	149.97	214.44	155.21	204.00	160.70	212.09	166.30	216.44	172.16	
Interest on Working Capital	22.08	18.69	23.76	19.92	24.78	18.49	24.89	17.89	25.16	18.26	24.96	18.05	
ARR	977.23	814.02	1216.54	911.74	1259.62	904.90	1272.13	941.95	1282.54	959.66	1268.40	942.13	

- (k) With regard to the recovery of transmission charges, HPERC ruled as follows:
  - "4.8.2 As discussed in the section 'Energy Flow and Nature of the Asset' in Chapter 3, the project has already been certified by NRPC as ISTS for FY 2019-20 with 98% utilization by other states.
  - 4.8.3 Further, the Petitioner has submitted that it will approach the CERC for recovery under the POC mechanism in reply to the 2nd deficiency letter shared with the Petitioner. The relevant extract of submission has been provided as follows:
  - "As per the established procedure to determine the nature of an asset(s), actual data of second and fourth quarter has to be studied to declare the asset as ISTS asset by NRPC. Accordingly, considering the data of second and fourth quarter of FY 2018-19, the instant assets have been declared as ISTS assets for inclusion in POC for FY 2019-20 by the NRPC in 45th and NRPC Meeting held on 02.09.2020. It is humbly submitted that since the data for FY 2018-19 demonstrates that the line was carrying Inter-State Power, once the tariff is approved, the Petitioner shall approach the CERC for inclusion of transmission charges for both FY 2018-19 and FY 2019-20."
  - 4.8.4 Accordingly, the Petitioner is directed to file suitable application before the CERC for recovery of ARR approved in this Order for the period FY 2018-19 to FY 2023-24 under the POC mechanism. In case of laxity or failure to pursue the inclusion of the ARR in PoC mechanism, the Commission shall not allow recovery of the ARR from HPSEBL. In the event the line is not declared as inter-state in any of the future years, appropriate application should be made before the Commission along with justification and evidence for recovery of transmission charges from HPSEBL..."

HPERC has categorically directed HPPTCL to file a suitable application before CERC to recover the approved ARR for the period from FY 2018-2019 to FY 2023-24.

- (I) Accordingly, in view of the direction of CERC in the Order dated September 23, 2015, in Petition No. 550/TT/2014 and the direction of HPERC in the Order dated November 1, 2021, HPPTCL, through this Petition, requests the CERC to include the instant assets under PoC mechanism for recovery of transmission charges for the period FY 2018-19 to FY 2023-24.
- (m) HPPTCL submitted that the delay in recovery of the tariff has gravely prejudiced HPPTCL and the same may be considered expeditiously.
- (n) HPPTCL further requested to allow it to recover the filing fee incurred by HPPTCL for the instant Petition along with filing fee incurred for the Petition filed before HPERC since the same was filed as per the directions of CERC.

# **Hearing Dated 15.07.2022**

2. The Commission admitted the Petition and directed Petitioner to file the CEA energization certificate, RLDC /SLDC charging certificate, and COD certificate of each of the assets under the instant Petition along with complete planning details for instant assets with clarification as to why the scheme was planned as STU system and reason for change of nature of system to ISTS.

# **Submissions by HPPTCL**

- 3. The Petitioner, HPPTCL, vide affidavit dated 02.08.2022, mainly submitted as follows:
  - (a) As per Clause no. 29 of CEA (Measures relating to Safety and Electric Supply) Regulations 2010 and Section 162 of Electricity Act 2003, the Chief Electrical Inspector, Himachal Pradesh Electrical Inspectorate Shimla, accorded approval for the energization of installations.
  - (b) Energization Certificate dated 25/07/2022 issued by from HPSLDC contains charging/ COD of 220 kV S/C transmission line from Rajera (PGCIL) to Karian (HPPTCL) as 15.05.2018.
  - (c) The instant assets for the construction of a 33/220 kV GIS Substation at Karian along with a 220kV Line from Karian to Rajera were envisaged to facilitate the evacuation of power from SHEPs in Karian and Sahu areas of Chamba in addition to medium sized projects in Kurthala/Tissa areas. Owing to the

- geographical and topographical peculiarities as well as the limited energy generation, the said transmission system was planned by the STU.
- (d) The State of Himachal Pradesh has immense potential for harnessing of hydro power and surplus power generated from hydropower projects is meant for forward sale to the neighboring states. In view thereof, the instant assets although envisaged as part of the STU network, have been utilised to transmit power on an interstate basis to outside the State of Himachal Pradesh.
- (e) The Board of Directors (HPPTCL) had approved the proposal for construction of the instant assets in the 7<sup>th</sup> Board Meeting held on 21/05/2010. The 33/220kV Karian Substation was planned for evacuation of power of HEPs through connectivity with 220/400kV, 2x315MVA Chamera Pooling Station and approval for the same was taken from CEA in the 29th Standing Committee meeting held on dated 29.12.2010.
- (f) A proposal was submitted before NRPC for ISTS certification of the 220kV Karian-Rajera Transmission line for FY 2019-20. Considering the nature of the line and the power flow, the NRPC in the 45<sup>th</sup> TCC meeting held on 27/08/2020 and 28/8/2020 and the 48th NRPC meeting held on 02/09/2020, recommended said subject Transmission system for inclusion in the POC mechanism as being part of the inter-state transmission system.

# **Submissions of the Respondent No.1 (HPSEBL)**

- 4. The Respondent No.1 (HPSEBL), vide affidavit dated 22.08.2022, has mainly submitted as under:
  - (a) The scheme for construction of 33/220 kV, 50/63 MVA GIS substation at Karian and 220kV connecting transmission line from Karian sub-station to PGCIL substation at Rajera was approved with an anticipated capacity of 250 MW. The 33/220 kV, 50/63 MVA GIS substation at Karian, and 220kV connecting transmission line from the Karian sub-station to PGCIL achieved COD on 12th May 2018. The 33/220kV,50/63 MVA, GIS sub-station & 220kV D/C Karian-Rajera Transmission Line is being used to evacuate power generated from hydro generating stations within the State of Himachal Pradesh & further, it is

- connected to PGCIL's 220kV pooling station at Rajera, evacuating power through PGCIL's Jalandhar line for Northern Grid.
- (b) HPSEBL has signed a long term Power Purchase Agreement with IPPs for purchase of power from Dunali SHP (5.00MW), Hul-II SHP (3.4MW), Kurtha SHP (5.00MW), Belij SHP (5.00MW) and Belij-II SHP (3.5MW). These generating stations have permanent interconnection points with 33/220kV, 50/63MVA, GIS Karian sub-station, and injecting power through ISTS to the Northern Grid. HPSEBL signed a Supplementary Transmission Service Agreement on 29th May 2018 to Original TSA dated 10th February 2012 with HPPTCL to include 220kV Karian Sub-station for evacuation of power from above IPPs beyond interconnection point. The total contracted capacity as per the addendum dated 18th April 2017 to Original TSA dated 10th February 2012 remained unchanged at 1060MW, considering the actual loading during FY2016-17 and FY2017-18.
- (c) The Himachal Pradesh Electricity Regulatory Commission (HPERC) has approved the capital cost and determined the tariff for 33/220kV GIS Substation at Karian along with 220kV D/C transmission Line from Karian to Rajera for the period from COD (12.05.2018) to FY2023-24 vide Order dated 01.11.2021 in HPPTCL petition no. 98 of 2020. The instant line is incidental to inter-state transmission network, and it is covered under the definition of inter-state transmission network as provided in Section 2(36) of EA 2003. STU lines carrying inter-state power or lines incidental to ISTS can be considered for inclusion in the computation of PoC charges if it is certified by RPC as carrying inter-state power. The COD of 33/220kV, 50/63 MVA, GIS sub-station, and 220kV D/C Karian-Rajera Transmission Line was on 12.05.2018, when the 2010 Sharing Regulations and subsequent amendments were in force and as per the 45th Technical Co-ordination Sub-Committee (TCC) meeting and 48th Northern Region Power Committee (NRPC) meeting held on 2nd September 2020 the asset has been declared as ISTS for the FY 2019-20.
- (d) In terms of the 2020 Sharing Regulations, CTU (Powergrid) has been assigned to identify the transmission assets on an all-India basis to be included under these regulations and the details of assets covered under different components for working out the transmission charges for the respective DICs and submit the same to the Implementing Agency (NLDC) for notification of transmission

charges on a monthly basis. Accordingly, CTU has issued the lists of interconnecting transformers (ICT) and downstream bays at various Powergrid substations. At Chamba GIS Substation, the HPPTCL Karian 220kV GIS bay has been included in the Transformer Component of HP & HPSEBL as DIC is paying for the same in the monthly CTUIL bills.

# **Hearing Dated 03.08.2023**

5. The Commission directed Petitioner to implead NRPC, CTUIL, and NRLDC as Respondents submit the Status of the Generating Stations for which the instant transmission line was planned and developed. Commission also directed to submit details of NRPC Certification for 2020-21 onwards with the status of the second circuit of 220kV Karian to Rajera D/c line.

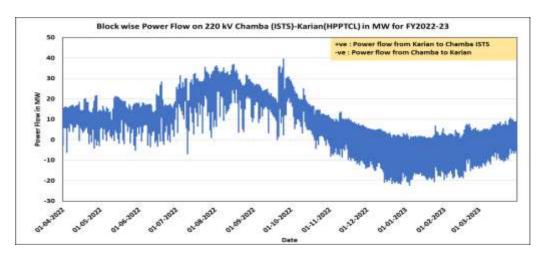
# **Submissions by the Petitioner**

- 6. Petitioner in compliance with the RoP dated 03.08.2023, impleaded NRPC, CTUIL, and NRLDC as Respondents and filed amended Memo of Parties and furnished additional information vide affidavit dated 25.08.2023 as per details below:
  - (a) Petitioner has submitted the status of aggregate capacity of 28 MW generating stations for which the instant transmission line was planned and developed by the Petitioner.
  - (b) Since NRPC refused to certify the ISTS status of the subject Transmission Line in view of the 2020 Sharing Regulations, the Petitioner did not approach NRPC from 2020-2021 onwards for obtaining certification.
  - (c) The second circuit of the 220 kV D/C Karian Rajera line has been stringed and is yet to be commissioned/ charged, and the same is pending due to the nonavailability of 220 kV Bay at the Rajera end. The same is expected to be completed by the end of October 2023 as the shutdown is not available due to high hydro season.

## NRLDC submission dated 25.09.2023

7. NRLDC vide affidavit dated 25.09.2023 has mainly submitted as follows:

- (a) The Petitioner made a request for allowing connection of Karian S/s of HPPTCL with the Chamba (Rajera) ISTS S/s through the subject transmission line. This request was made by HPPTCL with the primary objective of fulfilling the power demand of the state and evacuation of the small intra-state generating stations. Accordingly, said assets, i.e., Karian S/s & Transmission line, were developed as an intra-state system of Himachal Pradesh.
- (b) The subject transmission line is interconnecting the 220kV Chamba S/s (i.e., ISTS) and Karian S/s of HPPTCL. At present, 3 nos. of intra-state small hydro plants (SHP) of Himachal Pradesh (HP) are directly connected at Karian S/s, and in the future, other intra-state SHPs are also envisaged as per the details submitted by the Petitioner in compliance with the ROP dated 03.08.2023. Apart from the intra-state generating stations, two 33 kV feeders with a load of HP are also emanating from the Karian S/s. Therefore, the direction of power flow on the subject line varies according to the net load & generation pattern at Karian S/s. This can be seen from the power flow pattern of the 220 kV Chamba- Karian transmission line for FY 2022-23, as depicted below.



As per the above, when generation at Karian S/s is less than the load, the power flow direction is from Chamba S/s to Karian S/s and vice-versa. In the both cases, the subject line is either being used for evacuation of power from intra-state generators to HP (through ISTS) or for the drawal of power by the load of HP i.e., connected at Karian S/s.

(c) The Hydro-Rich states like Himachal Pradesh have peculiar demand patterns in that the surplus intra-state generation is injected into the ISTS during the high hydro season, while during the lean hydro period and when the state demand is high, it draws power from the ISTS. If any intra-state asset is termed as ISTS on the basis of the power flow pattern during low demand and high hydro season, then a substantial part of the Intra-State Network of states like Himachal and Uttarakhand are likely to become part of ISTS.

- (d) In a similar matter in Petition No.57/MP/2022, (filed by petitioner HPPTCL for inclusion of 220 kV D/C Charor- Banala Transmission line of H.P. Power Transmission Corporation Limited under PoC mechanism for recovery of transmission charges under Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020), the Commission had already passed the order on 04.05.23 and held that a network planned as intra-state could not be termed as inter-state status and vice versa.
- (e) In view of the above mentioned facts and peculiar circumstances of the case, the subject assets should be treated as Intra-State systems only and should not be included under the Sharing mechanism.

# Petitioners' rejoinder dated 24.11.2023

- 8. Petitioner, vide affidavit dated 24.11.2023, has filed a rejoinder to the submissions of NRLDC; the main submissions are as under:
  - (a) A Transmission System was envisaged to facilitate the evacuation of power from SHEPs in the Karian and Sahu areas of Chamba, in addition to medium-sized projects in the Kurthala/Tissa areas. Owing to the geographical and topographical peculiarities and the limited energy generation, the Subject Transmission System was planned by the STU. However, it is submitted that the initial planning is not the only contributing factor when it is demonstrable that, subsequently, the line is to be used for the interstate supply of power.
  - (b) The State of Himachal Pradesh has immense potential for harnessing hydro power, and surplus power generated from hydropower projects is meant for forward sale to neighboring states. In view thereof, the Subject Transmission System is being utilised to transmit power on interstate basis to outside the State of Himachal Pradesh.

- (c) Considering the nature of the line and the power flow, the NRPC recommended instant 220 kV D/C Transmission line for inclusion in the POC mechanism for FY 2019-20, as part of the interstate transmission system.
- (d) Even though initially the request was made for the implementation of the Subject Transmission System to meet the power demand of the State subsequently, the subject transmission system is being used for evacuation of power inter-state. Therefore, this Commission ought to consider other facts as well while determining the nature of the 33/220kV Karian Substation along with the 220kV Karian-Rajera Transmission line. It is stated that planning of a line is not the sole criterion for determining the status of the same, as also held by this Commission in Petition No. 57/MP/2022. The other criterion is load flow. In the present case, the NRPC has, in terms of its delegated powers certified the present line to be an interstate line based on the load flow. Once having delegated the power, this Commission being the delegator, cannot vary from the findings of the NRPC. In view thereof, testing the nature of the line solely on the anvil of system planning is incorrect and against the scheme of the Electricity Act, 2003.
- (e) It is denied that load-generation balance is the sole criterion for determining the nature of the line. If the case of NRLDC based on load-generation balance is taken to be true then no line in states like Himachal Pradesh and Uttarakhand can ever be classified as inter-state including the lines being conceived and planned by CTU. This certainly cannot be the case.
- (f) NRLDC is not a stakeholder as far as the commercial cost of Transmission charges is concerned. Whereas the very nature of the asset will decide the viability of small green generation in the State when opting for open access and having power tie ups outside the State.

## Hearing Dated 21.02.2024

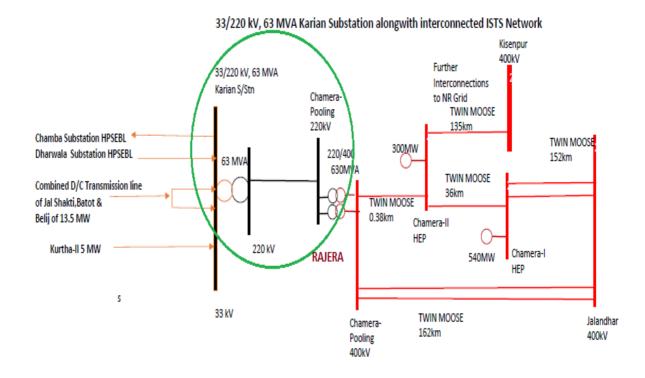
9. The Commission reserved the matter for Order and allowed Petitioner to file written submissions by 8.3.2024.

# Written submission of Petitioner

- 10. The Petitioner, in its written submissions dated 28.02.2024, mainly re-iterated earlier submissions; the additional information provided is as under:
  - (a) The Appellate Tribunal has passed a decision dated 29.01.2024 in Appeal No. 111 of 2020. The Appellate Tribunal has, inter alia, held that the certification process had been delegated by this Commission to NRPC, and once such power has been delegated, the same cannot then be the subject matter of inquiry before this Commission. The relevant extract of the decision of the Appellate Tribunal dated 29.01.2024 in this regard is as under:
    - "26. The Appellant, vide its IA 40/2020, had disputed the findings of the NRPC with regard to denial of ISTS status to HPPTCL's assets. As noted hereinabove, in Ishwar Singh vs. State of Rajasthan [(2005) 2 SCC 334] the Supreme Court held that if an authority delegates the power to act, the power exercised by the delegate shall be deemed to be the exercise of power on behalf of the delegator. In such a situation, there is no scope for revision of the order of the delegate by the delegator. In the present case also, the CERC has delegated the power conferred on it to the NRPC, and consequently the power exercised by NRPC, as a delegate of the CERC, cannot be the subject matter of enquiry in proceedings before the CERC. The Appellant, therefore, lacks locus standi to invoke the jurisdiction of the CERC against the exercise undertaken by the NRPC as a delegate of the CERC."
  - (b) In view thereof, in terms of the law now laid down by the Appellate Tribunal, since the Subject Asset has been certified by NRPC as an ISTS, the subject Asset ought to be included in the PoC mechanism.

# **Analysis and decision**

- 11. Petitioner, H.P. Power Transmission Corporation Limited (HPPTCL), is State Transmission Utility (STU) of Himachal Pradesh. By the instant petition, it is seeking the approval of the Commission for the inclusion of 33/220 kV GIS Sub Station Karian along with 220 kV D/C Transmission line from Karian to Rajera under the PoC mechanism for recovery of transmission charges under the 2020 Sharing Regulations for the period FY 2018-19 to FY 2023-24.
- 12. The 33/220 kV, 50/63 MVA GIS Sub Station Karian, having COD of 12.05.2018, was implemented by HPPTCL and connected with Chamera-II Pooling Station of PGCIL through the 220 kV Transmission line from Karian to Rajera (Chamera-II). The schematic representation of the transmission scheme is as follows:



From the above diagram, it is evident that the Karian GIS sub-station is connected to SHEPs of the state and the HP state network/ load at 33kV end, for feeding its power demand, and also with the 220/400kV ISTS Chamera-II (Rajera) Pooling Station.

- 13. The Petitioner has submitted that even though the NRPC has certified that the transmission line carries inter-state power, both the transmission line and GIS substation were commissioned simultaneously and have a common beneficiary. Accordingly, the ARR corresponding to the substation and transmission line should be included under the PoC mechanism.
- Petitioner has submitted that certification of 220 kV Karian-Rajera Transmission Line 14. as ISTS for the year 2019-20 cannot be subject matter of inquiry in the present case in view of the judgment of Supreme Court in the matter of Ishwar Singh v. State of Rajasthan [(2005) 2 SCC 334], wherein it was held that if an authority delegates the power to act, the power exercised by delegatee shall be deemed to be exercise of power on behalf of the delegator. Petitioner has referred to the Appellate Tribunal Order dated 29.01.2024 in Appeal No. 111 of 2020 wherein the Appellate Tribunal has, inter alia, held that the certification process had been delegated by this Commission to NRPC and once such power has been delegated, the same cannot then be the subject matter of inquiry before this Commission.

- NRLDC has submitted that HPPTCL constructed the instant assets with the primary 15. objective of fulfilling the power demand of the state and evacuation of the small intrastate generating stations as an intra-state system of Himachal Pradesh. At the Karian substation generating stations are connected, and drawl feeders are also connected. When generation at Karian S/s is less than the load, then the power flow direction is from Chamba S/s to Karian S/s and vice-versa. Hydro-Rich states like Himachal Pradesh have peculiar demand patterns that the surplus intra-state generation is injected into the ISTS during the high hydro season, while during the lean hydro period & when the state demand is high, it draws power from the ISTS, and if any intra-state asset is termed as ISTS on the basis of the power flow pattern during low demand and high hydro season, then substantial part of the Intra-State Network of states like Himachal and Uttarakhand are likely to become part of ISTS. NRLDC has recommended that the said assets may not be declared ISTS.
- Respondent HPSEBL has submitted that the instant line is incidental to the inter-state 16. transmission network, and is covered under the definition of inter-state transmission network as provided in Section 2(36) of EA 2003. STU lines carrying inter-state power or lines incidental to ISTS can be considered for inclusion in the computation of PoC charges if they are certified by RPC as carrying inter-state power.
- 17. We have considered the submissions of the Petitioner and the Respondents and have also perused the information on record. The Petitioner has prayed to include the instant asset under PoC mechanism for recovery of transmission charges for the period from FY 2018-2019 to 2023-24. We observe that the 2020 Sharing Regulations were published on 4.5.2020 and made effective from 1.11.2020, and with the 2020 Sharing Regulations coming into force, the 2010 Sharing Regulations were repealed. Accordingly, following issues arise for our consideration:

Issue No. 1: Whether the 220 kV D/C Karian to Rajera Transmission line is to be considered an Inter-State Transmission System for the purpose of recovery of transmission charges under the 2010 Sharing Regulations for the period from the date of COD of the assets till 31.10.2020? Whether 33/220 kV GIS Sub Station at Karian has been certified by NRPC as ISTS under the 2010 Sharing Regulations and is to be considered as ISTS system under the 2010 Sharing Regulations?

Issue No. 2: Whether 220 kV D/C Karian to Rajera Transmission line and 33/220 kV GIS Sub Station at Karian are to be considered as an Inter-State Transmission System for the purpose of recovering of transmission charges under the Sharing Regulations 2020 for the period from 1.11.2020-31.03.24?

The issues are dealt with in subsequent paragraphs.

#### Issue No. 1:

- The 33/220 kV GIS Sub Station Karian along with 220 kV D/C transmission line from 18. Karian to Rajera were approved by the Board of Directors of HPPTCL vide board resolution dated 21.05.2010.
- 19. The Petitioner had taken the view that the transmission scheme is incidental to the ISTS network and covered u/s 2(36) Electricity Act, 2003, and vide Petition no. 550/TT/2014 filed an application for the determination of tariff of instant assets for the Tariff Period 2014-19; this Commission vide Order dated 23.09.2015 held as follows:
  - "8. The petitioner has submitted that the instant line is incidental to inter-State transmission network and it is covered under the definition of inter-State transmission system as provided in Section 2(36) of the inter-State transmission lines. STU lines carrying inter-State power or lines incidental to ISTS can be considered for inclusion in the computation of PoC charges if it is certified by RPC as carrying inter-state power in terms of para 2.1.3 of the Annexure-I to the Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses) Regulations, 2010 (2010 Sharing Regulations).

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- 9. These assets can be considered for inclusion in the PoC only if they are certified by NRPC that these lines are used for evacuation of inter-state power. The tariff of such lines is determined by respective State Commissions by way of ARR. The Commission has worked out a methodology for the purpose of calculation of PoC charges and apportionment of transmission lines and charges to the transmission system of different configurations of the STU and this methodology has adopted in case of all the natural inter-state transmission lines. Similar procedure will be adopted in the instant case. The Commission in its order dated 18.3.2015 in Petition No. 213/TT/2015 has observed as follows:
- "17. We have not carried out any due diligence of the tariff of these lines (for consideration of PoC calculations) as the jurisdiction to determine the tariff of the lines owned by STU rests with the State Regulatory Commission. We have considered the ARR of the STU as approved by the State Regulatory Commission and have adopted the methodology as discussed in paras 15 and 16 of this order for the purpose of calculation of PoC charges and apportionment of transmission lines and charges to the transmission system of different configurations of the STU.

This methodology shall be adopted uniformly for the lines owned by other STUs used for inter-State transmission of power duly certified by respective RPCs for the purpose of inclusion in the PoC mechanism"

10. We have considered the submissions of the petitioner. As the instant assets are likely to be commissioned only after December, 2015, the instant petition is disposed of with a liberty to the petitioner to file fresh petition for inclusion of line in PoC computation after the commercial operation of the lines and approval of the tariff of the instant asset by the State Commission. The petitioner is further directed to obtain the necessary certificate from the NRPC to the effect that the instant assets are being used for inter-state transmission of power. The petition filing fees deposited along with this petition will be adjusted towards the fees to be deposited by the petitioner in future petitions."

The Commission, in the above order, directed the Petitioner to file a fresh petition for inclusion of the line in the POC mechanism after commercial operation and approval of the tariff by the State Commission.

- 20. The instant assets achieved Commercial Operation on 12.05.2018. HPERC has approved the capital cost and determined the tariff for 33/220kV GIS Substation at Karian along with 220kV D/C transmission Line from Karian to Rajera for the period from COD (12.05.2018) to FY2023-24 vide Order dated 01.11.2021 in HPPTCL Petition no. 98 of 2020.
- 21. The sub-clause (n) of clause (1) of Regulation 7 of 2010 Sharing Regulations provides as under:
  - "(n) For the computation of transmission charges at each node as per Hybrid Methodology, cost of ISTS transmission licensees whose lines feature on the Basic Network shall be considered.

Provided that in case of STU lines which are physically inter-State lines and whose tariff is approved by the Commission, such tariff shall be considered for computation of PoC charges:

Provided further that in case of non-ISTS lines (lines owned by STUs but being used for carrying inter-State power as certified by respective RPCs), the asset-wise tariff as approved by the respective State Commission shall be considered. Where asset-wise tariff is not available, the tariff as computed by the Commission based on the ARR of the STUs (as approved by respective State Commissions) by adopting the methodology similar to the methodology used for ISTS transmission licensees shall be considered. The transmission charges received by the concerned STU on this account shall be adjusted in its approved Annual Revenue Requirement."

Further, Clause 2. 1. 3 of Annexure – I of the 2010 Sharing Regulations provides as follows:

"Certification of non-ISTS lines carrying inter-state power, which were not approved by the RPCs on the date of notification of the Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses) Regulations, 2009, shall be done on the basis of load flow studies. For this purpose, STU shall put up proposal to the respective RPC Secretariat for approval. RPC Secretarial, in consultation with RLDC, using WebNet software would examine the proposal. The results of the load flow studies and participation factor indicating flow of Inter State power on these lines shall be used to compute the percentage of usage of these lines as inter state transmission. The software in the considered scenario will give percentage of usage of these lines by, home state and other than home state for testing the usage, tariff of similar ISTS line may be used. The tariff of the line will also be allocated by software to the home state and other than home state. Based on percentage usage of ISTS in base case, RPC will approve whether the particular state line is being used as ISTS or not.."

As per the above, lines owned by STUs but being used for carrying inter-State power as certified by respective RPCs shall be considered under the POC calculations as per asset-wise tariff approved by the respective State Commission.

- 22. We have perused minutes of 45<sup>th</sup> TCC dated 27<sup>th</sup> & 28<sup>th</sup> August, 2020 and 48<sup>th</sup> NRPC meeting held on 02<sup>nd</sup> September, 2020 wherein the following is noted:
  - B.2 Certification of Non-ISTS lines for inclusion in PoC Charges for FY 2019-20

#### TCC Deliberation

- B.2.1 Members were apprised that as per Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) (3rd amendment) Regulations, 2015, NRPC Sectt. is certifying the Non-ISTS lines carrying ISTS power for inclusion in PoC Charges as per the methodology approved in 36<sup>th</sup> NRPC meeting.
- B.2.2 The proposal for FY 2019-20 were submitted by HP, Rajasthan, Uttarakhand and Punjab. The same was studied as per the approved methodology and all the transmission lines submitted were divided in the following categories:
- B.2.2.1 Transmission lines, which fulfill the criteria recommended by the Group and hence are recommended to be certified as ISTS.
- B.2.2.2 Transmission lines, which do not fulfill the criteria recommended by the Group and hence may not be certified as ISTS.
- B.2.2.3 The transmission lines which are natural inter-state lines and hence need not be certified as ISTS.
- B.2.3 The complete category wise list of transmission lines submitted by STUs is enclosed at Annexure-B.II of Agenda.
- B.2.4 The result of the study were deliberated in 167th OCC meeting wherein it was highlighted that natural ISTS lines and lines emanating from ISGS do not require certification of NRPC and are automatically considered for inclusion in PoC charges. Thus, members are advised not to submit such lines for study.
- B.2.5 TCC recommended the following transmission lines for approval of NRPC for

## inclusion in PoC charges:

SI. No.	Name of Transmission Line	Owner STU
1.	220 kV Karian-Rajera	HP
2.	400kV S/C Merta - Heerapura Line	RVPN
3.	400 kV D/C Chhitorgarh-Bhilwara line	RVPN
4.	400 kV D/C Bhilwara-Ajmer line	RVPN
5.	132 kV Mahuakheraganj-Thakurdwara Line	PTCUL

B.2.6 Members were also informed that for the FY 2020-21, the proposal has only been received from Rajasthan.

B.2.7 Further, it was agreed that said certification of non-ISTS lines will be done only as per the methodology, approved in 36th NRPC meeting and in line with extant CERC (sharing of ISTS charges & losses) regulations. Any deviation from the extant certification methodology would require approval of NRPC.

#### NRPC Deliberation

B.2.8 NRPC concurred with the deliberations held in the TCC meeting and approved 5 no. of lines for inclusion in PoC charges"

As per the above, NRPC forum approved 5 lines for inclusion in PoC charges for 2019-20 including 220 kV Karian-Rajera. Further, NRPC observed that the said certification of non-ISTS lines will be done only as per the methodology, approved in the 36th NRPC meeting and in line with extant CERC (sharing of ISTS charges & losses) regulations.

- 23. The Commission asked the Petitioner whether, it has obtained certification from NRPC for a period beyond 2019-2020, to which the Petitioner replied that it had not obtained NRPC certification beyond 2019-2020.
- 24. In light of the above-quoted provisions of the 2010 Sharing Regulations and certification by NRPC for the 220 kV Rajera-Karian line for FY 2019-20, we observe that the said transmission line becomes eligible to be considered under ISTS for the period from 1.4.2019 to 31.3.2020
- 25. We observe that one circuit of 220 kV D/C transmission line from Karian -Rajera had not been charged as per records filed in the Petition. We also note that the COD certificate and approval of charging by NRLDC in 2018 have not been filed by the Petitioner. AS only one circuit of 220kV Karian -Rajera line had been charged during the period 1.04.2019- 31.03.2020, only half of the tariff approved by the State Commission for the D/C line shall be considered in the ISTS pool for the period

- 1.04.2019 31.03.2020. There is no certification from NRPC beyond this period, and accordingly, it has not been considered.
- 26. Petitioner has also sought approval of consideration of Karian Substation in PoC for the period 2019-2020 stating that it is part of the line. We are of the considered view that neither the Petitioner approached NRPC for certification of the substation at Karian nor has NRPC certified it as under ISTS. We find that the Sub-station is a separate transmission element for which the Petitioner has obtained a separate charging certificate from the HP electrical inspectorate and charging from SLDC. We are of the view that the Karian substation cannot be included in PoC since it has not been certified by NRPC for any period prior to 1.11.2020.
- 27. The issue is answered accordingly.

Issue No. 2: Whether the 220 kV D/C Karian to Rajera Transmission line and 33/220 kV GIS Sub Station at Karian are to be considered an Inter-State Transmission System for the purpose of recovering of transmission charges under the Sharing Regulations 2020 for the period from 1.11.2020-31.03.24?

- 28. The 2020 Sharing Regulations came into effect from 01.11.2020 and provides as follows:
  - "13 (13) An intra-State transmission system for which tariff is approved by the Commission shall be included for sharing of transmission charges of DICs in accordance with Regulations 5 to 8 of these regulations, only for the period for which such tariff has been approved."

As per above, there is no provision of RPC certification for intra-STS transmission systems carrying ISTS power. The approval of the transmission tariff by the Central Commission is required for the inclusion of the transmission system under Regulations 5 to 8 of the 2020 Sharing Regulations.

- 29. The Commission vide order dated 23.09.2022 in petition 57/MP/2022, has observed as follows:
  - "22. The Electricity Act 2003 lays down the framework of transmission system development in our Country as divided into intra-State transmission and inter-State transmission. The responsibility of development of inter-State transmission system lies with CTU, while the development of intra-State transmission system with STU. Inter-State transmission system is planned by CTU for evacuation and transmission of inter-state power after consultation with CEA and the concerned RPC, and mode

of implementation of inter-state transmission system is either Tariff Based Competitive Bidding (TBCB) route or Regulated Tariff Mechanism (RTM) route, as decided by the committee constituted by MOP, Govt. of India. However, there are some transmission lines connecting the systems of two neighboring states which have been constructed over the years by concerned States under bilateral arrangement or the intra-state lines converted into inter-state lines due to bifurcation of a State. Such transmission lines connecting two states are eligible as inter-State lines under Section 36(i) of the Act and they are being approved by the Commission as inter-State transmission system upon application by the Concerned States. Commission had also introduced identification of intra-State transmission lines as inter-State based on load flow under Sharing Regulations, 2010. However, load flow varies in a transmission system on continuous basis depending on the load-generation balance scenarios. A transmission system planned as intra-State transmission system cannot be termed as inter-State for one month and then intra-State for another month. There are cases where intrastate power flows through inter-State lines where such inter-State lines cannot be declared as intra-State. Since the network is meshed, it is not appropriate to identify an intra-State transmission system as inter-State and levy its transmission charges on beneficiaries of other States."

As per the above, it was observed that the Commission had introduced the identification of intra-State transmission lines as inter-State based on load flow under Sharing Regulations, 2010. However, load flow varies in a transmission system on a continuous basis depending on the load-generation balance scenarios. A transmission system planned as an intra-State transmission system cannot be termed as inter-State for one month and then intra-State for another month. There are cases where intrastate power flows through inter-State lines where such inter-State lines cannot be declared as intra-State. Since the network is meshed, it is not appropriate to identify an intra-State transmission system as inter-State and levy its transmission charges on beneficiaries of other States.

30. We have perused the planning aspect of the said transmission line as submitted by NRLDC. The agenda for the 29<sup>th</sup> Standing Committee on Transmission System Planning of Northern Region dated 22.07.2010, as proposed by HPPTCL, is as under:

"Agenda no -3: Creation of 220/132/33 kV Pooling station at Karian, Distt. Chamba, HP under implementation by HPPTCL with 220 kV connectivity with 400/200 kV Chamera Pooling Station near Chamera-II Power House under construction by PGCIL.

As per CEA's Master Plan for evacuation of power from Ravi basin projects in HP, a 220/400 kV, 2x315 MVA pooling station near Chamera-II power House with 400 kV (twin MOOSE) D/C connecting line up to Jalandhar is being built by PGCIL. The above transmission system stands approved in the 23rd meeting of the standing committee held on 16.2.2008 at Dehradun. In the close vicinity of 400/220 kV pooling station of PGCIL, HPPTCL is implementing 220/132/33 kV pooling station at Karian. For meeting the power requirements of the state, 2 Nos. 220 kV bays are required at 400/220 kV pooling station near Chamera-II for connecting 220 kV pooling station of HPPTCL at Karian.

The above requirement of HPPTCL for 2x220 kV bays at 400/220 kV pooling station of PGCIL near Chamera-II power House may kindly be included in the agenda for the meeting of standing Committee for approval of the Committee please."

As per the above, it was proposed by HPPTCL that HPPTCL is implementing a 220/132/33 kV pooling station at Karian for meeting the power requirements of the state and 2 Nos. 220 kV bays are required at the 400/220 kV pooling station near Chamera-II for connecting the 220 kV pooling station of HPPTCL at Karian

The aforementioned agenda was discussed in the Standing Committee meeting, which, vide the Minutes of meeting dated 20.01.2011, noted as under:

## "Agenda 12(ii): 220kV bays at Chamera Pooling station:

For evacuation of power from Ravi basin, a 220/400kV, 2x315 MVA pooling station near Chamera-II is under construction. In close vicinity of pooling station, HPPTCL is planning to implement 220/132/33kV S/s at Karian. HPPTCL requested for 2 nos of 220kV bays at Chamera Pooling station for connecting 220kV pooling station of HPPTCL at Karian.

# Members agreed for the above."

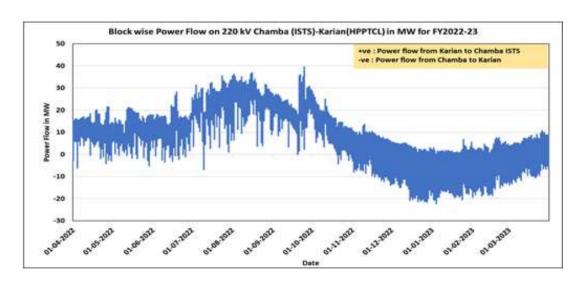
- 31. We observe that it is not the case of the petitioner that the said substation or line is required for evacuation of inter-state power. However, the Petitioner in the instant Petition has stated that the instant transmission system was envisaged to facilitate the evacuation of power from SHEPs in the Karian and Sahu areas of Chamba in addition to medium-sized projects in Kurthala/ Tissa areas; it was planned by STU owning to topographical peculiarities as well as the limited energy generation.
- 32. Petitioner has filed the status of the hydro projects as under:

Sr. No	Name of The Interfacing Substation	Name of the Projects	Voltage (KV)	Allotted		Current Status
				Yes/ No	Capacity (in MW)	
		BALIJ KA NALAH - II	1 33 1 766 1 350 1			
	33/220 KV	GEHRA	33	Yes	2.00	Under Clearance Stage. Date of SCOD Is 31.01.2024
1	SUBSTATI ON AT	BELIJ	33	Yes	5.00	Commissioned On 17.06.2012
	KARIAN	BALIJ KA NALAH -III	33	Yes	3.00	Under Clearance Stage. SCOD Is 12.01.2024
		BALENI KA NALAH	33	Yes	2.00	IA Yet to be Signed
		CHANNI	33	Yes	5.00	IA Yet to be Signed

		SAMWARA	33	Yes	2.50	Under Clearance Standard Office Office SCOD 28.01.2024	age. Is
		DUNALI	33	Yes	5.00	Commissioned 15.05.2013	on
	TOTAL				28.00		

From the above table, it is noted that only 13.50 MW capacity has been commissioned. The remaining capacity is under clearance.

- 33. We also take note of submissions of NRLDC, which have submitted that the instant assets were planned for drawl of power by the State. NRLDC, after a detailed blockwise power study power flow study during FY2022-23, established as under:
  - (a) The direction of power flow in the subject transmission line varies in accordance with the net load and generation pattern at Karian S/s.
  - (b) When generation at Karian S/s is less than the load, the power flow direction is from Chamba (Chamera-II) S/s to Karian S/s and vice-versa. In both cases, the subject line is either being used for evacuation of power from intra-state generators to HP (through ISTS) or for the drawal of power by the load of HP, i.e., connected at Karian S/s.



NRLDC also submitted that Hydro-rich states like Himachal Pradesh have peculiar demand patterns. The surplus intra-state generation is injected into the ISTS during the high hydro season, while during the lean hydro period when demand is high, it draws power from ISTS. NRLDC recommended that subject assets should be treated as an intra-State system and should not be included under the Sharing Mechanism.

- 34. We observe that assets in the instant petition were planned and implemented by the State Transmission Utility, for meeting the power requirements of the state.
- 35. In view of above discussions, we are not inclined to consider the 33/220 kV GIS Sub Station at Karian along with 220 kV D/C transmission line from Karian to Rajera as an inter-State system. We hold that it shall continue to be an intra-State system under the jurisdiction of the State Commission. Accordingly, the Petitioner's prayer on this issue is rejected.
- 36. The cost of filing the instant Petition is to be adjusted in terms of the Commission's Order in Petition no. 550/TT/2014 dated 23.09.2015.
- 37. The Petition No. 05/MP/2022 is disposed of in terms of the above.

Sd/-Sd/-Sd/-

(P. K. Singh) (Arun Goyal) (Jishnu Barua) Member Member Chairperson