



**TEESTAVALLEY POWER
TRANSMISSION LTD.**

**(NOW, SIKKIM POWER
TRANSMISSION LTD.)**

**Public Hearing on Draft CERC
Tariff Regulations, 2024**

Scheduled on 15.02.2024

Introduction

- **Sikkim Power Transmission Limited** (formerly Teestavalley Power Transmission Ltd.), (SPTL), a JV of Sikkim Urja Limited & POWERGRID, was entrusted with the responsibility of construction, operation & maintenance of the 400 kV D/C Quad Teesta III – Kishanganj Transmission Line.
- The transmission line of length 215 km (589 towers) passes through Mangan, Gangtok & Namchi Districts of Sikkim, Darjeeling District of West Bengal and Kishanganj District of Bihar.

- **COB of the transmission line project was progressively achieved on 13.02.2019 as mentioned below:**

Description of Asset	COB
400 kV Teesta III – Rangpo Circuit 2 – 36 km	17.01.2017
400 kV Teesta III – Dikchu Circuit 1(a) – 14 km	14.04.2017
400 kV Dikchu – Rangpo Circuit 1(b) – 22 km	02.07.2018
400 kV Rangpo – Kishanganj Circuit 2(a) – 179 km	06.01.2019
400 kV Rangpo – Kishanganj Circuit 1(c) – 179 km	13.02.2019
One (1) no. 400 kV Line Bay along with one (1) no. 63 MVAR Switchable Line Reactor at 400 kV Kishanganj Gas Insulated Substation of POWERGRID	06.01.2019
One (1) no. 400 kV Line Bay along with one (1) no. 63 MVAR Switchable Line Reactor at 400 kV Kishanganj Gas Insulated Substation of POWERGRID	13.02.2019

Synopsis

- The O&M expenditure allowed by CERC vis-à-vis actual O&M expenditure incurred by SPTL is tabulated below:

Financial Year	Total O&M Charges allowed by CERC (in Rs., Lakh)	Total actual O&M expenditure incurred by SPTL (including insurance expenditure) in Rs., Lakh	Percentage of O&M Charges allowed by CERC vis-à-vis actual O&M Expenses
2019-20	374.25	1,465.16	~25%
2020-21	387.30	1,548.51	~25%
2021-22	400.90	1,658.30	~24%
2022-23	415.04	1664.46	~25%

- It can be seen that actual O&M expenditure incurred by SPTL is about 4 times the O&M charges including insurance charges (and about 3 times of O&M charges excluding insurance charges).

Draft Regulation (Regulation 36)

Regulation (36): Operation & Maintenance Expenses

Sub Regulation (3): Transmission System

Provision of higher O&M charges has been made in the new draft regulation for the transmission lines passing through hilly and mountainous regions as per the following;

Quote

..

Provided further that the O&M expenses for Transmission licensees whose transmission assets are located solely in NE region, States of Uttarakhand, and Himachal Pradesh, the Union Territories of Jammu and Kashmir and Ladakh shall be worked out by multiplying 1.50 to the normative O&M expenses prescribed above.

Unquote

Comments of SPTL (Regulation 36)

- Regions like the State of Sikkim and Darjeeling District in West Bengal have not been mentioned.*
- The terrain in Sikkim (entirely a hilly state) and Darjeeling (predominantly hilly terrains) in West Bengal are also equally difficult, if not more and engulfed in between mountains and hills and are extremely prone to landslides, rockslide, shooting stones, rock mass failure etc.*
- The 215 km long 400 kV Teesta III – Kishanganj D/C transmission line of SPTL is an Inter-State Transmission line with the following distribution :**

State	Transmission Line Length	Percentage of Total line
Sikkim	56 km	26%
West Bengal (Darjeeling District)	87 km	41%

- 67% of the line falls in Sikkim and Darjeeling District in West Bengal, which is hilly terrain and 33% of the line falls in Bihar which is plain terrain.**

Comments of SPTL (Regulation 36)

- *Further, use of the word “solely” excludes transmission utilities, who have a major portion of their transmission assets (say greater than 60%) in the hilly terrains and only a minor portion of their transmission assets in plain terrain, from benefitting through this provision of the regulation.*
- *Therefore, it would be prudent to identify the transmission licensees eligible for higher O&M charges as those having a majority of their transmission assets (greater than 60%) located in NE Region, State of Sikkim, Darjeeling District of West Bengal, States of Uttarakhand and Himachal Pradesh, the Union Territories of Jammu and Kashmir and Ladakh.*

High O&M Cost (Regulation 36)

❖ Repair & Maintenance Expenses

- High R&M cost due to difficult geographic locations, movement restriction, high rain fall, high mobilization & transportation cost, tower & foundation damages due soil erosion, land slides, land settlements, vegetation management etc.
- High patrolling frequency required due to vulnerable locations.

❖ Economies of scale towards establishment costs

- SPTL ,under the Companies Act 2013 is obliged to fulfill statutory compliances having Board of Directors, Managing Director, Chief Financial Officer, Company Secretary and other KMPs.
- SPTL being a single project/asset company, the financial burden of maintaining the office and minimum key management persons as per Companies act is loaded on income from the single asset.
- The hiring cost of stores (03 nos.) and site offices (05 nos.) are utilized for maintaining the single line along the route which also affects the economy of scale as compared to T/L offices maintaining multiple lines from the single establishment.

Hon'ble Commission may allow higher O&M expenses (3 times the O&M norms) for SPTL and similar Single Asset companies and having majority of transmission assets (greater than 60%) in hilly terrains.

High Insurance Expenses (Regulation 36)

- Insurance for complete transmission line including substation equipment is required to be maintained by the company.
- In SPTL, Insurance coverage is taken through Competitive Bidding. The Actual Insurance Premium paid by SPTL in FY 2022 was about 0.20% of gross block. However, insurance charges/self insurance reserves have been considered as 0.09% of gross fixed asset value and is included in O&M charges.
- The expenditure incurred on insurance premium for the FY 2019-20, 2020-21, 2021-22, 2022-23 and the O&M charges approved by the commission are as below:-

FY	Expenditure towards Insurance (Rs., in Lakhs)	O&M Expenses approved by the commission in (Rs., in Lakhs)	Insurance Premium as percentage of O&M Expenses allowed by CERC
2019-20	124.66	374.25	33%
2020-21	227.08	387.30	59%
2021-22	298.83	400.90	75%
2022-23	316.26	415.04	76%

Approx 3/4th of the allowed O&M charges are incurred against insurance charges of transmission assets.

High Insurance Expenses (Regulation 36)

The reason of high insurance premium are due to following;

- a) High capital cost of assets specially in hilly regions (approx 3 times of plains)*
- b) High risk premium due the nature of terrain through which lines are passing.*

❖ CERC has made the following observation regarding insurance for hydro generating stations in Explanatory Memorandum:

“The Commission, with regard to the increase in insurance premium for hydro generating stations, is of the view that the hydro generating stations are at utmost risk on account of an increased occurrence of natural calamities in their vicinity which may result in a substantial increase in their insurance premium. Therefore, the Commission proposes to allow the increase, if any, in insurance premiums for hydro generating station on a case-to-case basis after due prudence check.”

The Hon’ble Commission has recognized the risks faced by hydro generating stations due to occurrence of natural calamities and hence has allowed insurance premiums on prudence check, however, has not considered the same for transmission lines having similar risk of natural calamities.

❖ At present, norms do not exist to allow separate expenditure towards insurance cost for transmission licensees whose assets are predominantly in hilly area and the same may be allowed by the commission after prudence check on actual basis.

Draft Regulation (Regulation 3)

“Definitions:-

In these regulations, unless the context otherwise requires: -

(12) 'Capital Spares' means spares individually costing above Rs. 20 lakh, which is maintained by the generating company or the transmission licensee over and above the initial spares.”

Comments of SPTL:

- The nature of transmission assets is such that during most of the major breakdown events in transmission line, cost towards individual spares does not exceed Rs. 20 lakhs. However, as frequency of such incidents is higher, the benefit of the capitalization of spares over Rs. 20 lakhs will be seldom used by transmission licensees.
- Costing of Capital Spare above Rs. 20 lakhs is more closely applicable / related to large plants & machinery mostly in power plants.

It is therefore prayed that **‘Capital Spares’ may be defined as spares individually costing above Rs. 20 lakhs in case of spares maintained by the generating company and Rs. 5 lakhs in case of spares maintained by the transmission licensee, over and**

Conclusion

- Hon'ble Commission may specify the State of Sikkim and Darjeeling District of West Bengal and not use the word **solely** in the draft Regulation 36, as it restricts transmission utilities who have a major portion of their transmission assets (greater than 60%) in the hilly terrains and only a minor portion of their transmission assets in plain terrain, from benefitting from the regulation as in the case of SPTL whose 67% of the transmission assets are located in the State of Sikkim and Darjeeling District of West Bengal in hilly terrain.
- The Hon'ble Commission may allow higher O&M expenses (3 times the O&M norms) for SPTL and similar Single Asset companies and having transmission assets in hilly terrains.
- Re-imburement of Insurance charges separately on actual basis after prudence check to SPTL and licensees having transmission assets in difficult terrains and of high capital cost.
- Define 'Capital Spares' as spares individually costing above Rs. 20 lakhs in case of spares maintained by the generating company and Rs. 5 lakhs in case of



THANK YOU