

**Before**

**UTTARAKHAND ELECTRICITY REGULATORY COMMISSION**

**Petition No. 10 of 2019**

**In the Matter of:**

*Suo-moto* proceeding initiated in the matter of transfer of assets pertaining to 66 kV Substation and Lines from UPCL to PTCUL.

**And**

**In the Matter of:**

Uttarakhand Power Corporation Limited. (UPCL),  
VCV Gabar Singh Urja Bhawan, Kanwali Road,  
Dehradun.

**&**

Managing Director,  
Power Transmission Corporation of Uttarakhand Ltd.,  
Vidyut Bhawan, Majra,  
Dehradun.

**...Respondents.**

**Coram**

**Shri Subhash Kumar      Chairman**

**Date of Order: April 10, 2019**

**ORDER**

This Order relates to the *suo-moto* proceeding initiated in the matter of transfer of assets pertaining to 66 kV Substation and Lines from UPCL (hereinafter referred to as distribution licensee) to PTCUL (hereinafter referred to as transmission licensee) for ensuring the compliance of the provisions of the Act, Regulations, respective Licence conditions and Commission's Order dated 12.09.2018 in the matter of application seeking approval for the investment on the project covering the construction of 01 No. 66/33 kV Substation & its 0.60 Km associated 66 kV Line.

**Background**

2. Earlier, the Commission in its Order dated 12.09.2018 in the matter of 'application seeking approval for the investment on the project covering the construction of 01 No. 66/33 kV Substation & its 0.60 Km associated 66 kV Line', had observed that

the distribution licensee had encroached the purview of the transmission licensee and had committed an *ultra vires* act by constructing a 66 kV S/s which do not fall under its jurisdiction. However, the Commission did not find it prudent to keep the constructed sub-station as stranded asset as it would be an overall loss for the State. Hence, in the interest of the consumers of the State, the distribution licensee was allowed to charge the newly constructed 66/33 kV sub-station. Accordingly, the Commission at Para 27 of its aforesaid Order dated 12.09.2018 had decided to initiate a separate proceeding in the matter of transfer of assets pertaining to 66 kV substations and lines in accordance with the Electricity Act, 2003 and conditions of the respective licences issued to the licensees.

3. Thereafter, the Commission had issued show cause notices to transmission licensee & distribution licensee vide its letter no. 1219 & 1220 dated 05.12.2018 respectively.
4. The Commission in its notice to transmission licensee had directed it to submit as to why the entire 66 kV network including S/s & Lines should not be transferred to transmission licensee from distribution licensee and further directed it to submit its reply to the show cause notice under affidavit before the Commission latest by 07.01.2019.
5. Further, the Commission in its notice to distribution licensee had directed it to furnish the details of all the assets pertaining to 66 kV being maintained by it and also submit as to why the entire 66 kV Network including S/s & Lines should not be transferred to transmission licensee. Moreover, the Commission directed it to submit its reply to the show cause notice under affidavit before the Commission latest by 07.01.2019.
6. Incompliance to the show cause notice, transmission licensee vide its letter no. 89 dated 10.01.2019 submitted its compliance. In its aforesaid letter transmission licensee has submitted following reservations with regard to transfer of 66 kV S/s & lines being maintained by the distribution licensee to it:-

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- (1) *All the 66 kV substations have 66/33 kV, 33/11 kV Transformers, 33 kV & 11 kV feeders at their common switchyard and there is common control room for 66 kV panels, 33 kV panels, T/F panels and 11 kV Feeder Panels. The lodging of complaints*

*of electricity, consumers billing centre, revenue realization works etc. are also being carried out by UPCL at these substations. The campus of substations have residential/offices of employees of UPCL.*

- (2) UPCL has incurred expenditure and established requisite infrastructure, manpower along with inventories as a integral part of distribution system to maintain these 66/11 kV distribution network for distribution of power in its licensed area of business and these assets forms the part of gross fixed assets of UPCL for which UPCL is getting Annual Revenue requirements as approved by Commission since 2004 from Consumers of state in terms of tariff. PTCUL needs additional skilled manpower and have to develop basic infrastructure along with inventories for maintaining these assets which will lead to additional burden to consumers in terms of cost of supply. The matter of recruitment of additional manpower is not within the sanctioned strength. Further, GoU has issued an Order dated 25.09.2017 on 7<sup>th</sup> Pay Commission that prior approval of GoU needs to be taken for any recruitment of manpower post 7<sup>th</sup> pay Commission.*
- (3) Transferring of these assets has far reaching consequences on Financial & Commercial health of UPCL and PTCUL. UPCL has legal rights on these assets and will take time in inter-corporation transfer of assets. Finalization of Transfer scheme between PTCUL, UPCL and UPPTCL has been taking time since creation of PTCUL and reflecting on ARR of PTCUL.*
- (4) As these 66 kV networks are more than 30 years old and have outlived their useful life, considering the necessity of the reliable supply of power in the region and N-1 contingency criteria, PTCUL proposes to construct a separate 132 kV/220 kV transmission system. PTCUL will face difficulty in ensuring reliable supply with the existing system as these network are very old and frequent trippings will lead to consumer agitation in hilly region.*
- (5) As both entities i.e. UPCL and PTCUL are owned by the GoU, the matter will have to be taken up with GoU before transferring of these assets as these assets are in the ownership of UPCL. “*

7. Distribution licensee vide its letter no. 342 dated 02.02.2019 requested the Commission for grant of additional time upto 28.02.2019 for submission of its reply to the show cause notice dated 05.12.2018. Thereafter, distribution licensee vide its letter no. 845 dated 18.03.2019 submitted its reply to show cause notice

dated 05.12.2018 submitting the following details of 66 kV network being maintained and operated by it:-

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**A. 66 kV Srinagar-Joshimath line**

1. Total length of 66 kV line : 121 Km.  
Conductor in use : Dog  
Total no. of Towers : 423
2. Sub-stations connected:
  - a. 66/33/11 kV Sub-station, Karanprayag
    - (i) (7.5+3+5) MVA, 66/33 kV Sub-station
    - (ii) 1x5 MVA, 33/11 kV, Sub-station
  - b. 66/33/11 kV Sub-station, Kothiyalsain
    - (i) 1x7.5 MVA, 66/33 kV, Sub-station
    - (ii) 2x5 MVA 33/11 kV, Sub-station
  - c. 66/33/11 kV Sub-station, Marwari, Joshimath
    - (i) 1x15 MVA 66/33 kV, Sub-station
    - (ii) 2x5 MVA 33/11 kV, Sub-station

**B. 66 kV Almora-Pithoragarh line**

1. Total length of 66 kV line : 69.50 Km.  
Conductor in use : Dog  
Total no. of Towers : 206
2. Line partially being used at 33 kV level.
  - a. 220/33 kV Almora to 33/11 kV Sub-station, Toli, Daniya (Approx. 32 Km.)  
33/11 kV Sub-station connected
    - (i) (1.5+5) MVA, Toli
    - (ii) (1x5) MVA, Daniya
  - b. 220/33 kV Pithoragarh to 33/11 kV Sub-station, Kanthgaon (12.30 Km.)  
33/11 kV Sub-stations connected:
    - (i) 2x3 MVA, Kanthgaon
    - Approx. 25.20 Km. line between 33/11 kV Sub-station, Kanthgaon to 33/11kV Sub-station, Daniya is lying unutilized.

**C. 66 kV line from 220/33 kV Sub-station, Chamba-Pathri Power House**

1. Total length of 66 kV line : 85.00 Km.

*Line partially being used at 33 kV level.*

a. *220/33 kV Chamba to 33/11 kV Sub-station, Narendranagar (Approx. 55 Km.)-Dhalwala.*

*33/11 kV Sub-stations connected :*

(i) *2x5 MVA, 33/11 kV Sub-station, Narendranagar*

(ii) *2x3 MVA, 33/11 kV Sub-station, Gaja*

- *Approx 30 Km. line between 33/11 kV Sub-station, Narendranagar to Pathri Power House is lying unutilized.*

**D. 2x15 MVA, 66/33 kV Sub-station, Manglore''**

8. Thereafter, the Commission decided to hear the matter on 02.04.2019 and issued notices to distribution licensee and transmission licensee vide its letter no. 1790 and 1792 dated 19.03.2019.
9. On the scheduled date of hearing, the Commission heard both the respondents in the matter. During the course of hearing, transmission licensee re-iterated its submission dated 10.01.2019 and submitted its reservations w.r.t. the transfer of 66 kV Substation and lines from distribution licensee to transmission licensee. Further, transmission licensee submitted that majority of 66 kV network is being maintained by distribution licensee, therefore, it is in a better position to handle the same as additional inventory would be required at its end for operation and maintenance of the said 66 kV network.
10. During the course of hearing, the counsel of distribution licensee submitted before the Commission that as of now only 66 kV Srinagar-Joshimath line & its associated 66 kV Substation and 66/33 kV Substation, Manglore are being used at 66 kV level by it and all other lines are partially being used at 33 kV level to maintain reliable power supply in the connected regions. Further, during the hearing, distribution licensee submitted before the Commission that they have No Objection in handing over of 66 kV network to transmission licensee.

**Commission's Observations, Views & Directions:-**

11. On examination of the submissions made by the Respondents in the matter, following has been observed:-

- (1) Clause 2 of Uttaranchal Transmission Licence (Licence No. 1 of 2003) defines Transmission System and distribution system as:-

*"Transmission System means the system consisting mainly of extra high voltage electric lines having design voltage of 66 kV and higher, owned or controlled by the Licensee, and used for the purposes of the transportation of electricity between the switchyards of two Generating Sets or from the switchyard of a Generating Set to a substation, or between substations, or to or from any external interconnection and includes all bays/equipment up to the interconnection with the Distribution System, and any plant, apparatus and meters owned or used in connection with the transmission of electricity, and shall include any other system which the Commission specifically declare it to be a part of the Transmission System;*

*"Distribution system means any system consisting mainly of cables, service lines and overhead lines, electrical plant and meters having design voltage of 33 kV and under and shall also include any other system of higher or lower voltage as the Commission may specifically recognise. A Distribution System shall not include any part of the Transmission System including such part of 33 kV design voltage as the Commission may by order specifically include as part of the Transmission System."*

- (2) With regard to the existing 66 kV network is concerned, it has been observed that 66 kV network do not constitute a major portion of the T&D network of Uttarakhand. Basically, existing 66 kV network in the State of Uttarakhand was created in pre Electricity Act, 2003 period i.e. prior to unbundling of the State Electricity Boards. In a post Electricity Act, 2003 era, separate Licence for Transmission and Distribution of electricity have been issued by the Commission including the definition of the voltage levels for Transmission & Distribution licensee under which they are authorised to develop, operate & maintain. As an exceptional case, some portion of the existing 66 kV network remained with distribution licensee for Operation & Maintenance in a post Electricity Act, 2003 (with separate Transmission Licence) due to field constraints.

- (3) The Commission at Para 20 (7) of its Order dated 12.09.2018 had held that :-

*“...in the interest of the State Power Sector, it is imperative to keep the Ownership & O&M of the 66 kV S/s & lines in the hands of PTCUL which is solely accountable for the upkeeping of the 66 kV S/s & lines under the Licence and Regulations. Moreover, the ARR of the Transmission Licensee is linked with the availability of 66 kV and above network which by virtue of norms defined in MYT Regulations makes PTCUL accountable for reliable and quality power supply in the State. ”*

From the above statement it is observed that the back-bone of the State Transmission Network i.e. EHT network has to be maintained and operated by transmission licensee so that the overall availability and quality of power supply is maintained across the State.

- (4) The 66 kV and above network in the State is not only used for serving the Power demand across the State but is also used for evacuating the power from & to the various corners of the State. Therefore, the overall availability of the Power System especially the EHT network becomes all the more important as its non-availability would result in power loss to the consumers as well as generation loss to the generators of the State.
- (5) Further, the calculation of voltage wise losses and upcoming Intra State ABT/Deviation Settlement Mechanism makes it all the more imperative to clearly demarcate the voltage levels of ownership & operation for the Transmission & Distribution licensee.
- (6) Earlier, the Commission in its Order dated 12.09.2018 had observed that the distribution licensee had adopted a nonchalant approach while planning and conceptualization of 66/33 kV S/s and had failed to consider vital issues viz. condition & adequacy of incoming feeder, N-1 contingency criteria and adequate scope for future expansion, which are the pre-requisites for establishing a reliable & robust EHT network. In this regard, the Commission has observed that the responsibility of establishing a reliable & robust EHT network is of the transmission licensee who has to play as an important link between various entities namely the Central Transmission Utility, State Transmission Utility & the Distribution Licensee operating within State.

(7) Distribution licensee has been conferred with a responsibility of developing, operating & maintaining distribution system of 33 kV & below in the State. In this regard, the Commission is of the view that in general the existing dilapidated condition of the protection system at 11 kV S/s, 33 kV S/s & lines of the Petitioner is vociferously speaking that distribution licensee is finding it difficult to properly operate & maintain the assets which are under its control as per licence conditions.

(8) With regard to details of 66 kV substations and lines submitted by distribution licensee vide its letter dated 02.02.2019, the Commission has observed that some of the 66 kV substations & lines have been charged at 33 kV. Whereas, certain 66 kV lines are not being utilized/lying abandoned.

12. The Commission is of the view that one of the intents of the Electricity Act, 2003 was to clearly demarcate the boundaries of operation of Generation, Transmission & Distribution so that it results in better planning, efficiency and accountability in the Power Sector. Therefore, in the present context it is imperative to implement the aforesaid intent of the Act by clearly demarcating and enforcing the voltage levels of operation for transmission and distribution licensees operating in the State.

13. With regard to the reservations shown by transmission licensee towards taking over of 66 kV network from distribution licensee as stated above, the Commission is of the view that as per the provisions of Section 39(2)(c) and Section 40(a) of the Electricity Act 2003 as stipulated below:-

*“39(2) The functions of the State Transmission Utility shall be-*

*...*

*(c) to ensure development of an efficient, coordinated and economical system of intra-state transmission lines for smooth flow of electricity from a generating station to the load centres;”*

*“40. Duties of transmission licensees.- It shall be the duty of a transmission licensee-*



*(a) to build, maintain and operate an efficient, co-ordinated and economical inter-State transmission system or intra-State transmission system, as the case may be;"*

The responsibility of developing, building, maintaining & operating an efficient, coordinated and economical system of intra-state transmission system is with State Transmission Utility (STU) and transmission licensees operating within the State which in the instant case happens to be same i.e. PTCUL. Therefore, STU/transmission licensee should not behave as spectator and should proactively perform its duties/responsibilities bestowed to it under the Licence and Regulations and not try to run away from its responsibility/duties.

14. The Commission also took cognizance of the frequent trippings occurring at 66 kV systems spreading more than 120 km emanating from Srinagar (Garhwal) to Joshimath catering to the load of Karnprayag, Gopeshwar & Shri Badrinath Dham (Joshimath) areas having the famous Hindu shrines and also various strategic defense establishments. In this regard, the Commission is of the view that for such long distance power networks with these important places and having strategic defense importance, proper planning & development of network w.r.t. N-1 criteria and adequacy for future expansion is of utmost importance. Hence, 66 kV system in such areas cannot be kept at the mercy of the distribution licensee for which it is not having jurisdiction as per the licence conditions.
15. With regard to unutilized assets of 66 kV which are under the control of distribution licensee, the Commission of the view that the same are integral part of 66 kV lines which are currently unutilized/are lying abandoned and provides an opportunity for transmission licensee for utilization of the same in future at same voltage level or by upgrading it to a higher voltage level.
16. In light of the above, the Commission hereby orders that:-
  - (1) The Following 66 kV Substations as per Table 1 and Lines as per Table 2 currently under operation and being maintained by distribution licensee shall be transferred to transmission licensee latest by **31.12.2021** :-

**Table 1: 66 kV Substation under Operation**

Sl. No.	Name of 66 kV S/s	Capacity	Remark
1	66/33 kV S/s Karanprayag	7.5+3+5=15.5 MVA	66/33 kV network shall be transferred to transmission licensee. However, 33/11 kV S/s of 1x5 MVA shall remain with distribution licensee.
2	66/33 kV S/s Kothiyalsain	1x7.5 MVA	66/33 kV network shall be transferred to transmission licensee. However, 2x5 MVA, 33/11 kV S/s to remain with distribution licensee.
3	66/33 kV S/s Marwari	1x15 MVA	66/33 kV network shall be transferred to transmission licensee. However, 2x5 MVA, 33/11 kV S/s to remain with distribution licensee.
4	66/33 kV S/s Manglore	2x15 MVA	66/33 kV network shall be transferred to transmission licensee.

**Table 2: 66 kV Line under Operation**

Sl. No.	Name of 66 kV Line	Length/ Conductor Details	Remark
1	66 kV Srinagar-Joshimath line	121 Km./Dog	Shall be transferred to transmission licensee.

(2) With regard to the following 66 kV lines, as per Table 3 below, presently under the control of the distribution licensee which are not being utilized/lying abandoned, the Commission directs both the licensees to sit together and mutually settle the issues once for all for maximum utilization of the assets in the interest of the consumers of the State. Further, a report in this regard shall be submitted by the distribution licensee before the Commission within three months of this Order.

**Table 3: 66 kV Lines Lying Abandoned/Not under Operation**

Sl. No.	Name of 66 kV Line	Length/ Conductor Details	Remark
1	Line between 33/11 kV S/s, Kanthgaon to 33/11 kV S/s, Daniya	25.20 Kms/Dog	Currently line is unutilized/ abandoned.
2	Line between 33/11 kV S/s, Narendarnagar to Pathri Power House.	30 Kms/Dog	Currently line is unutilized/ abandoned.

- (3) The 66 kV lines charged at 33 kV and being utilized by the distribution licensee shall remain with distribution licensee.
- (4) Both the licensees are directed to install metering system at interface points as per CEA (Installation and Operation of Meters) Regulations, 2006 and amendments thereafter/MCDAR of UERC (State Grid Code) Regulations, 2016.
- (5) Both the licensees are directed to ensure the operation & maintenance of lines & substations of voltage levels as defined in their respective licences and also adhere to the applicable provisions of the Regulations.

Ordered accordingly.

**(Subhash Kumar)**  
**Chairman**