

Before

UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

Petition No. 34 of 2014

In the Matter of:

Approval of Capital Investment under Para 11 of the Transmission Licence [Licence No. 1 of 2003].

In the Matter of:

Power Transmission Corporation of Uttarakhand Limited (PTCUL) ...Applicant

AND

In the Matter of:

Investment Approval (Change in scope) for Construction of 132 KV GIS substation Bageshwar with 6x5 MVA 132/33 KV Transformer Capacity (Revised DPR under REC-II Scheme).

Coram

Shri Subhash kumar	Chairman
Shri C.S. Sharma	Member
Shri K.P. Singh	Member

Date of Order: 26th December, 2014

ORDER

The Petitioner, Power Transmission Corporation of Uttarakhand limited (PTCUL) has sought approval for Construction of 6x5 MVA, 132 KV GIS substation at Bageshwar vide their Application No.370/MD/PTCUL/UERC dated 25.03.2014 under Para 11 of Transmission Licence [Licence No. 1 of 2003].

2. The Commission had earlier vide its Order dated 23.10.2007 given investment approval for construction of 2x15 MVA 132 kV AIS substation at Bageshwar with project cost of Rs. 15.41 Crore.
3. The Petitioner has stated that the cost involved in land development in hills for construction of AIS substation is very large and involves felling of large number of trees. Therefore, Board of PTCUL has decided that henceforth all the substations in hills shall be based on GIS technology, therefore, GIS substation in place of AIS S/s is being proposed at Bageshwar.
4. The proposed work comprises of Construction of 132 kV GIS substation at Bageshwar consisting of 2 banks of single phase 5 MVA transformers each (6x5 MVA 132/33 kV transformer capacity). The capital cost structure of proposed scheme is presented below:

Table:1 Details of Capital Cost structure under PFC Scheme

Particulars	Proposal sent to PFC (as per DPR) (Rs. Crore)	Considered by PFC (Rs. Crore)
Construction of 132 kV (6x5MVA) GIS substation at Bageshwar	92.78	70.95
Total	92.78	70.95
Debt (70% of above)	64.95	49.66
Equity (30% of above)	27.83	-

5. The Petitioner has proposed PFC loan assistance at the rates prevailing on the date of each disbursement. The rate prevailing on the date of sanction is 12 % per annum with three years reset, after a rebate of 0.25% for timely payment.
6. As per the PFC sanction letter, the loan shall be repaid by PTCUL in 60 (Sixty) equal quarterly installments. The Petitioner would pay interest on the loan at the applicable rate of interest from the date of release of first installment.
7. A motion hearing was fixed in the Commission's office on 23.042014 to decide admissibility of the Application.
8. The hearing in the matter was held on the stipulated date and time and in the daily Order passed by the Commission it was order that:

- “i. PTCUL shall submit, in each case, a detailed report in chronological order justifying the delay in implementation of the projects and detailed reasons for change of scope/specifications including transformer capacity, type of sub-station etc. PTCUL is ordered to give a comprehensive presentation before the Commission on 06.05.2014 at 3:30 PM.*
- ii. PTCUL should also submit by the said date the current status of all the ongoing projects for which Commission approval has already been accorded and which are yet to be completed and put to use.”*

9. PTCUL vide letter No. 497/Dir.(Projects)/PTCUL/UERC dated 26.07.2014 submitted the compliance of the above directions given in the daily Order dated 23.04.2014.
10. In the report submitted by PTCUL, it was stated that the main reason for the delay in implementation of the originally approved AIS substation was delay in allotment of land by the concerned Government authorities. The process for acquiring the land was started in August 2005 and even after elapse of more than 09 years the land was not transferred in the name of PTCUL mainly due to the agitation from the local villagers. Further, due to change in location/dimensions of the proposed land, a revised DPR proposing GIS substation instead of originally planned AIS substation was prepared.
11. In the light of the above, PTCUL was directed vide UERC letter No. UERC/Misc. App. No. 14 of 2014/1027 dated 02.09.2014 to submit in affidavit, that the selected land for construction of the substation and the corridor for construction of the connecting line i.e. 132 kV Ranikhet-Bageshwar line has been transferred in the name of PTCUL and that there is no opposition from local villagers.
12. PTCUL vide letter No. 680/Dir.(Projects)/PTCUL/UERC dated 05.09.2014 submitted in affidavit that the Board of PTCUL had in its 38th Meeting held on 09.10.2012 decided that as far as possible all new substation in the hills shall be based on GIS technology, further, the Board of PTCUL in its 41st Meeting held on 06.08.2013 decided to change the scope of the substation at Bageshwar from AIS to GIS. PTCUL further submitted that a forest land has been allotted to PTCUL on 30 years lease by the State Government in village Kafalkhet, District-Bageshwar, for construction of 132 kV GIS S/s. The Petitioner further

informed that the lease deed between PTCUL and DFO Bageshwar has already been signed on 15.06.2011 and that the said land has been fenced by PTCUL and that now there is no opposition from local villagers.

13. The Commission further forwarded following observations to PTCUL for clarification vide UERC letter No. 1234 dated 25.09.2014:

- "1. Since PTCUL proposes to switch over to GIS S/s instead of earlier proposed AIS S/s to avoid huge land development work, therefore, in this context PTCUL must clarify that why two banks of 03 nos., 5MVA transformers each are being proposed which might occupy more land space including involvement of more land development work.*
- 2. PTCUL should submit the status of activities namely NIT, Tender finalisation and award of contract etc. with respect to the proposed GIS S/s.*
- 3. PTCUL should submit the progress of 132 kV Ranikhet-Bageshwar line under construction.*
- 4. On preliminary examination of the estimate for the proposed S/s reveals that PTCUL has included cost of around Rs. 2.00 crores against procurement of testing & maintenance equipment. PTCUL must give justification for including these equipments in the cost estimate of the proposed S/s works.*

14. PTCUL gave point wise reply to the aforesaid observations made by the Commission vide its letter No. 832/Director (Projects)/PTCUL/UERC dated 09.10.2014. With regard to point no. 1 PTCUL stated that the land requirement for 2 banks of single phase 03 nos., 5 MVA transformers each shall be slightly higher than 2 Nos. three phase 15 MVA transformers but due to narrow approach road, sharp bends and narrow bridges in the route it shall be easier to transport smaller capacity transformers to the substation site. In reply to point no. 2 PTCUL stated that after tender finalization LOA to the successful bidder has been issued on 26.09.2014. With respect to progress of 132 kV Ranikhet-Bageshwar line PTCUL informed that retendering for the work of construction of the said line is under progress.

15. PTCUL vide Commission vide letter No. 1522 dated 12.11.2014 was directed to submit the following additional information:

1. *The cost of the work awarded to the firm issued LOA for construction of GIS S/s at Bageshwar.*
 2. *Completion period of the S/s.*
 3. *Status of the land development work of the S/s including approach road and the time required to construct the road to have an access to the site of the S/s to start the construction activity.*
 4. *The present status of retendering activity and the expected time to award the work for construction of 132 kV Ranikhet-Bageshwar line. PTCUL may also be asked to submit the tentative date of completion of the said line.*
 5. *The present position of clearing of line corridor after grant of forest clearance by the forest department on 09.05.2014.*
 6. *Submit a plan how the licensee proposes to ensure that completion of GIS Substation matches with completion of 132 kV Ranikhet-Bageshwar line. Also submit Bar chart programme for completion of both these works namely 132 kV Ranikhet-Bageshwar line and 132 kV GIS S/s, Bageshwar.*
16. PTCUL vide letter No.1042/Dir.(Projects)/PTCUL/UERC dated 19.11.2014 submitted point wise reply to the aforesaid letter of the Commission stating that the cost of work (limited to supply, erection and civil works of substation) awarded to the firm has been at a cost of Rs 45.92 Crores and the completion period for the substation shall be 18 months from the date of issue of the letter of allotment i.e. 26.09.2014. Regarding status of retendering activity and the expected time to award the work for construction of 132 kV Ranikhet-Bageshwar line, the Petitioner informed that the tendering is under process and award of new contract is expected by 31.12.2014. Survey of the line is complete and final forest clearance from MOEF, New Delhi has been received on 09.05.2014 and cutting of trees is under progress. On the concern of the Commission as to how PTCUL plans to ensure that both line and the substation are completed simultaneously, the Petitioner has stated that planning is being done to ensure that both substation and the concerned 132 kV Ranikhet-Bageshwar line are completed by March, 2016.
17. The Petitioner has submitted a copy of the extract of the Minutes of the Meeting dated 06.08.2013 wherein the Petitioner's Board has, in addition to other schemes, approved

Corporation's proposal for construction of GIS substation in place of AIS substation at Bageshwar to be funded through 70% loan assistance by PFC and balance through equity to be funded by GoU.

18. On analysis of the Petition, it was observed that against the capital cost of Rs. 92.78 Crore (including IDC) submitted by PTCUL, PFC has considered capital cost of Rs 70.95 Crore only and accordingly, a loan assistance of Rs. 49.66 Crore against the debt requirement proposed by PTCUL of Rs 64.95 Crore has been sanctioned by the financial institution. Thus, there is a shortfall of Rs 15.29 Crore in terms of debt funding. Further, PTCUL has claimed that the equity component amounting to Rs. 27.83 Crore shall be funded by GoU
19. The Petitioner has confirmed that the substation work has not been financed or tied up for financial assistance from any other source or lending organization and, thus, there is no duplicate financing for the proposed works.
20. According to the petitioner the present load of Almora and Bageshwar area is being fed from 132 kV substation, Almora. With the construction of proposed 132 kV GIS substation at Bageshwar the reliability and quality of power in and around Bageshwar area shall improve considerably. The proposed substation shall also facilitate evacuation of power from various SHPs proposed in the Bageshwar District i.e. 7.5 MW Sarju Stage-1, 15 MW Sarju Stage-2 and 10.5 MW Sarju Stage-3.
21. The Commission, to put things in proper perspective, examines the past history of this work. This work was approved by the Commission in Oct 2007. At that point of time, the cost posed for this work was Rs. 15.41 Crore. This work was not taken up and has now been posed by making following changes:
 - (i) The configuration has been changed from 2x15 MVA to 6x5 MVA
 - (ii) The type of substation has been changed from AIS type to GIS type.

The cost has now been posed as Rs. 92.78 Crore roughly six times of the cost earlier posed.

Section 40(a) of the Electricity Act, 2003 requires that it shall be the duty of 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;

For changes in configuration and type of substation as mentioned above, reasons cited are difficult approach to site making transportation of larger transformers difficult and lesser requirement of land for GIS substation as compared to AIS substation.

These two submissions present a conundrum. While by change of configuration the land requirement has increased, to reduce land requirement the substation type has been changed from AIS to GIS. It has been mentioned that Board of this licensee has decided that all hill substations henceforth will be of GIS type. The cost differential between GIS and AIS substation at Bageshwar is around 2.5 times considering only supply and erection components of the estimate.

The Act imposes a duty on the transmission licensee to develop an intra-State system economically. Decision of the Board of the licensee to go in for only higher cost option in hilly areas cannot be sustained. This will have to be examined on case to case basis and lower cost option of AIS need only be rejected where land availability poses an unsurmountable problem.

To this end, the licensee is directed to critically re-examine the land availability with them at Bageshwar and adequacy thereof for housing an AIS substation. If it is found to be adequate, the licensee is further directed to again approach its Board and revert back to AIS substation. This exercise needs to be completed within two months. Alternatively, if the land availability is not adequate to house an AIS substation, report in this regard be submitted to the Commission within one month of this order. As the execution of this work has already inordinately delayed, if it emerges, that an AIS substation cannot be created in the available land the licensee is permitted to proceed for creation of the GIS substation.

The approval of this substation was initially granted in October, 2007. The licensee has taken no action to implement that approval and has cited non-availability of a land as the sole reason for not taking up of this work. Apparently, there is something seriously amiss

both in their approach of acquiring land as also in their effort level to do so. The Commission has time and again mentioned in its orders that very poor progress in transmission works is adversely affecting both the generators situated in the State and also the upcoming consumers. Their inability to procure land for substation for more than 07 years need to be critically examined and corrective actions required either at the Government's end or at the licensee's end need to be urgently implemented. A copy of this order be also forwarded to Chief Secretary and Secretary (Energy), Government of Uttarakhand with a request to get this examined at the Government level and take/enforce appropriate corrective measures so that transmission works get speeded up thereby alleviating the difficulties being faced by both the generators and consumers of the State.

22. In the absence of any justified reasons for including quantity variation @20% on the base cost and cost escalation @20% on the total cost the Commission disallows these provisions in the estimate. Accordingly, the Commission hereby approves the project cost of Rs 70.95 Crores as considered by PFC subject to prudence check. Further, subject to the compliance to directions contained in Para 21 above the Commission hereby orders that:

- (a) All the loan conditions as may be laid down by PFC in their detailed sanction letter be strictly complied with. However, the Petitioner is directed to explore the possibility of swapping this loan with cheaper debt option available in the market.
- (b) The Petitioner shall, as and when the need arises, submit detail specifying funding arrangement for the balance debt over and above that sanctioned by PFC.
- (c) The Petitioner shall, within one month of the Order, submit letter from the State Government or any such documentary evidence in support of its claim for equity funding agreed by the State Government or any other source in respect of the proposed scheme.
- (d) After completion of the project, the Petitioner shall submit the completed cost and financing of the scheme. The petitioner must endeavor to shorten the period of completion of project.

- (e) The cost of servicing project cost shall be allowed in the Annual Revenue requirement of the petitioner after the assets are capitalised and subject to prudence check of cost incurred.

(K.P. Singh)
Member

(C.S. Sharma)
Member

(Subhash Kumar)
Chairman