

Before
UTTARAKHAND ELECTRICITY REGULATORY COMMISSION
Petition No. 10 of 2016

In the Matter of:

Investment Approval for Procurement, Erection & Commissioning of 40 MVA, 132/33 kV Transformer and replacing the defective Transformer at 132 /33 kV Sub-station Roorkee.

And

In the Matter of:

Power Transmission Corporation of Uttarakhand Limited (PTCUL)
Vidyut Bhawan, Near ISBT Crossing, Saharanpur Road,
Majra, Dehradun.

.....Petitioner

Coram

| | |
|---------------------------|-----------------|
| Shri Subhash Kumar | Chairman |
| Shri K.P. Singh | Member |

Date of Order: July 27, 2016

ORDER

This Order relates to the Petition filed by Power Transmission Corporation of Uttarakhand Ltd. (hereinafter referred to as "PTCUL" or "the Petitioner") seeking approval of the Commission for Procurement, Erection & Commissioning of 40 MVA, 132/33 kV Transformer and replacing the defective Transformer at 132 /33 kV Sub-station Roorkee.

2. The Petitioner vide its letter No. 223/MD/PTCUL/UERC dated 11.02.2016 submitted Petition for seeking approval of the Commission for Procurement, Erection & Commissioning of 40 MVA, 132/33 kV Transformer and replacing the defective Transformer at 132 /33 kV Sub-station Roorkee under UERC (Conduct of Business) Regulations, 2014 and Para 11 of Transmission and Bulk Supply Licence [Licence No. 1 of 2003].

3. On preliminary examination of the Proposal, some deficiencies/ shortcomings, pertaining to the present status, IDC, quantity variation and cost escalation, load etc., were issued by the Commission and thereafter, discussions were held between officers of UERC and PTCUL. On the deficiencies pointed out, PTCUL submitted its clarification/reply vide letters No. 641 dated 21.04.2016 & 976 dated 06.06.2016 to the Commission.
4. Summary of the submissions and subsequent clarifications made by the Petitioner is as follows:
- (1) 132/33 kV Sub-station, Roorkee is having capacity of 100 MVA (2x40 MVA and 1x20 MVA) and all the Transformers are almost 90% loaded. Due to occurrence of major fault in one of the 40 MVA Transformer i.e. Transformer-III, the affected area namely 33 kV Landhora Feeder (connected load- 27 MVA), 33 kV Khera Mughal Feeder (connected load-15 MVA) and 33 kV Devi Bhoomi Industrial Feeder (connected load-5 MVA) was forced for the load shedding as the capacity of remaining Transformers in the Sub-station was not sufficient for catering the load of the faulty Transformer.
 - (2) To deal with the said emergent situation, PTCUL decided to shift a new transformer available at 132 kV S/s Jwalapur to the aforesaid Sub-station.
 - (3) The cost proposed by the Petitioner for the works in the revised DPR and the actual cost incurred (as per purchase order No. 1851 dated 09.09.2015) has been tabulated below:

| Sl. No. | Description | Cost claimed by PTCUL in its Revised DPR (in Rs.) | Cost as per PTCUL's Orders (in Rs.) |
|--------------------|---|---|-------------------------------------|
| I Supply | | | |
| 1 | Supply of 40 MVA 132/33 kV rating T/F with direct temperature measurement system, Nitrogen Injection, Fire prevention cum Extinguishing system alongwith online DGA (inclusive of Freight, Insurance, Excise duty & Cess and Sales Tax/VAT) | 2,96,84,216 | 2,96,84,216 |
| Total I | | 2,96,84,216 | 2,96,84,216 |
| II Erection | | | |
| A | Work of shifting of defective 40 MVA T/F to nearby plinth | 2,70,000 | 2,50,000 |
| B | Work of making plinth for 40 MVA T/F after shifting from main foundation | 99,900 | 99,350 |
| C | Shifting work from 132 kV S/s Jwalapur and | 5,07,500 | 5,60,000 |

| Sl. No. | Description | Cost claimed by PTCUL in its Revised DPR (in Rs.) | Cost as per PTCUL's Orders (in Rs.) |
|---------|--|---|-------------------------------------|
| | commissioning work of 40 MVA T/F | | |
| D | Supervision of testing & commissioning of 01 No. 40 MVA T/F with Direct Temperature Measurement System, Nitrogen Injection, Fire prevention cum extinguishing system alongwith online DGA make IMP | 40,000 | 40,000 |
| E | Work of Erection for 40 MVA T/F (excluding foundation work) with all accessories | 8,64,000 | 8,64,000 |
| F | Civil work for making foundation and pit for NIFS system | 58,800 | 58,800 |
| | Total II. | 18,40,200 | 18,72,150 |
| | Total (I + II) | 3,15,24,416 | 3,15,56,366 |
| | 3% Contingency charges | 9,45,732.48 | - |
| | 15% Centage charges | 48,70,522.27 | - |
| | IDC (proposed by the Petitioner for 5 months) | 7,00,000.00 | - |
| | Grand Total | 38040671 | 3,15,56,366 |

Values in above table are excluding of Service Tax.

- Copy of extracts of the Minutes of 51st Board Meeting of the Petitioner Company has been enclosed with the Petition, wherein the Petitioner's Board has approved the proposal with a funding plan of 70% through loan assistance by financial institutions and balance 30% as equity proposed to be funded by GoU.

Commission's observations, views and decision

- In accordance with para 11.3 & 11.5 of Transmission & Bulk Supply Licence [Licence No. 1 of 2003] licensee is required to make an application for obtaining prior approval of the Commission for the scheme involving major investments beyond Rs 250 Lacs. However, in view of immediate restoration of supply of the affected area, the Commission decides to relax the provisions of para 11.3 & 11.5 of Transmission and Bulk Supply Licence.
- The Commission observed that the Petitioner is augmenting its transmission system on short term need basis and its horizon for transmission planning is devoid of long term planning. Further, the Commission is of the view that the Petitioner is indifferent about compliance of contingency criteria as mentioned in the CEA Manual on Transmission Planning Criteria, 2013.
- Further, the Commission observed that the Petitioner is frequently approaching the Commission for various augmentation requirements in its network in the

Roorkee & Haridwar area which prima-facie indicates Petitioner's lackadaisical approach towards long term planning for catering the power requirements of the area and its non-compliance to the 'N-1' contingency criteria mentioned in the CEA Manual on Transmission Planning Criteria, 2013.

9. On further examination of the proposal and subsequent submissions/clarifications, the Commission has observed that:

- (1) The faulty 40 MVA Transformer-III of 132 kV S/s Roorkee got defective and required immediate replacement for avoiding prolonged rostering condition in Landhora, Khera Mughal & Devi Bhoomi Industrial feeders of Roorkee area. PTCUL as an alternate arrangement decided to shift 40 MVA transformer (which was destined for installation at 132 kV S/s Jwalapur) from 132 kV S/s Jwalapur to 132 kV S/s Roorkee for immediate restoration of supply in the affected area.
- (2) Under the circumstances brought before the Commission in the matter, the Commission observed that for immediate power restoration, shifting of Transformer was justified, however, the Commission is of the view that the 40 MVA Transformer proposed in the instant Petition should be placed at 132/33 kV S/s Jwalapur from where the said capacity of transformer has already been shifted to Roorkee Substation.
- (3) The Commission observed that the works carried out for installation and commissioning of Transformer are broadly categorized as follows:
 - (i) Work of shifting of defective 40 MVA Transformer to nearby plinth at 132 kV S/s Roorkee.
 - (ii) Work of making plinth for defective 40 MVA Transformer after shifting it from the main foundation.
 - (iii) Shifting of 40 MVA Transformer from 132 kV S/s Jwalapur to 132 kV S/s Roorkee.
 - (iv) Supervision of testing & commissioning of 01 No. 40 MVA Transformer with Direct Temperature Measurement System, Nitrogen Injection, Fire

prevention cum extinguishing system alongwith online DGA make IMP.

- (v) Work of Erection for 40 MVA Transformer (excluding foundation work) with all accessories.
 - (vi) Civil work for making foundation and pit for NIFS system.
- (4) On examining the financial aspects of the proposal, it has been observed that the Petitioner has claimed contingency @ 3% and centage charges @15% on the total project cost. Since, the work has already been executed and actual cost incurred in the project is known to the Commission, therefore, the Commission has decides not to allow the same.

Further, with regard to IDC, the Commission observed that the IDC amount has already been allowed by the Commission while allowing the investment for increasing capacity of 132/33 kV S/s Jwalapur from 2x40 MVA to 3x40 MVA in the Order dated 23.07.2015. Furthermore, the time taken in installation and commissioning of the Transformer was only nine days and for this duration of execution, the impact of which on IDC already allowed earlier vide the said Order works out to be negligible, therefore, the Commission has not considered the same.

- (5) The Commission observed that the rate for supply of 40 MVA, 132/33 kV Transformer in the Schedule of Rates (SoR) of PTCUL for FY 2014-15 is Rs. 3,28,31,982/-, whereas, the proposed cost in the revised DPR is as per PTCUL's purchase order No. 1851 dated 09.09.2015, i.e Rs. 2,96,84,216/-. Hence, the Commission has considered the actual cost of supply of the transformer at which purchase order was issued by PTCUL.

Further, the cost of erection of 40 MVA Transformer as per SoR of PTCUL for FY 2014-15 is Rs. 5,51,761. Thus, the total cost as per SoR for supply & erection of 40 MVA Transformer is Rs. 3,33,83,743 [Rs. 3,28,31,982 (for supply)+ Rs. 5,51,761(for erection)], inclusive of all the taxes.

10. Since, the cost actually incurred in supply, erection and commissioning of the Transformer is Rs. 3,15,56,366 (exclusive of Service Tax), and the same is less than

the cost of supply, erection & commissioning of 40 MVA Transformer as per SoR of PTCUL for FY 2014-15 i.e. Rs. 3,33,83,743 (inclusive of all the taxes), therefore, the Commission has decided to grant approval for the investment of Rs. 3,15,56,366 only and the same has been presented in the Table given below:

| S. No. | Description | Cost considered by the Commission (in Rs.) |
|--------------------|---|--|
| I Supply | | |
| 1 | Supply of 40 MVA 132/33 kV rating T/F with direct temperature measurement system, Nitrogen Injection, Fire prevention cum Extinguishing system alongwith online DGA (inclusive of Freight, Insurance, Excise duty & Cess and Sales Tax/VAT) | 2,96,84,216 |
| | Total I | 2,96,84,216 |
| II Erection | | |
| A | Work of shifting of defective 40 MVA T/F to nearby plinth | 2,50,000 |
| B | Work of making plinth for 40 MVA T/F after shifting from main foundation | 99,350 |
| C | Shifting work from 132 kV S/s Jwalapur and commissioning work of 40 MVA T/F | 5,60,000 |
| D | Supervision of testing & commissioning of 01 No. 40 MVA T/F with Direct Temperature Measurement System, Nitrogen Injection, Fire prevention cum extinguishing system alongwith online DGA make IMP | 40,000 |
| E | Work of Erection for 40 MVA T/F (excluding foundation work) with all accessories | 8,64,000 |
| F | Civil work for making foundation and pit for NIFS system | 58,800 |
| | Total II | 18,72,150 |
| | Total (I + II) | 3,15,56,366 |
| | 3% Contingency charges | - |
| | 15% Centage charges | - |
| | IDC (proposed by the Petitioner for 5 months) | - |
| | Grand Total | 3,15,56,366 |

Values in above table are excluding of Service Tax.

11. In view of the observations made at para 8 above, the Commission also directs the Petitioner to conduct a comprehensive system study for the Roorkee and Haridwar area and submit its report within 1 month of this Order covering the long term planning in the area.

Ordered accordingly.

(K.P. Singh)
Member

(Subhash Kumar)
Chairman