Before

UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

Petition No. 32 of 2020

In the Matter of:

Application seeking approval for the investment on the project covering Construction of 02 Nos. 33/11 kV Sub-Stations along with their associated 33 kV Underground Lines at Laltaro & Jagjeetpur, Haridwar.

And

In the Matter of:

Uttarakhand Power Corporation Ltd., Victoria Cross Vijeta Gabar Singh Urja Bhawan, Kanwali Road, Dehradun.

...Petitioner.

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Shri D.P. Gairola Member (Law)

Shri M.K.Jain Member (Technical)

Date of Order: January 11, 2021

ORDER

This Order relates to the Petition filed by Uttarakhand Power Corporation Limited (hereinafter referred to as "UPCL" or "the Petitioner" or "the licensee") seeking approval of the Commission for investment on the project covering Construction of 02 Nos. 33/11 kV Sub-Stations along with their associated 33 kV Underground Lines at Laltaro & Jagjeetpur, Haridwar.

Background

2. The Petitioner vide its letter No. 3066/UPCL/Comm/RM-6/D(P) dated 19.10.2020 submitted its Petition for investment approval under the provisions of the Clause

11 of Distribution and Retail Supply Licence and Regulation 40 of UERC (Conduct of Business) Regulations, 2014.

- 3. The Petitioner in its Petition has submitted that: -
 - (1) To ensure reliable power supply, voltage profile and to meet future load growth, it has proposed the Construction of 02 Nos. 33/11 kV Sub-Stations along with their associated 33 kV Underground Lines at Laltaro & Jagjeetpur, Haridwar. The estimated cost of the project is Rs. 2375.00 Lac, which will be met through loan (70%) from REC and Equity (30%) from State Government through 'Kumbh Mela'-2021 budget. The land for Construction of Substations would be made available by the respective Electricity Distribution Division of UPCL. The project is proposed to be implemented fully on turnkey basis. The duration of the project is 08 months (F.Y. 2020-21). The details of substations and lines are as follows: -

Sl. No.	Name of 33/11 kV Sub-station	Capacity	33 KV UG Cable Length (Km)	Estimated Cost (Rs. in Lakh)
1	Laltaro	2x10 MVA	0.15	718.74
2	Jagjeetpur (including cost of land)	2x10 MVA	13.75	1554.60 (for S/s) + 101.66 (for land) = 1656.26
	Τ	2375.00		

- (2) The proposed investment will be financed through 70% loan from REC for which proposal has been submitted (Annexure-B) and the remaining 30% will be met from State Government through 'Kumbh Mela'-2021 budget.
- (3) State Level Empowered Committee constituted for selection of works in 'Kumbh Mela'-2021under the chairmanship of Chief Secretary, Govt. of Uttarakhand has accorded approval for construction of these Substations for 'Kumbh Mela'-2021. Estimates of these works have been forwarded by Meladhikari, Haridwar to Urban Development Department, Govt. of Uttarakhand for administrative and financial approval. Urban development Department, Govt. of Uttarakhand vide their letter no. 398/IV(3)-2019-

4(7Mahakumbh)/19 dated 24 February, 2020 (Annexure-D) has informed as hereunder:

"ऊर्जा विभाग के कार्यो के आगणन की धनराशि के सापेक्ष यह भी निर्णय लिया गया कि उक्त कार्यो हेतु कुम्भ मेला बजट से 30 प्रतिशत धनराशि आबंटित की जायेगी। शेष धनराशि की व्यवस्था ऊर्जा विभाग के विभागीय श्रोतों से किये जाने का निर्णय लिया गया।"

- (4) As millions of pilgrims are expected to take part in 'Kumbh Mela', which is a very important and prestigious event for the State of Uttarakhand, any kind of low voltage or break down would lead to unwanted chaos/unpleasant experience among the devotees flocking for 'Kumbh Mela'. Therefore, tender for the aforesaid works was invited on dated 06.02.2020 and later finalised. Further, works were started and the status was intimated to Secretary, Urban Development vide letter no. 1159/MD/UPCL/K-1 dated 30.01.2020 and 4027/MD/UPCL/K-1 dated 28.05.2020.
- 4. The Petitioner has enclosed the Detailed Project Report showing techno-economic analysis together with the outline of the work to be undertaken, the salient features and particulars demonstrating the need for investment alongwith relevant cost benefit. Further, Petitioner has submitted that the said works do not have any adverse environmental effect.
- 5. The Petitioner has enclosed certified true copy of the Resolution passed by the Board of Directors in 95th BOD meeting held on 20.07.2020 in which the aforesaid works were accorded by the Board of Directors.
- 6. The Petitioner in its Petition has also submitted that due to force majeure situation of Covid-19, the BOD meeting was delayed and held on 20.07.2020. Minutes of BOD were circulated on 21.09.2020. In view of the said force majeure situation and considering the importance of work as the same relates to 'Kumbh Mela' works, the Petitioner had to go ahead with the project. Further, Petitioner has requested the Commission to relax the requirement of prior approval for the aforesaid works citing the criticality of the project and grant approval for the aforesaid investment for the project.

- 7. On examination of the Petition, certain deficiencies/infirmities and requirement of additional information were identified. The Commission vide its letter No. 825 dated 29.10.2020 directed Petitioner to submit/furnish its compliance on the said deficiencies/infirmities latest by 09.11.2020 and the Commission also directed UPCL to make a Power Point Presentation in the matter on 20.11.2020. The said deficiencies/infirmities are detailed hereunder: -
 - "
 - (A) <u>General</u>
 - 1. UPCL is required to furnish the details of cost estimate including item-wise cost breakup for the project covering the 'construction of 33/11 kV S/s at Laltaro and 33/11 kV S/s Jagjeetpur and along with their 33 kV associated lines'. Moreover, UPCL is required to furnish soft copy in excel format for the same.
 - 2. UPCL is required to furnish the soft copy in excel format for the payback period calculations for proposed 33/11 kV S/s at Laltaro and 33/11 kV S/s Jagjeetpur.
 - 3. UPCL is required to furnish the status of proposal sent to M/s REC pertaining to financing of the proposed 33/11 kV S/s at Laltaro and 33/11 kV S/s Jagjeetpur.
 - 4. UPCL is required to furnish copy of rate schedules for material, erection and civil works which have been considered while preparing the estimates for the proposed works.
 - 5. UPCL is required to furnish the details of forest clearances of the lines associated with the proposed 33/11 kV S/s at Laltaro and 33/11 kV S/s Jagjeetpur.
 - 6. UPCL in its petition under status of land has mentioned 'Land Available'. In this regard, UPCL is required to furnish the details of land acquisition for the proposed 33/11 kV S/s at Laltaro and 33/11 kV S/s Jagjeetpur.
 - 7. UPCL in its Petition has mentioned that the works of the aforesaid 33/11 kV S/s has started. In this regard, UPCL is required to furnish the details of the tendering process including dates of bid invitation, bid finalization and issuance of LoI to the selected bidder alongwith documentary evidence to the same.
 - 8. UPCL is required to clarify whether the 30% equity for the project is sourced through the grant amount received for 'Kumbh Mela' 2020-21 or not.

9. UPCL is required to clarify regarding the rate of energy charges for electricity supplied for 'Kumbh Mela' and the details of the entity to whom the electricity bill for the same would be raised.

(B) <u>33/11 kV S/s Laltaro (2 X 10 MVA)</u>

- 1. In calculation of payback period, the total anticipated load shown after first year and 7th year indicated in the payback period calculation should reduce as during 2nd to 6th year and 8th to 11th year the Kumbh activities would not take place. Moreover, in Column L & M negative entries are being indicated in 10th & 11th year, the same should be shown as 'Nil'. UPCL is required to resubmit its calculation of payback period.
- 2. In line chart, 33 kV industrial feeder is shown as 6.1 Km. Panther, 1.95 Km. Dog & 0.25 Km. cable with existing load of 399 amp which is even more than the maximum current carrying capacity of a Dog conductor approx. 300 amps. Moreover, the post construction loading in the said feeder is indicated as 451 amps which is more than 90% of the maximum current carrying capacity of a Panther conductor. UPCL is required to clarify regarding the same.

(C) <u>33/11 kV S/s Jagjeetpur (2 X 10 MVA)</u>

- 1. It is observed that the total anticipated load indicated in the payback period calculation should reduce during 2nd, 8th and 13th year and accordingly in subsequent years as the Kumbh activities would not take place in these years. Moreover, in Column L & M negative entries are being indicated in 16th year, the same should be shown as 'Nil'. UPCL is required to resubmit its calculation of payback period."
- 8. Incompliance to the Commission's letter dated **29.10.2020**, UPCL vide its letter dated **19.11.2020** submitted its point-wise reply to the deficiencies/infirmities pointed out by the Commission as follows: -
 - "
 - With regard to Point no. 1 to 6, UPCL furnished the relevant documents and submissions in support of the same.
 - (2) With regard to Point no. 7, UPCL furnished the details of the tendering process including dates of bid invitation, bid finalization and issuance of Lol

to the selected bidder alongwith documentary evidence to the same. The details are as follows: -

Sl. No.	Description	Tender Specification No.	Important Dates
1.	Construction of 2X10 MVA 33/11 kV Substation (Indoor Type) at Jagjeetpur, Haridwar and its associated 33 kV underground line with Power Distribution Center (PDC) under 'Kumbh Mela' 2021 on turnkey basis.	CCP-I/41/2019-20, E-Tender Notice dated 07.02.2020.	Date of Notice for Bid invitation- 07.02.2020 . Date of pre bid meeting- 13.02.2020 . Last Date of submission of bids- 26.02.2020 .
2.	Construction of 33/11 kV Substation (Indoor Type) at Laltaro, Haridwar and its associated 33 kV underground cable with Power Distribution Center (PDC) under 'Kumbh Mela' 2021 on turnkey basis.	CCP-I/42/2019-20, E-Tender Notice dated 07.02.2020	Date of opening of bid Part-I (Technical bid) in online and offline mode- 27.02.2020 . Date of opening of bid Part-II (Price bid) – 16.03.2020 .

Further, the Petitioner has furnished copy of Letter of Award (LOA) issued to the Joint Venture of M/s ISAT Network Engineers (P) Ltd., D-24-25 Industrial Area-II Haridwar (Lead partner) and M/s KEC International Ltd., 8th Floor building, 9A DLF Cyber City DLF, Phase-2, Sector-24, Gurgaon-122002 dated 31.03.2020 for the aforesaid substations.

- (3) With regard to Point no. 8, UPCL furnished that the Expenditure Financial Committee (EFC) of both substations has been done & financial Government notification/Order for issue of the 30% equity to be sourced through the grant from 'Kumbh Mela'- 2021 budget is under process.
- (4) With regard to Point no. 9, UPCL furnished that both the substation will supply power to the residential, commercial consumers and also to the temporary sectors of 'Kumbh Mela' & the billing would be done in appropriate rate schedule. The bill for electricity consumption in temporary

sectors would be raised to 'Kumbh Mela' office under RTS-9 category as per Tariff Order.

(A) <u>33/11 kV S/s Laltaro (2x10 MVA)</u>

- (5) With regard to Point no. 1, UPCL furnished recalculation of payback period for Laltaro substation.
- (6) With regard to Point no. 2, UPCL furnished corrected line chart for Laltaro substation.
- (B) <u>33/11 kV S/s Jagjeetpur (2x10 MVA)</u>
- (7) With regard to Point no. 1, UPCL furnished recalculation of payback period for Jagjeetpur substation.
- 9. During the presentation held on 20.11.2020 in the matter, UPCL submitted that the financing of the project pertaining to the same shall be arranged 70% from REC and 30% equity shall be sourced through contribution from the 'Kumbh Mela' 2020-21 budget. Further, UPCL submitted that the said 33/11 kV Substations alongwith their associated 33 kV underground lines shall ensure reliable and quality power supply not only during the 'Kumbh Mela' 2020-21 but also for the Laltaro, Jagjeetpur & adjacent areas. The said projects have been provided with State-of-the-art SCADA compatible equipment which would ensure better monitoring and reduced breakdowns in the Substations.
- 10. The Commission vide its letter dated 10.12.2020 directed the petitioner to furnish documentary evidence with regard to the financing of the loan and equity portions pertaining to the aforesaid project latest by 16.12.2020.
- 11. The Petitioner vide its letter dated 29.12.2020 submitted its compliance furnishing REC sanction letter dated 22.12.2020 for the loan amount of Rs. 16.63 Crore for the 'Construction of 2 nos. 33/11 kV Substations alongwith their associated 33 kV underground line at Laltaro & Jagjeetpur.' Further, UPCL has submitted documentary evidence for the financing of equity portion of the project through the grant received from the Kumbh Mela budget of Rs. 4.09 Crore & Rs. 1.94 Crore for Jagjeetpur & Laltaro Substations respectively.

Commission's Observations, Views & Directions: -

- 12. On examination of the Petition and subsequent submissions of the Petitioner, following has been observed:-
 - (1) UPCL has made an inordinate delay in filing of application for the investment approval before the Commission which is almost 9 months from the date of initiation of the tendering process in the matter. This act of the distribution licensee is in contravention to the provisions of the Regulation 40 of Regulation 40 of UERC (Conduct of Business) Regulations, 2014.
 - (2)It appears that the Petitioner is not paying heed to the directives/advisories/reprimands of the Commission. The Commission has already expressed its serious concern in its previous Orders. However, considering the auspicious event of 'Kumbh Mela', situation arisen due to Covid-19 Pandemic and criticality and time constraints involved in the project, the Commission decides not to take coercive action against the Petitioner under the provisions of the Act/Regulations/Licence conditions. Further, the Commission warns the Petitioner not to repeat such acts in future investment proposals else the Commission would take coercive action against the Petitioner under the provisions of the Act/Regulations/Licence conditions.
- 13. Further, on examination of the instant Petition, the Commission has observed that:
 - (1) <u>33/11 kV S/s Laltaro (2 X 10 MVA): -</u>
 - (a) At present, power to Mayapur area, Sarvannath Nagar and nearby area is being fed through 11 kV Mayapur (length 6.5 km) and Laltaro feeder (length 3.5 km) emanating from 33/11 kV Sub-station Laljiwala. During Mela and peak hours these feeders are expected to be over loaded resulting in low voltage or break down problems. Hence, the Petitioner envisages to divide Mayapur and Laltaro feeder in two parts and also to emanate extra 11 kV outgoing feeders, which appears to be a judicious decision. Further, the Petitioner envisages that new Substation will also cater to the future load growth of the near by area.

(b) Petitioner has envisaged for sanctioning the project submitting that in order to develop a distribution network that would ensure a reliable & high quality supply during 'Kumbh Mela' and surrounding area, and would also meet future load growth in the area, the said project should be sanctioned.

(2) <u>33/11 kV S/s Jagjeetpur (2 X 10 MVA):-</u>

- (a) At present, power to Jagjeetpur and nearby area is being fed through 11 kV Jagjeetpur feeder (length 6.5 km) emanating from 33/11 kV substation Kankhal-II and 11 kV Ferupur feeder (length 15 km) emanating from 33/11 kV substation Gurukul. The said 33/11 kV Kankhal-II substation is sourced from 33/11 kV Bairagi Camp substation which is being fed through 132/33 kV Bhupatwala substation.
- (b) During Mela and peak hours, the aforesaid 33/11 kV Kankhal-II and Bairagi Camp substations and their associated 11 kV feeders are over loaded resulting in low voltage or break down problems. Hence, the Petitioner envisages to divide three existing 11 kV feeders in two parts and emanate extra 11 kV outgoing feeders, which appears to be a appropriate decision.
- (c) The proposed Jagjeetpur Sub-station would be sourced from 132/33 kV Padharatha substation by construction of 33 kV Underground cable line. 33 kV UG cable is proposed to be laid from proposed Jagjeetpur substation to Kankhal-II substation in order to get alternate 33 kV source of Padhartha at Kankhal-II substation. Moreover, the new substation would also cater to the future load growth in view of growing urbanization in the area. Besides above, after commissioning of the said substation reliability and quality of power supply would improve substantially resulting in more revenue from the existing consumers as well as additional revenue from new consumers in future.
- (d) Petitioner's proposal for developing a distribution network that would ensure a reliable & high quality supply in Kumbh and surrounding

area, and also meet future load growth in this area appears to be a judicious decision.

- 14. In the instant Petition, the Petitioner has proposed 'N-1' contingency provision for 33 kV incoming supply at the proposed 33 kV S/s Lataro and Jagjeetpur Substations inline with Regulation 3.6 (4) of UERC (Distribution Code) Regulations, 2018 which provides that: -
 - "(4) In every Sub-Station of capacity 10 MVA and above there shall be a provision for obtaining alternate 33 kV supply to the Sub-Station in case of a failure in the incoming supply."

In this regard, the Commission is of the view that the Petitioner has made correct attempt in ensuring 'N-1' contingency provision at 33 kV incoming feeder level. However, the Commission advises the Petitioner to complete all the works pertaining to connectivity of 33/11 kV substation at Jagjeetpur with 132/33 kV substation Padharatha so that unwarranted delays with respect to 'N-1' contingency can be avoided. Further, with regard to distribution system planning, the Commission is of the view that the Petitioner should ensure to analyze the system capacity and adequacy of the lines/Substations feeding the proposed Substations, as such analysis would help in early identification of bottlenecks in existing sub-transmission and distribution network of the Petitioner. Thus, the same would help in effective distribution system network planning.

- 15. With regard to underground lines, the Commission cautions the Petitioner that albeit underground system provides certain benefits, however, it may pose immense challenges with respect to Operation & Maintenance of the underground system in case of breakdowns. Therefore, the Commission opines that the project should be executed with due diligence so that minimal incidents of break downs/fault occurrences/challenges/hindrances are faced during operation and maintenance of the underground electrical network in Haridwar town and helps in providing a sustainable underground electrical network resulting in reliable and quality power supply to the consumers.
- 16. Considering the expected improvement in the quality & reliability of electricity in the Laltaro & Jagjeetpur area, the Commission hereby grants in-principle approval

for the proposed construction works of 33/11 kV S/s Laltaro & 33/11 kV S/s Jagjeetpur and their associated underground lines subject to the fulfillment of the conditions mentioned below:

- (1) All the loan conditions as may be laid down by the funding agency in their detailed sanction letter are strictly complied with. However, the Petitioner is directed to explore the possibility of swapping this loan with cheaper debt option available in the market.
- (2) The Commission has considered the funding of the projects as 70% from REC and 30% equity has been considered to be sourced through the grant amount from 'Kumbh Mela'- 2021 budget. The Petitioner at the time of filling its ARR/True-up petition shall ensure to furnish the documentary evidence for the funding of the projects before the Commission.
- (3) After completion of the aforesaid schemes, the Petitioner shall submit the completed cost and financing of the schemes.
- (4) The cost of servicing the project cost shall be allowed in the Annual Revenue Requirement of the Petitioner after the assets are capitalized and subject to prudence check of cost incurred.

Ordered accordingly.

(M.K. Jain) Member (Technical) (D.P. Gairola) Member (Law)