

**Before**  
**UTTARAKHAND ELECTRICITY REGULATORY COMMISSION**

Petition No. 03 of 2020

**In the Matter of:**

**Petition for seeking approval of the Commission for the investment on the Implementation of Real Time Data Acquisition System (RTDAS) for SAIFI/SAIDI measurement at 11 kV feeder level of 66 non-SCADA towns of UPCL under Integrated Power Development Scheme (IPDS) of Ministry of Power, Govt. of India.**

And

**In the Matter of:**

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

...Petitioner

**Coram**

**Shri D.P. Gairola      Member (Law)**

**Shri M.K.Jain         Member (Technical)**

**Date of Hearing: February 14, 2020**

**Date of Order: May 22, 2020**

**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 the Investment on the Implementation of Real Time Data Acquisition System (RTDAS) for SAIFI/SAIDI measurement at 11kV feeder level of 66 non-SCADA towns of UPCL under Integrated Power Development Scheme (IPDS), Ministry of Power (MoP), Government of India (GoI).

**Background & Petitioner's Submissions**

2. The Petitioner vide its letter No. 353/UPCL/Comm/RM-6(IPDS\_ERP)/D(F) dated 31.01.2020 submitted a Petition for approval of Capital Investment under the

provisions of Regulation 40 of UERC (Conduct of Business) Regulations, 2014 and clause 11 of the Distribution and Retail Supply Licence [Licence No. 2 of 2003].

3. The Petitioner in its Petition has submitted that for strengthening of sub-transmission and distribution network in urban areas, Govt. of India (GoI) had launched Integrated Power Development Scheme. The aforesaid scheme included implementation of RTDAS for measurement of SAIFI/SAIDI of urban 11 kV feeders of 66 R-APDRP and IPDS towns. For implementation of IPDS program, the Govt. of India had designated Power Finance Corporation (PFC) as Nodal Agency vide MoP Order dated 03.12.2014 and the Tripartite Agreement was signed between Govt. of India through PFC, Govt. of Uttarakhand and UPCL on 07.12.2015.
4. Further, the Petitioner in its Petition has submitted that:
  - (1) The Detailed Project Report (DPR) was prepared for implementation of RTDAS under IPDS in non-SCADA towns of UPCL as per Model DPR template provided by PFC following the IPDS guidelines & advisory issued by M/s PFC Ltd.
  - (2) The project aims at accurate measurement of reliability of power distribution network and facilitate utility in taking suitable administrative action by accurate measurement of SAIFI/SAIDI on real time basis. The project also aims at real time data acquisition from 11kV feeders such as breaker position, power, current, voltage, frequency and power factor. Moreover, the project would also facilitate in taking appropriate measures for improving reliability indices namely SAIFI/SAIDI by knowing precise reason for its poor values and would help in differentiating planned and unplanned outages.
  - (3) In order to leverage IT infrastructure to the maximum extent, the project envisages supply and installation of Feeder Remote Terminal Unit (FRTU) and associated hardware & software in all urban area (R-ARPRP and IPDS towns), excluding R-APDRP SCADA towns, along with centralized SAIFI/SAIDI system at Data Centre/Customer care centre/SCADA Control Centre.
  - (4) The scope of project also covers preparation of feeder-wise, substation-wise & town-wise SAIFI /SAIDI measurement. The computer systems for SAIFI /SAIDI measurement would be installed at respective Data Centres of Part A

IT R-APDRP in the State, while Data from substations shall be acquired from FRTUs installed at substations.

- (5) Revenue expenditure (such as Facility Management Services, Bandwidth charges, Annual Technical Support, Annual Maintenance Charges, manpower etc.) and expenditure on earthing of the installations, civil infrastructure related works and retrofitting works are excluded from funding under this Scheme. The said expenditures shall be borne by UPCL from its internal resources.
- (6) For implementation of RTDAS system in 66 towns of Uttarakhand ₹4.28 Crore have been approved by the IPDS Monitoring Committee, MoP, GoI.
- (7) Funding details of the project are as given below:
  - a) The scheme shall be funded through PFC as per IPDS guidelines for special category States.
  - b) 85% of approved project cost of ₹4.28 Cr. i.e. ₹3.64 Cr. shall be provided as Grant from Govt. of India (GoI) through PFC.
  - c) 5% amount of the approved project cost i.e. ₹0.21 Crore shall be arranged by UPCL from its own fund/source as Discom's contribution.
  - d) Balance 10% amount of approved project cost i.e. ₹0.43 Crore shall be arranged by UPCL either from its internal resources or would be raised from PFC/REC or any other FIs/Banks as a loan.
  - e) Additionally, Govt. of India (GoI) shall also provide grant equal to 0.5% of approved cost i.e. ₹0.02 Crore for Project Management Agency (PMA). Accordingly, total GoI Grant shall be ₹3.66 Crore (₹3.64 Cr.+₹0.02 Cr.).
  - f) Additional grant (50% of loan component/internal resources i.e. 5% of the Total project cost) under the IPDS scheme will be released subject to achievement of following milestones:
    - i) Timely completion of the scheme as per laid down milestones.
    - ii) Reduction in AT&C losses as per trajectory finalized by MoP in consultation with State Governments (Discom-wise).
    - iii) Upfront release of admissible revenue subsidy by state Govt.

based on metered consumption.

- g) Projects shall be implemented in accordance with IPDS guidelines and advisory issued by MoP/Nodal Agency from time to time.
  - h) UPCL shall arrange project cost over and above the GoI Grant from its own resources/FIs.
  - i) Project completion date as per IPDS guidelines shall be 06.06.2021 i.e. 30 months from date of sanction letter.
- (8) The Petitioner in its Petition has also submitted that the work had been awarded to M/s Dongfang Electronics Private Limited through Letter of Award (LoA) dated 15.10.2019.
- (9) As per sanctioned DPR, RTDAS project covers 350 Nos. of 11 kV feeders and 101 Nos. of 33/11 kV substations in 66 towns under RAPDRP & IPDS. In the Request for Proposal (RFP), UPCL has also envisaged to carry out the related works for balance 390 Nos. incomers & outgoing feeders of these substations (non-RAPDRP/IPDS feeders) as the major works including FRTU, power supply, cabling, etc. are already covered in RTDAS. The work for these 390 feeders shall include supply, installation, testing, commissioning & integration of their corresponding Multi Functional Transducers (MFTs) & Contact Multiplier Relays (CMRs) with Feeder Remote Terminal Units (FRTUs). Cost of such works will be ₹0.284 Crore approximately and proposed to be borne by UPCL.
- (10) Facility Management Services (FMS) & Bandwidth services for five years are also proposed along with the RTDAS work. Expenditure on these works shall be ₹1.13 Crore approximately i.e. ₹0.226 annually and the same is proposed to be borne by UPCL from its internal resources.
- (11) Capital expenditure for support works such as cable tray arrangement for FRTU cables and separate earthing for FRTUs in 33/11kV substations are not funded under IPDS. The estimated cost to be incurred on these works shall be ₹0.78 Crore approximately. The expenditure are also proposed to be borne by UPCL from internal resources.
- (12) Summary of the project cost as given by the Petitioner is as follows:

Sl. No.	Particulars	Cost as per Sanctioned DPR (₹ in Lac)	Estimated/ Awarded Cost (₹ in Lac)
1	RTDAS data center works	150.00	123.90*
2	FRTU including power supply and associated hardware & software	277.75	275.19*
3	Earthing of substations and laying of cable tray for FRTU cable	Not included in DPR	78.04#
<b>4</b>	<b>Total setup cost</b>	<b>427.75</b>	<b>477.13</b>

\* Cost as per contract awarded to M/s Dongfang Electronics Private Limited.

#Estimated Cost.

### Recurring Expenditure to be incurred by UPCL after Completion of the Project

Sl. No.	Particulars	Annual cost (₹ in Cr.)
1	Facilities Management Services Cost	0.21
2	Bandwidth Services Charges	0.016
	<b>Total</b>	<b>0.226</b>

After completion of the project, UPCL would incur annual expenditure of ₹ 0.226 Cr. for 5 years i.e. Total ₹1.13 Cr. towards Facilities Management Services and bandwidth services for running & maintaining the system for 5 years. Being recurring expenditure, the same would be claimed in Annual Revenue Requirement.

5. As per PFC sanction letter dated 07.12.2018, the award of sanctioned RTDAS projects is envisaged within 6 months from date of issue of Sanction letter. Further, Project completion date as per IPDS guidelines is 06.06.2021 i.e. 30 months from date of sanction letter. The closing date for drawl of grant shall be 05.06.2022 i.e. one year from the project completion date/ or any other date as decided by the Monitoring Committee. Further, it is also mentioned that expenditure incurred after the sanction letter date shall only be eligible for Grant utilization. As per Chapter-IV of IPDS guidelines (Annexure-1 of the IPDS Office Memorandum of MoP, GoI dated 03.12.2014), the grant shall be extended on achievement of following: -

Tranche No.	Conditions for release of grant support by PFC, GoI	Release of Grant component
1	1) Approval of the DPRs by the Monitoring Committee.	10%

Tranche No.	Conditions for release of grant support by PFC, GoI	Release of Grant component
	2) Bipartite/Tripartite agreement between Discoms, State Govt. & Nodal Agency on behalf of MoP	
2	Placement of Letter of Award (LoA) by the Utility	20%
3	Utilization of 90% of grant released by GoI (1 <sup>st</sup> and 2 <sup>nd</sup> Tranche) and 100% release of Discom contribution	60%
4	After completion of works	10%

6. With regard to the concurrence of the Board of Directors, the Petitioner has submitted a certified true copy of the item No. 90.15 of resolution passed by the Board of Directors (BoD) in 90<sup>th</sup> BoD Meeting held on 19.06.2019 for implementation of RTDAS for SAIFI/SAIDI measurement at 11 kV feeder level for 66 towns of UPCL under Integrated Power Development Scheme (IPDS) of MoP, GoI.
7. For justifying the need of proposed works, the Petitioner in its petition has submitted that implementation of RTDAS would result in following benefits:
- (i) Accurate measurement of SAIFI/SAIDI on real time basis.
  - (ii) Real time acquisition of data of 11kV feeders such as breaker position, power, current, voltage, frequency and power factor.
  - (iii) Facilitation in taking appropriate measures for improvement of SAIFI/SAIDI by knowing reason for poor values of indices.
  - (iv) Identification/Segregation of planned and unplanned outages.
8. On preliminary examination of the submissions in the Petition, it was observed that the Petitioner had already awarded the work for the aforesaid project to M/s Dongfang Electronics Private Limited vide Letter of Award (LoA) dated 15.10.2019 for ₹ 5,11,75,710.28, while the legal provisions under which the Petition was filed clearly specifies for seeking Prior investment Approval for investments equal or exceeding ₹2.5 Crore. The provisions of Regulation 14 of UERC (Conduct of Business) Regulations, 2014 and clause 11 of Distribution and Retails Supply Licence dated 20.06.2003 are reproduced below: -

**Clause 11 of the Distribution & Retail Supply Licence dated 20.06.2003**

*"11.3 The Licensee shall make an application to the Commission for obtaining **prior approval of the Commission** for schemes involving major investments as per the*

*procedure which the Commission may specify from time to time and demonstrate to the satisfaction of the Commission that:*

- a) *there is a need for the major investments in the Distribution System, which the Licensee proposes to undertake,*
- b) *the Licensee has examined the economic, technical, system and environmental aspects of all viable alternatives to the proposal for investing in or acquiring new Distribution system assets to meet such need.” [Emphasis Added]*

**Regulation 40 of the UERC (Conduct of Business) Regulations, 2014**

*“40(1) Unless otherwise directed by the Commission, every licensee and SLDC shall obtain **prior approval of the Commission** for making investment in its business if such investment is above the limits laid down by the Commission from time to time by a general or special Order.” [Emphasis Added]*

9. Accordingly, the Commission decided to fix a hearing for admissibility in the matter on 14.02.2020. On the scheduled date of hearing, the Petitioner reiterated its submissions in the Petition.
10. The Commission heard the Petitioner and expressed its serious concern over the indifferent approach of the licensee towards compliance of the provisions of clause 11 of Distribution & Retail Supply Licence dated 20.06.2003 and Regulation 40 of the UERC (Conduct of Business) Regulations, 2014, wherein distribution licensee is required to take prior approval of the major investments. However, taking a lenient view, the Commission decided to admit the Petition and cautioned the licensee for ensuring strict adherence to the aforesaid provisions with specific direction that any laxity on the same in future shall not be condoned.

**Commission’s observations, Views & directions**

11. The Commission has observed that in the instant case UPCL has blatantly failed in adhering to the provisions of clause 11 of the Distribution and Retail Supply Licence dated 20.06.2003 and Regulation 40 of UERC (Conduct of Business) Regulations, 2014 and has filed a Petition before the commission neither acknowledging the same nor has requested for condonation. In this regard, the Commission has already expressed its serious concern in its admittance Order and cautions the Distribution licensee not to repeat such acts in future investment proposals.

12. On detailed examination of the Petition, following has been observed:-

- (1) As per PFC sanction letter dated 07.12.2018, any slackness in implementation of the scheme will have an impact on the Petitioner's financial position. The relevant extract of the said sanction letter has been reproduced below:-

***"15 Pre Closure/Recall of Grant:***

*15.1 In case the utility fails to submit the Project Completion Certificate within a period of one year from the approved project completion date (approved by Monitoring Committee), or not completed project within project completion date due to poor progress, the Nodal Agency shall send a team suo-moto to assess the works and expenditure and submit its recommendation to the Monitoring Committee for closure and also refund of excess grant by utility if any released against the project.*

*15.2 In case the utility fails to award the sanctioned project up to 09 months from release of 1st tranche of grant component by PFC to Utility, the project will be deemed as closed/cancelled and the grant component released shall be refunded by the utility within three months.*

*15.3 In case the utility fails to refund the grant as in above cases, the Nodal Agency has the right to adjust the already released grant against future releases of grant pertaining to other approved projects under the scheme. If there are no such eligible future releases, the same shall be adjusted against the Central Plan Assistance for the state by Govt. of India."*

- (2) As mentioned in para 4 (7) f) above, additional grant (50% of loan / own fund i.e. 5% of the total cost for special category states and 15% for other states) under the Scheme will be released subject to achievement of specified milestones. Hence, the Commission firmly opines that the Petitioner should put its all endeavor to achieve maximum benefit from the Scheme.
- (3) As mentioned in para 8 above, it is observed that in case the Petitioner achieves the aforesaid benefits from the project implementation of RTDAS namely (i) accurate measurement of SAIFI/SAIDI on real time basis, (ii) Real time acquisition of data of 11 kV feeders such as breaker position, power, current, voltage, frequency and power factor, (iii) facilitation in taking appropriate measures for improvement of SAIFI/SAIDI by knowing reason for poor

values of indices, (iv) Identification/Segregation of planned and unplanned outages, the Petitioner would not only accurately measure reliability of power distribution network but also it would help in facilitating UPCL to take suitable administrative action for enhancement of power reliability in town areas.

13. The Commission is of the view that schemes like IPDS which provides grant from Central Government should be availed/encouraged in the State, as it not only provides early availability of funds but also an initiative to revamp and modernize IT infrastructure in the sub-transmission & distribution sector. Such schemes help in providing reliable & quality power supply to consumers in an efficient and sustainable manner. However, the Commission cautions the Petitioner that if such schemes are not implemented in the right earnest/intent and within the specified time schedule then it would result in recalling of grant as mentioned in para 13 (1) above. Hence, any adverse financial impact on the Petitioner on account of such reasons shall not be allowed as a pass through in the tariffs.
14. Considering the submissions made by the Petitioner, the Commission hereby grants in-principle approval to the Petitioner for going ahead with the proposed works pertaining to Implementation of RTDAS for SAIFI/SAIDI measurement at 11 kV feeder level of 66 non-SCADA towns of UPCL under IPDS amounting to ₹4.77 Crore (including cost for RTDAS, FRTU and Earthing & Laying of Cables) + ₹0.02 Crore (grant from GoI for Project Management Agency) + ₹1.13 Crore (total for 5 years AMC for Facility Management Services and Bandwidth service charges) subject to fulfillment of the following conditions:
  - (1) Any slackness in the part of Petitioner which results in disallowance of issuance of additional 5% grant from the PFC shall be treated as laxity on its part and shall not be allowed as pass through in tariff.
  - (2) The Petitioner shall ensure completion of the works proposed under the scheme for implementation of Real Time data Acquisition System (RTDAS) for measurement of SAIFI/SAIDI of urban 11 kV feeders of 66 R-APDRP and IPDS towns within the specified timelines. Further, the Petitioner shall also ensure to achieve the specified target for accurate measurement of reliability of power distribution network and facilitate utility to take suitable

administrative action for enhancement of power system reliability in town areas.

- (3) All the loan conditions as may be laid down by the funding agency i.e. PFC in their detailed sanction letter should strictly be complied with. However, the Petitioner is directed to explore the possibility of swapping the loan with cheaper debt option if any, available in the market.
- (4) 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 said works.
- (5) All the terms and conditions of tripartite agreement amongst PFC, GoU and UPCL dated 07.12.2015 including obligations/commitments should be strictly complied with by the Petitioner.
- (6) On completion of the project, the Petitioner shall submit the completed cost of each of the works.
- (7) The additional cost burden due to any failure on the part of Petitioner in achieving the targets, if any, arising out of the cost or time over runs or variation in scope of work under the project or on any other account may not be allowed by the Commission in the Annual Revenue Requirement of the licensee.

Ordered accordingly.

**(M.K. Jain)**  
**Member (Technical)**

**(D.P. Gairola)**  
**Member (Law)**