

Before
UTTARAKHAND ELECTRICITY REGULATORY COMMISSION
Petition No. 09 of 2018

In the Matter of:

Approval for the Capital Investment on the Implementation of Phase-II of IT enablement projects under Integrated Power Development Scheme (IPDS), Ministry of Power (MoP), Government of India (GoI).

And

In the Matter of:

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

.....Petitioner

Coram

Shri Subhash Kumar Chairman

Date of Order: May 21, 2018

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 Capital Investment on the Implementation of Phase-II of IT enablement projects 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. 4861/UPCL/Comm/RM-6(IT(RAPDRP-A)_IPDS) dated 01.12.2017 submitted a Petition for approval of Capital Investment under the provisions of UERC (Conduct of Business) Regulations, 2014 and clause 11 of the Distribution and Retail Supply License [License No. 2 of 2003].

3. The Petitioner in its Petition has submitted that for strengthening of sub-transmission and distribution network in the urban areas, Govt. of India had launched Integrated Power Development Scheme (hereinafter referred to as "IPDS") vide OM No. 26/1/2014-APDRP dated 03.12.2014. This scheme includes phase-II of IT enablement of distribution sector for the identified IPDS towns. For implementation of IPDS program, the Govt. of India has designated Power Finance Corporation (PFC) as Nodal Agency vide MoP Order dated 03.12.2014 and the Tripartite Agreement has been signed between Govt. of India through PFC, Govt. of Uttarakhand and UPCL on 07.12.2015.
4. Further, the Petitioner has submitted that the scheme has been formulated for urban areas (Statutory Towns) having population up to 5000 as per Census 2011 covering following works:-
 - (1) Under the Phase-II of IT enablement projects under IPDS project, 36 Nos. Non-RAPDRP towns have been identified for implementation of IT Applications. Under the PFC guidelines Detailed Project Reports (DPR) for IPDS IT Phase-II were prepared with the following activities:
 - a) Supply & installation of additional hardware including Layer-II switch, Router, UPS, PC Workstation, Printers, Hand Held Spot Billing Equipment with Printer, Network LaserJet Printer, Bar Code Reader and Modem in the offices covered under 36 towns.
 - b) Metering of distribution transformers/feeders/HT consumers in urban areas. Under distribution strengthening works, meters, modems and AMRs are already covered under scope of main DPR of IPDS and UPCL has been allowed to cover balance modem if not covered earlier.
 - c) GPS based GIS survey of assets and incremental up-gradation in Hardware/Server at Data Center/DR Center to cater additional towns.
 - (2) The Petitioner has submitted that in the 9th meeting of IPDS, ₹11.90 Crore has been approved by the IPDS Monitoring Committee, MoP, GoI for IT enablement in 36 towns in IT Phase-II DPR under IPDS.
 - (3) Details of the funding of the project as per the Petition are as given below:

- a) Govt. of India (GoI) shall provide Grant of Rs 10.12 Crore (85% of approved cost i.e. ₹11.90 Cr.) through PFC.
- b) 5% amount (₹0.6 Crore) of the project cost is to be arranged by UPCL from its own fund/source as Discom's contribution.
- c) Balance 10% of project cost (₹1.19 Crore) is to be arranged by UPCL either from its internal resources or to be raised from PFC/REC or any other FIs/Banks as a counterpart loan.
- d) Additionally, Govt. of India (GoI) shall also provide grant equal to 0.5% of approved cost (Rs 0.06 Crore) for Project Management Agency (PMA). Hence, total GoI Grant shall be ₹10.18 Crore.
- e) Projects shall be implemented in accordance with IPDS guidelines and advisory issued by MoP/Nodal Agency from time to time.
- f) Additional grant (50% of loan /own fund i.e. 5% for special category states and 15% for other states) under the 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.

(4) List of 36 Nos. Non-RAPDRP towns covered under IPDS IT Phase II are as given below:

Sl. No.	Name of Town	Name of Circle
1	Kaladhungi	EDC Haldwani
2	Lalkuwan	
3	Bhimtal	
4	Bhawali	
5	Mahua Kheraganj	EDC Kashipur
6	Sultanpur Patti	
7	Kela Khera	
8	Mahua Dabra Haripur	
9	Dharchula	EDC Pithoragarh
10	Didihat	

Sl. No.	Name of Town	Name of Circle
11	Champawat	
12	Lohaghat	
13	Bageshwar	
14	Dwarahat	EDC Ranikhet
15	Dineshpur	EDC Rudrapur
16	Shaktigarh	
17	Veerbhadra IDPL	EDC Rural DEHRADUN
18	Herbertpur	
19	Doiwala	
20	Chakrata	
21	Jhabrera	EDC, Roorkee
22	Kedarnath	EDC, Srinagar
23	Badrinathpuri	
24	Rudraprayag	
25	Devaprayag	
26	Nandprayag	
27	Karnprayag	
28	Gauchar	
29	Kirtinagar	
30	Lansdowne	
31	Dogadda	
32	Gangotri	
33	Barkot	
34	Muni Ki Reti	
35	Chamba	
36	Narendranagar	
		TOTAL

(5) Summary of the project cost as given by the Petitioner is as follows:

Major Head	Quantity	Works Proposed	Estimated Amount (₹in lakh)
Incremental requirements at Data Center / DR Center			
Application Server, Testing & Staging Server, Additional RAM in existing Servers.	15 Nos. Servers, 102 units of 32 GB RAM, Additional 35 TB storage space for DC & DR., 10 Hand Sets , 10 Head Sets, IP Phones & PC's.	Hardware	439.85
GIS Desktop Licenses, Operating Systems Antivirus for PC's	4 (2 DC & 2 DR) , 12 OS , 153 Antivirus	Software	119.90
Integration cost with existing IT systems	-	Implementation Cost	111.95
Sub-Total (DC/DR incremental)			671.70

Major Head	Quantity	Works Proposed	Estimated Amount (₹in lakh)
36 Towns IT Infrastructure			
Router, Switch, PC's, UPS, SBM, Printers, IP Phone, Modems etc.	34 Router, 34 Switch, 153 PC's , 34 UPS, 72 SBM, 62 DMP, 25 N/w Printers, 44 IP Phones, 117 Modems	Hardware	225.99
Installation & Commissioning of Hardware with Data Center		Implementation Cost	45.20
Procurement of 36 towns imagery, Asset Mapping	103.76 Sq. Km Satellite Imagery, Consumers covered: - 72,629 Nos.	GIS Survey Cost	247.36
<i>Sub Total (Towns IT)</i>			518.55
<i>Grand Total</i>			1190.25

5. Following the advisory guidelines of PFC Ltd dated 16.02.2017, UPCL has invited RFP (Request for Proposal) on 16.05.2017 for selection of IT Implementation Agency, which is under process of finalization.
6. As per PFC sanction letter dated 14.03.2017, the award of sanctioned IT projects is envisaged within 3 months from date of issue of Sanction letter and the priority items related to availability of energy flow information is envisaged to be completed within 9 months from date of issue of sanction letter. Further, projects completion date as IPDS guidelines shall be 13.09.2019. The closing date for drawl of grant shall be 13.09.2020 (i.e. one year from project completion date) / or any other date as decided by Monitoring Committee. Expenditure incurred after the sanction letter date shall only be eligible for Grant utilization.
7. As per Annexure-IV of the PFC sanction letter dated 14.03.2017, 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 project by the Monitoring Committee. 2. Execution of tripartite/bipartite agreement. 3. Appointment of Project Management Agency (PMA) by the utility.	10%
2	1. Placement of Award. 2. Updating of web portal regarding award details.	20%

Tranche No.	Conditions for release of grant support by PFC, GoI	Release of Grant component
3	<ol style="list-style-type: none"> 1. Certificate from utility regarding utilisation of 90% of grant released under 1st and 2nd tranche. 2. Receipt of 100% of utility contribution (5% of approved project cost for special category states and 10% of approved project cost for other states). 3. Financial sanction of lenders (FIs/Banks) for 10% of approved project cost for special category states and 30% of approved project cost for other states, in case utility needs to avail loan for the project and/ or commitment to bring its own fund. 4. Recommendations of PMA supported by a report on expenditure, progress and constraints if any for timely completion of project. 	60%
Final	<ol style="list-style-type: none"> 1. Project Completion Certificate, duly recommended by the Head of Utility, in the stipulated format. 2. PMA report regarding project Completion and expenditure incurred along with recommendation in accordance with the guidelines. 	10%
<p>In case of timely completion of the project, utilities shall submit all the documents and information in the prescribed format for availing additional grant as per the guidelines.</p>		

8. With regard to the concurrence of the Board of Directors, the Petitioner has submitted a certified true copy of the resolution passed by the Board of Directors for implementation of IPDS IT Phase-II.
9. For justifying the need of the works proposed in the Petition, the Petitioner in its petition has submitted that the implementation of IT Phase II works would ensure IT enablement of 36 Nos. Towns under IPDS which will result in:-
 - (1) Improvement of consumer satisfaction and power supply reliability.
 - (2) Accurate measurement and proper energy accounting & auditing would result in reduction in AT&C losses.
 - (3) Monitoring of 11 kV feeders through National Power Portal (NPP), calculation of feeder losses and calculation of accurate reliability indices of the towns.
10. Before scrutinizing the proposal of the licensee, the Commission decided to review the status and progress of the works undertaken by the licensee under financial

support (Grant) of GoI, the Commission vide its vide letter No. 1488 dated 21.12.2017 directed the Petitioner to furnish status report of works covered under R-APDRP (Part-A & Part-B) scheme alongwith benefits accrued to UPCL in operation & maintenance of the distribution system on account of the works completed under R-APDRP (Part-A & Part-B) scheme.

11. In response, UPCL vide its letter No. 433/UPCL/Comm/RM-6 (IT (RAPDRP-A)_IPDS) dated 31.01.2018 submitted its reply as follows:

“

(i) Status of IT Implementation project under R-APDRP Part-A

IT Implementation project under R-APDRP, Part-A has been completed successfully & got verified by Third Party Independent Evaluation Agency-Information Technology (TPIEA-IT) on 24th Aug-2016 and the project is eligible for 100% conversion of loan into grant. The financial closure of the project is under progress and it is expected that the same shall be achieved by 28th Feb-2018.

(ii) Benefits accrued to UPCL through IT Implementation project under R-APDRP Part-A

- *R-APDRP Part-A implementation provided for the necessary IT infrastructure to UPCL which facilitated UPCL in implementation of a centralized MBC (Metering Billing-Collection) application. Before R-APDRP, Billing was running on different islands and were based on manual processes including human interventions & errors. UPCL implemented all the mandatory modules of the program & running them satisfactorily in all the offices of the UPCL catering to all consumers of the State.*
- *R-APDRP resulted in bringing transparency & accountability in the system, focused monitoring at the feeder level, enabled accurate measurement of reliability of power, improved consumer services through 24x7 customer care center, strict monitoring over consumer requests & applications for New Service Connections & provision of multiple bill payments options to consumers alongwith facility of SMS alerts.*

Implementation of the scheme has resulted in the reduction of the AT&C losses of all the 31 towns.

- *Implementation of R-APDRP in UPCL has created a Enterprise level Data Center at Dehradun and Disaster Recovery Center at Haldwani using WAN, LAN technologies, which can be used for future technological advancements such as extension of facilities to smaller towns under IPDS, Smart Metering Infrastructure development, enhanced automations etc.*
- *Implementation of ERP is also one of the envisioned domains post R-APDRP for which DPR approval is in progress & shall be taken up shortly for implementation.*

(iii) Status of SCADA/DMS project under R-APDRP, Part-A

The project is under progress and is targeted to be completed by March, 2018. Presently, SCADA/DMS control centre at Dehradun and Data Recovery centre at Haldwani has already been established with all the IT hardware & software applications. 19 Nos. out of 23 Nos. 33/11 kV sub-stations of Dehradun town have been made live and their data is being communicating to SCADA/DMS CC. More than 200 Nos. Sectionalizers & RMUs of Dehradun town have also been made live and their data is being communicating to SCADA/DMS CC.

(iv) Benefits accrued to UPCL through SCADA/DMS project under R-APDRP Part-A

- *Although the project is under progress, yet the works completed till date have provided desired visibility & controllability to UPCL in regard to the 33/11 substations, Sectionalizers & RMUs. This will help UPCL in effective monitoring of various parameters of distribution grid of Dehradun town that shall lead to effective condition & health monitoring of assets.*
- *The SCADA/DMS will also help in faster fault detection/location that shall lead to faster fault restoration and thus lesser downtime.*
- *The SCADA/DMS will help in improving SAIFI/SAIDI of Dehradun town.*

- *The SCADA/DMS CC is integrated with SLDC on ICCP which is providing real time data of State power generators of Uttarakhand, major transmission lines of PTCUL and other drawal parameters of State.*

(v) Status & benefits accrued through implementation of R-APDRP Part-B

Physical work covered under R-APDRP Part-B in 30 towns out of qualified 31 towns has been completed. Balance work of Dehradun town is targeted for completion by 31st Mar-2018. As the closure work is under progress the benefits derived under the scheme shall be established after verification of towns by TPIEA-EA to be deputed by Nodal Agency in near future. The same shall be communicated to Hon'ble Commission as soon as the report will be available after verification; however reduction in AT&C is being observed in all 31 towns w.r.t. their approved baseline losses. The major activities carried out under R-APDRP Part-B are:-

- *Construction of new 33/11 kV Substation.*
- *Capacity enhancement of 33/11 kV power transformer.*
- *New 33 kV feeder/bifurcation*
- *Re-conductoring of 11 kV line*
- *New 11 kV line*
- *Re-conductoring of 11 kV line*
- *Installation of new Distribution Transformer*
- *Replacement of LT bare conductor by LT ABC*
- *Bringing meters outside the consumer premises, etc."*

12. The Commission found the above reply of the Petitioner as unsatisfactory, therefore, a meeting was convened on 05.04.2018 between the Commission's officers and the concerned officers of the licensee, wherein the officers of the licensee were directed to submit detailed reply containing the comparison of the base line AT&C loss figures vis-a-vis the current AT&C loss levels for the 31 towns covered under R-APDRP scheme. Incompliance to the directions issued during the aforesaid meeting, the Petitioner vide its letter No. 577/Dir(P)/UPCL/C-4 dated

07.04.2018 submitted additional information with respect to R-APDRP Part-A (IT), R-APDRP Part-A (SCADA) & R-APDRP Part-B alongwith status of implementation as mentioned below :

“

A. R-APDRP Part-A (IT)

(a) *The latest copy of monitoring formats (D1-D7) submitted to Nodal Agency is attached herewith as (Annexure-A). D1 to D7 stands as under :-*

- *D-1 Town Current AT&C losses Vs approved Base Line data (jan-17 to Dec-17)*
- *D-2 Status of release of New Service Connections in Town Area (Feb-18)*
- *D-3 Status of Redressal of Consumer Complaints/Requests in Town Area (feb-18)*
- *D-4 Status of identified High Loss Feeder under town area (jan-17 to Dec-17)*
- *D-5 Number & Duration of Outages of all Urban Feeders of Town Area (feb-18)*
- *D-6 Communication Status of all Feeder Meters of Town Area (Feb-18)*
- *D-7 Town Wise status of digital payment under Town Area (Feb-18)*

...

(d) *Financial closure of the project is under progress, request of release of final tranche was made to PFC on 28th Mar'18, it is expected that the same shall be achieved by 30th Apr'18.*

B. R-APDRP Part-A (SCADA)

A tender for hiring of an agency for carrying out the operations of SCADA/DMS Control Center has already been invited whose part-1 has been opened and technical evaluation of the same is under process. After finalization of the agency, SCADA/DMS operations of the town shall be carried out from the SCADA Control Center, Urja Bhawan Campus, Dehradun that shall enable breaker operations in substations, RMU & Sectionalizer operations from SCADA Control Centre. At present data of 19 Nos. 33/11 kV Substations and data of around 200 RMUs & Sectionalizers is being acquired at SCADA Control Centre through RTUs/FRTUs.

C. R-APDRP Part-B

Out of 31 towns under R-APDRP Part-B works in 30 towns have been completed & work under SCADA Town Dehradun is in progress. It is also to mention that RMU & Sectionalizers installed under the SCADA town under R-APDRP Part-B works are in operation and are being used by field personnels that is helping in curtailing the downtime of outgoing feeders from substations. This in-turn is resulting into less effected consumers during planned outages. Once SCADA control center becomes operational as mentioned above, RMU & Sectionlizers shall be operated from the Control Center leading to further enhancement in operational ease & efficiency."

Commission's observations, Views & directions

13. On examination of the Petition and submissions made by the Petitioner, the following has been observed:-

- (1) As per PFC sanction letter dated 14.03.2017, any slackness in implementation of IPDS will have an impact on the State & Petitioner's financial position. The relevant extract of the said sanction letter has been reproduced below:-

"
...

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 project within nine months from release of first 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 (3) f) above, additional grant (50% of loan / own fund i.e. 5% 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 of the scheme.
 - (3) As mentioned in para 9 above, it is observed that in case the Petitioner achieves the aforesaid benefits from the project namely increased consumer satisfaction & power supply reliability, accurate measurement and proper energy audit & accounting, reduction in AT&C losses and accurate calculation of reliability indices this would certainly help in making its distribution business financially/commercially viable with increased consumer satisfaction.
14. The Commission is of the view that schemes like IPDS which provides a grant from Central Government should be availed/encouraged in the State as it not only provides early availability of funds but also is an initiative to revamp and modernize IT infrastructure in the sub-transmission & distribution sector which would help in providing reliable and quality power supply 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 in accordance with Chapter IV Para 15 of IPDS guidelines i.e. pre-closure/recall of grant as specified in PFC sanction letter dated 14.03.2017 as mentioned in para 13 (1) above. Hence, any adverse financial impact on the Petitioner on account of such reasons should not be allowed as a pass through in the tariffs.
15. 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 Phase II IT enablement projects under IPDS amounting to ₹11.96 Crore i.e. ₹11.90 Crore (Total cost of works) + ₹0.06 Crore (grant from GoI for Project Management Agency) 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 MoP 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 IPDS within the specified time lines and also of achieving the specified target for reduction of AT&C losses as finalized by MoP within the stipulated timeframe for availing the benefits of the scheme.
- (3) 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 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.

(Subhash Kumar)
Chairman