No. PFI/Prog/UERC /2025/14
Dated: 15th February 2025

To,

The Secretary
Uttarakhand Electricity Regulatory Commission
Vidyut Niyamak Bhawan
Near ISBT, PO-Majra
Dehradun-248171, Uttarakhand

Subject: PFI Comments on UPCL True-Up Petition FY 2023-24 & ARR FY 2025-26

Ref: UPCL Public Notice dated 10th January, 2025

Dear Sir,

With reference to your above-mentioned Public Notice, Power Foundation of India (PFI), a not-for-Profit society under the aegis of Ministry of Power (GoI) supported by leading Power Sector organizations is committed to address challenges in the Power Sector for the benefit of consumers, investors and ensuring sustainable development of the Sector.

In this context, PFI has analyzed the True-Up Petition of FY 2023-24 and ARR FY 2025-26 filed by Uttarakhand Power Corporation Limited (UPCL) before Uttarakhand Electricity Regulatory Commission (UERC).

Our comments/ suggestions on the said Tariff Petition are enclosed herewith for your consideration as **Annexure–I** which have also been emailed to secy.uerc@gov.in . **We would also like to orally submit our comments/ suggestions on the day of Public Hearing through video conference.**

Warm Regards,

Encl: Annexure – I

Copy to:

The Chairperson
Uttarakhand Electricity Regulatory Commission
Vidyut Niyamak Bhawan
Near ISBT, PO-Majra
Dehradun-248171

Yours Sincerely,

Sambit Basu

Head Research, PFI

ANNEXURE-I

PFI Comments: Uttarakhand DISCOM (UPCL)
True-Up Petition FY 2023-24 and ARR FY 2025-26

1) PFI is a Policy Research and Advocacy entity, a registered society under the aegis of the Ministry of Power, Government of India, and supported by leading Central Power Sector Organizations, to undertake evidence-based policy research and facilitate informed decision making by the Regulators, Ministry and stakeholders concerned with the Power Sector.

2) Uttarakhand Electricity Regulatory Commission (UERC) has sought comments / suggestions from various stakeholders on the Petition filed by UPCL on True-Up of FY 2023-24, Annual Performance Review of FY 2024-25, Tariff determination for FY 2025-26 and ARR for the Control Period from FY 2025-26 to FY 2027-28. PFI has reviewed and analyzed the True-Up of FY 2023-24 and ARR Petition for FY 2025-26 and our comments on the same are as follows:

A. IMPRUDENT POWER PROCUREMENT PLANNING

3) PFI notes from the previous Tariff Orders of Hon'ble UERC and actual information submitted during True-up of FY 2023-24 that Power Procurement Planning by UPCL is highly imprudent on account of the following reasons:

HUGE RELIANCE ON SHORT-TERM POWER PURCHASE

4) During True-up of FY 2023-24 it is noted that 15% of power has been purchased from short term sources against the total power purchase requirement. Even this 15% is on the lower side because UPCL has not disclosed the Total Short-term Power Purchase either in the Audited Accounts or in their Tariff Formats. They have mentioned only Net Short-term Power Purchase which considers the impact of sale of Surplus Power under short-term arrangement. Be it as it may be, such huge dependence on short term arrangement which is volatile in nature and too costly reflects unwise/imprudent power procurement planning of UPCL. Such improper planning is not only for FY 2023-24 but it has been continued in the past and even has been projected for future years by UPCL themselves that they will continue such imprudent practices tabulated as follows:

Particulars	True-up FY 2022-23	True-up FY 2023-24	ARR FY 2025-26
Net Short Term Power Purchase – STPP (MU)	2334	2441	2575
Total Power Purchase quantum (MU)	16227	16809	18525
STPP as % of Total Power Purchase	**14%**	**15%**	**14%**

5) Every State Electricity Regulatory Commission u/s 87 of the Electricity Act 2003 (Act) representing various Sectoral experts of the respective State notify State Advisory Committee. PFI notes from the previous Tariff Orders of Hon'ble UERC including the MYT Order dtd. 31/03/2022 that issue related to over-reliance on short-term power purchase by UPCL has been raised by various stakeholders, State Advisory Committee members and even Hon'ble UERC itself. State Advisory Committee members noted that:

"UPCL should submit the reason for total reliance on short term power purchase agreement instead for opting for long and medium-term power purchase agreements. These short-term power purchase agreements are expensive and thus UPCL should ensure that very limited short-term agreements are implemented."

6) Even UERC in past many Tariff Orders including recent Tariff Order for FY 2024-25 dtd. 28/03/2024 has noted that UPCL has not been able to rectify its huge dependence on costly short term purchases, extracted as follows:

"The Commission has gone through the submissions of the Petitioner and observes that the reliance on short term sources to meet deficit energy has resulted in huge increase in the power purchase cost. ***The Commission time and again through various Orders has been directing UPCL to prepare a long-term power procurement plan*** *and has also cautioned the Petitioner that such a situation may arise in case UPCL continues to completely depend on short term sources.* ***However, as evident from the power purchase details submitted for FY 2022-23, UPCL has not been able to rectify the situation."***

HUGE RELIANCE ON COSTLY GAS BASED PLANTS – VIOLATION OF MERIT ORDER DESPATCH

7) UPCL has procured 35.73 MU from costly Gas based Plants Anta, Auraiya, & Dadri stations of NTPC and has borne expenses of Rs. 153.28 Cr. including Fixed Cost of Rs. 84 Cr. for such power @ Weighted Average Rate of Rs. 42.89/kWh as tabulated below:

Sr. No.	Costly Gas based Power Stations	Fixed Cost (Rs. Cr.)	Variable Cost (Rs. Cr.)	Other Cost (Rs. Cr.)	Total Cost (Rs. Cr.)	Quantum (MU)	Per unit Cost (Rs./kWh)
1	Anta Gas	11.03	8.92	0.27	20.22	6.91	29.26
2	Auraiya Gas	53.15	11.95	21.23	86.33	9.65	89.46
3	Dadri Gas	19.86	22.71	4.16	46.73	19.17	24.37
4	**Total**	**84.04**	**43.58**	**25.66**	**153.28**	**35.73**	**42.89**

8) During State Advisory Committee (SAC) Meeting held on 9/03/2022, the SAC Members gave suggestions on the UPCL Business Plan and MYT Petitions for Fourth Control Period from FY 2022-23 to FY 2024-25. One of the significant suggestions from SAC was as follows:

> ***"UPCL should renegotiate or surrender their high price PPA such as for Anta, Auraiya and Dadri. Further, UPCL should explore Power purchase option for future so as to ensure that consumer gets Regular power at reduced rates."***

9) However, PFI notes that UPCL has not made any efforts for renegotiation or surrendering their high price PPA such for Anta, Auraiya and Dadri Gas based Power Plants.

10) PFI further observes from the Tariff Order of Hon'ble Punjab SERC dtd. 14/06/2024 that the Fixed Cost and Other Charges from these three generating stations were disallowed by PSERC during the True-up of FY 2022-23 of PSPCL (Punjab DISCOM) since PPAs with them had been terminated. Relevant extract of the said Tariff Order of PSERC is as follows:

> *"If PSPCL is to bear and pass on the cost of the burden of unallocated power of the surrendered PPAs also, then the Commission's Order dated 05.08.2021 in Petition no. 28 of 2021 as well as the termination notice issued by PSPCL to Anta, Auraiya, & Dadri stations seems inconsequential.* ***Accordingly, the Commission disallows Fixed cost and other charges amounting to Rs. 30.73 Crore from these thermal generating stations in the True-up of FY 2022-23. Since PPA's with them already stand terminated, PSPCL should not be paying these fixed cost."***

11) Similarly, Hon'ble Delhi Electricity Regulatory Commission (DERC) in the Tariff Order dtd. 29/09/2015 did not consider energy allocation from Anta, Auraiya and Dadri Gas based Power Plants since FY 2015-16 due to expiry of PPAs. Relevant extract from the said Tariff Order is as follows:

"4.48 During the Technical Validation Session, it was observed from the internal audit report of the Petitioner that validity of PPA from Anta, Auriya and Dadri stations have expired on 31.03.2012 and Singrauli's PPA has expired on 30.04.2013. These PPAs have been renewed by the Petitioner without intimating or getting approval from the Commission. As per internal report of the Petitioner for FY 2013-14, Anta, Auriya and Dadri Gas based stations are costlier than their average power purchase cost. The Commission has also sought clarification vide its letter dated 19.03.2015from the Petitioner regarding renewal of PPA from these stations without getting the approval of the Commission.

4.49 The Petitioner has submitted that the renewal of PPA has been extended on existing terms and conditions. Therefore, approval of the same from the Commission is not required.

4.50 The Petitioners submission regarding renewal of PPA is factually incorrect because whenever the analysis for projected demand and supply is considered, the supply from each station is being considered up to the date of validity of existing PPA. Therefore, before extending the existing PPA for further periods Petitioner should have:

a) undertaken Demand Analysis i.e., whether power from the source under question is required or not over such extended period
b) done Cost Benefit Analysis for procurement from such sources, and
c) obtained prior approval from the Commission as per its license conditions.

4.51 It is observed that actions as brought out at para 4.51 above, have not been done by the Petitioner. This is also evidenced from the fact that the Petitioner vide its letters dated 15.06.2015, 23.06.2015, 26.06.2015, 30.06.2015 and 13.07.2015 has submitted its proposal to surrender its allocation from Anta, Auriya and Dadri Gas Stations forever from their portfolio due to high cost of generation from these stations. The said letters were also submitted to GoNCTD by the Petitioner.

4.52 In view of the above, the Commission has decided that the Power Purchase Cost from Anta, Auriya and Dadri Gas based station should not be considered into the total power purchase cost on and from the expiry date of respective PPA's due to their high cost of generation as well as Petitioner's proposal for surrendering power from these stations....

4.53 In view of the above, ***the Commission has not considered the energy allocation from Anta, Auriya and Dadri Gas Stations during FY***

2015-16 due to expiry of its PPA on 31.03.2012 as the renewal of these PPAs has not been approved by the Commission."

12) In the same Tariff Order, Hon'ble DERC also provided a methodology for treatment of Power Purchase from these stations for the True-up of BRPL for FY 2013-14. Relevant extracts of the Tariff Order have been provided below:

"3.252 As discussed earlier, the Commission has decided that the power purchase cost from Anta, Auraiya and Dadri Gas based station should not be considered into the total power purchase cost after the expiry date of PPA due to their high cost of generation and the very fact that the Petitioner is pursuing surrender of costly power from these stations....

3.253 As physically the power was received from Anta, Auraiya and Dadri Gas Stations in FY 2013-14, the Commission has considered all power scheduled from these stations as it was procured by the Petitioner through short term sources. Therefore, the cost of procurement of this power shall be allowed limited to the monthly average rate of exchange of Northern Region (N2) as per CERC Monthly Market Monitoring Report for FY 2013-14. Accordingly, the difference between the actual rate of power procured and exchange rate of Northern Region (N2) amounting to Rs. 60.40 Crore from these stations has not been considered into the power purchase cost of FY 2013-14. The calculation of the avoidable cost of power from these stations based on the above methodology is as follows:"

Table 3.64: Amount Disallowed from Anta, Auriya and Dadri Gas Stations during FY 13-14

MU Purchased in FY 2013-14													
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
Anta Gas	5.47	3.36	3.47	9.87	10.16	3.37	6.77	7.24	8.74	9.91	8.70	6.78	83.85
Auriya Gas	4.35	2.42	3.52	9.00	7.83	4.70	5.15	4.37	3.63	6.20	5.99	4.17	61.33
Dadri Gas	7.44	3.98	7.44	14.69	10.66	13.33	15.83	10.65	9.46	11.63	14.75	9.09	128.95
Rate (Rs./kWh)													
Anta Gas	4.30	7.38	5.32	3.86	3.85	6.31	4.68	3.91	3.97	3.99	3.90	4.39	
Auriya Gas	5.73	10.73	6.86	4.44	3.13	6.42	5.74	5.84	6.77	5.95	5.34	6.57	
Dadri Gas	5.34	10.12	5.35	1.12	4.51	4.84	4.46	4.84	5.08	5.39	4.46	5.35	
N2 Exch. Rate	2.67	2.36	1.96	2.02	1.77	1.77	2.48	2.56	3.06	2.97	3.09	2.80	
Avoidable Cost (Rs. Crore)													
Anta Gas	0.89	1.69	1.17	1.82	2.11	1.14	1.49	0.98	0.80	1.01	0.70	1.08	14.86
Auriya Gas	1.33	2.03	1.72	2.18	1.06	1.64	1.68	1.43	1.35	1.85	1.35	1.57	19.18
Dadri Gas	1.99	3.09	2.52	(1.32)	2.92	2.53	3.14	2.42	1.91	2.82	2.02	2.32	26.36
TOTAL													60.40

13) Further, it is brought to the notice of Hon'ble UERC that Hon'ble APTEL vide its judgement dtd. 1/06/2016 in Appeal No. 286 of 2015 had upheld the DERC Order wherein the Generation from costly Gas based Power Plants namely Anta, Auraiya and Dadri were not considered. The relevant extract of the said judgement is as follows:

"7.15 The Commission while computing the PPAC did not consider the Power Purchase Cost from the NTPC Generating Stations, namely Anta, Auraiya and

Dadri Gas Power Plants. As the PPA of these plants has already expired on 31.03.2012, the Distribution Licensees without prior approval of the Delhi Commission entered into Supplementary Agreement with NTPC for purchase of power from these gas generating stations. In view of the non-fulfillment of the license conditions, the Delhi Commission rejected the Power Purchase Cost of these stations while computing the Power Purchase Adjustment Cost.

...

7.21 In view of the above discussion and analysis, we do not find any infirmity in the Impugned Order and we hold and observe that the Delhi Commission is fully and legally justified in passing the Impugned Order dated 12.06.2015 7.22 Accordingly, the issue is decided against the Appellants and the Impugned Order of the Delhi Commission is liable to be upheld."

14) It is further noted that UPCL has purchased from costly State Gas Plants in FY 2023-24 :

State Gas plants	Fixed Cost (Rs. Cr.)	Variable Cost (Rs. Cr.)	Other Cost (Rs. Cr.)	Total Cost (Rs. Cr.)	Power Purchase (MU)	Per Unit Cost Rs./kWh
Gama	96.17	195.98	-	292.15	215.22	13.57
Shravanti	271.63	392.17	-	663.80	430.23	15.43

15) UPCL has even not submitted monthly reports certified by SLDC that Merit Order Despatch has been followed in true spirit while scheduling the power from various generating stations. PFI notes from Regulation 81 (4) of UERC (Terms and Conditions for Determination of Multi Year Tariff) Regulations, 2021 that *"All Power Purchase Costs will be considered legitimate unless it is established that the Merit Order principle has been materially violated or power has been purchased at unreasonable rates."* It is noted that UPCL has not provided the gross power purchase quantum in Short-term mode and corresponding purchase rate, heavily relied on costly gas based power plants and has even not submitted the details related to adherence of Merit Order Despatch.

16) PFI notes that various other DISCOMS operating in other States submit such information as part of their True-up Petitions and based upon the prudence check exercise of Merit Order Despatch the legitimate Power Purchase Cost is thus allowed by respective SERCs which is in compliance to Section 86 1(b) of the Act wherein one of the major functions of the SERC is to regulate electricity purchase and procurement process of DISCOM including the price at which electricity shall be procured. Further there are numerous judgments of the Hon'ble APTEL wherein MoD principle has been considered as one of the major parameter in deciding the Power Purchase Cost of DISCOM. UPCL has not provided any details that whether there was forced scheduling

from various costly gas based CSGS as tabulated above or these were received on account of Minimum Technical Limit (MTL) Criteria.

17) In view of above, PFI notes that no suitable measures have been taken by UPCL for improving their Power Procurement Planning since past many years. Further, details whether such Gas based plants were required / scheduled during peak hours has also not been provided in the Petition which Hon'ble UERC should seek from UPCL and provide in Public Domain. The inefficiency on account of DISCOM is socialized in the ARR and its impact is being loaded to the Honest Consumers of Uttarakhand in the form of Tariff hike.

18) **Thus, considering the consistent imprudent Power Purchase Planning continuing since past many years by UPCL despite the directions of Honb'le UERC, suggestion of SAC members it is now submitted that such high cost power be restricted at APPC rate (derived from long term sources only) for FY 2023-24. The inefficiency of UPCL should not be borne by consumers at large in the form of Tariff Hike. Rather it should be provided by the Government of Uttarakhand to UPCL. PFI request Hon'ble UERC to disallow Rs. 669.78 Cr. from the Power Purchase Cost claimed during FY 2023-24. Fixed Cost is allowed as per the PPA terms even to costly Gas based Plants.**

Sr. No.	Imprudent Power Planning by UPCL	Quantum	Variable Cost	Other Cost	VC + Other Cost	Per Unit	APPC*	Disallowed Cost
		(MU)	(Rs. Cr.)	(Rs. Cr.)	(Rs. Cr.)	(Rs./kWh)	(Rs./kWh)	(Rs Cr)
1	Anta Gas	6.91	8.92	0.27	9.19	13.30	4.19	6.29
2	Auraiya Gas	9.65	11.95	21.23	33.18	34.38	4.19	29.14
3	Dadri Gas	19.17	22.71	4.16	26.87	14.02	4.19	18.84
4	Gama Gas	215.22	195.98	-	195.98	9.11	4.19	105.80
5	Shravanti Gas	430.23	392.17	-	392.17	9.12	4.19	211.90
6	Net Short Term	2441				5.41	4.19	297.80
	Total	**3122.18**	**631.73**	**25.66**	**657.39**		**4.19**	**669.78**

19) **Also, UPCL should ensure surrender of costly PPA post their expiry and increase their portfolio with Round the Clock Renewable Energy coupled with Energy Storage.**

B. O&M EXPENSES (EMPLOYEE EXPENSES)

20) UPCL has claimed Rs. 414 Cr. as Employee Expenses for FY 2023-24 based on the actuals as per Audited Accounts of FY 2023-24. However, UPCL has also calculated the Normative expenses as per the UERC MYT Regulations,2021. Table 18 of the Petition has been reproduced below:

Table 18: Normative Employee Expenses for FY 2023-24 (Rs. Cr.)

Particular	Actual as per Audited Accounts	Approved in T.O. for FY 23-24 dated March 30, 2023	Normative
	(Rs. Cr.)	(Rs. Cr.)	(Rs. Cr.)
Employee Expenses			
EMPn-1		454.38	453.92
Gn		0.00%	0.00%
CPIinflation		5.89%	5.40%
EMPn = (EMPn-1) x (1+Gn)	530.00	481.16	478.44
Capitalisation rate		15.16%	15.16%
Less: Employee expenses capitalised	102.02	72.93	72.53
Less: Subsidized Electrcity	14.07		-
Net Employee expenses	**413.92**	**408.23**	**405.90**

21) In the True-Up Petition for FY 2022-23 also, UPCL had requested the Commission to allow actual employee expenses, but the Commission approved Normative Employee Expenses only stating the following reason:

> *"Thus, as already opined by the Commission, O&M expenses are allowed based on certain norms to encourage efficiency and, moreover, these expenses are controllable in nature, accordingly, UPCL should exercise proper prudence while incurring these expenses as a commercial entity. Any further allowance or incentives or benefits granted to its employees will have to be borne by UPCL from its own resources or through increased efficiency which is rather deteriorating day by day.* ***Thus, the Commission does not find any reason to allow O&M expenses based on actuals."***

22) **Thus, PFI requests the Hon'ble UERC to disallow Rs. 8 Cr. from the claimed Employee Expenses of UPCL based on normative in the True-Up of FY 2023-24.**

23) Further, PFI notes from Note No. 25 of the Audited Accounts related to Employee Expenses for FY 2023-24 that Rs. 176.27 Cr. has been booked under the head ***Other***

Staff Cost in Employee Expenses which is at par with the head ***Salary wages*** of Rs. 293.05 Cr.

24) No details/ explanation has been provided in the True-Up Petition or in the footnote of the said Note related to the expenses booked under the head ***Other Staff Cost.*** It is further noted that in Form 4.1 wherein UPCL has provided sub heads of Employee expenses from FY 2018-19 to FY 2027-28 that "Other Staff Cost" is Rs. 118.71 Cr. for FY 2023-24 which is at variance with that mentioned in the Audited Accounts, i.e., Rs. 176.27 Cr. It is even further noted that for FY 2025-26 and FY 2026-27 UPCL has claimed Rs 66.01 Cr. in "Other Staff Cost".

25) **On account of above-mentioned variations in the head of "Other Staff Cost", its sanctity/ transparency cannot be established by PFI. Therefore, it is requested to Hon'ble UERC to restrict its cost to Rs. 66.01 Cr. as claimed for ARR of FY 2025-26 and disallow Rs. 110.26 Cr** from the claimed Employee expenses of UPCL.

C. REPAIR AND MAINTENANCE (R&M) EXPENSES

26) PFI observed that UPCL has computed R&M expenses based on Opening GFA of FY 2023-24 as per their Audited Accounts which is in violation of the Regulatory provisions stipulated under the *UERC Tariff Regulations, 2021.*

27) Regulation 84 (3) of the said Regulations stipulates that R&M expenses for the nth year will be computed as product of k-factor and GFA approved for (n-1)th year. Thus, in the present case, i.e., True-Up of FY 2023-24, the GFA for computation of R&M will be approved Closing GFA of FY 2022-23 (UERC True-Up Order for FY 2022-23 dtd. 28/03/2024) and not opening GFA of FY 2023-24 as per Audited Accounts.

28) Thus, PFI has reworked the R&M expenses (in Rs. Cr.) for FY 2023-24 as tabulated below:

Particulars	Actual	Claimed	PFI working	Disallowance
K- factor		3.11%	3.11%	
Opening GFA		9223	8357	(867)
WPI inflation		7.90%	7.90%	
R&M expenses for FY 2023-24	**380.20**	**310**	**280**	**(29)**

29) **PFI requests Hon'ble UERC to disallow Rs. 29 Cr. as computed above by PFI using the Regulatory Provisions and allow only Rs. 280 Cr. as R&M expenses for FY 2023-24.**

D. ADMINISTRATIVE AND GENERAL EXPENSES

30) PFI observed that UPCL has claimed Rs. 67.49 Cr. of A&G expenses in FY 2023-24 which comprises of Rs. 34.81 Cr. (52% of the total) of Bandwidth, Data Centre and Facility Management Service Charges. It is pertinent to note that the same expenses were of Rs. 25.74 Cr. in FY 2022-23, which has increased to 35% y-o-y. Snapshot of Audited Accounts of UPCL for FY 2023-24 is placed below for reference:

Note No. 28 => Other Administrative Expenses

(Amount Rs. In Lakhs)

S.No.	Particulars	For the year ended 31st March, 2024	For the year ended 31st March, 2023
1	Rent Rates & Taxes	121.58	85.27
2	Electricity and Water	888.98	896.75
3	Insurance	15.03	18.23
4	Communication	341.44	492.05
5	Printing and Stationery	297.60	287.63
6	Travelling and Conveyance	1,078.62	1,004.23
7	Legal & Professional Incl. Fees & Subscription	1,131.45	1,106.48
8	Auditors Remuneration- Audit fees (refer foot note (i))	11.20	10.89
9	Departmental Training	10.07	48.78
10	Advertisement	449.15	404.26
11	Miscellaneous Expenses	666.68	641.50
12	Other debit to Revenue A/c,Compensation expenses to staff & outsiders, Arbitration Award,Court Orders,etc.	557.73	504.45
13	Bandwidth & Facility Management Services (FMS) Charges	3,480.66	2,574.42
14	U.E.R.C. Fees	477.44	470.22
	Total (A)	*9,527.63*	*8,545.15*
	Less: Expenses charged to Capital WIP *(B)*	1,995.41	1,985.40
	Total (A-B)	*7,532.22*	*6,559.75*

31) It is pertinent to note that Hon'ble UERC has disallowed some parts of A&G expenses basis the fact that A&G expenses are controllable in nature and cannot be allowed to increase drastically without any justification. Relevant extract of the Hon'ble UERC Tariff Order for FY 2024-25 is as follows:

> *"It has been observed from the information of A&G expenses submitted by UPCL vide letter dated 01.02.2024, that during FY 2022-23, certain expenses have increased substantially when compared with FY 2021-22, like telephone, postage etc. which was Rs. 1.70 Crore in FY 2021-22 and has increased to Rs. 4.92 Crore in FY 2022-23, similarly Conveyance and travelling expenses which was Rs. 1.09 Crore in FY*

2021-22 increased to Rs. 10.04 Crore in FY 2022-23. ***These expenses are controllable in nature and cannot be allowed to increase drastically without any justification.****"*

32) **In view of above, PFI requests Hon'ble UERC to consider Rs. 25.74 Cr. with escalation of 7.90% as claimed by UPCL in True-Up of FY 2023-24. Thus, PFI requests to disallow Rs. 7.04 Cr. from the A&G expenses.**

33) Further, Hon'ble UERC in Tariff Order for FY 2024-25 disallowed Rs. 2.85 Cr. paid as penalty by UPCL. Further, the Commission in the matter of "**Compensation for death, injuries and damage to staff and outsiders"** directed UPCL to ensure that no HT works are charged without obtaining clearance from the EI, failing which the expenses in the form of compensation will not be considered by the Commission.

34) PFI notes from Audited Accounts of FY 2023-24 (Note- 28) that UPCL has booked Rs. 5.58 Cr. as part of Compensation and other expenses. PFI submits before the Hon'ble UERC that as per the Regulatory Provisions, the compensation made by the DISCOMs against their fault should not be pass through in the ARR. Any inefficiencies in the form of Compensation should be disallowed by Hon'ble UERC. **Thus, PFI requests Hon'ble UERC to provisionally disallow Rs. 5.58 Cr. of A&G expenses.**

35) **So, the total disallowance worked out by PFI in A&G expenses is of Rs. 12.62 Cr. PFI requests Hon'ble UERC to consider the submission made by PFI.**

E. LOWER COLLECTION EFFICIENCY: DEFAULT IN PAYMENT BY GOVT. PUBLIC UTILITIES

36) PFI notes from the previous Tariff Orders of UERC including the MYT Order dtd. 31/03/2022 that issue related to poor Collection Efficiency of UPCL has been raised by various stakeholders, SAC members and even UERC itself. SAC is constituted by every State Electricity Regulatory Commission u/s 87 of the Electricity Act 2003 representing various Sectoral experts of the respective State. It is noted from the said MYT Order that UPCL submitted Collection efficiency of 97% to be considered for the 4^{th} Control Period from FY 2022-23 to FY 2024-25, whereas Hon'ble UERC rejected the said request and approved the normative Collection efficiency of 99.15%.

37) It is also noted from the said MYT Order that UPCL themselves submitted that they plan to carry out various measures in the upcoming period for the improvement of Collection Efficiency like - Android based billing system, Installation of pre-paid meters, AMR based billing for high value consumers, Instant Bill delivery on Consumer Premises using Spot Billing Machines, Photo based billing started in some areas to remove meter reader malpractices & improve customer satisfaction, SMS based alerts on bill generation, payment reminders & other customer centric actions, SMS based services using 8108114333, Pre-Paid Metering for Temporary Connections.

38) Significant amount of Capital Expenditure was also allowed by Hon'ble UERC in the said MYT Order for various schemes related to Collection Efficiency. However, it is noted that actual Collection efficiency of a relevant year on cash basis without Arrear (as per UERC practice) is far below the normative level, as tabulated below. Further, **PFI notes from Form 15 of the True-Up Petition of FY 2023-24 that there is wide variation in the category wise Collection Efficiency. For Public Lamps it is 59.19%, Govt. Irrigation it is 83.29%.**

Particulars	True-up FY 2021-22	True-up FY 2022-23	True-up FY 2023-24
Collection Efficiency with Arrears	98.14%	98.99%	99.14%
Collection Efficiency w/o Arrears	**93.85%**	**93.82%**	**95.28%**

39) Relevant extract of the said MYT Order is as follows:

"2.15.3 Commission's Views

The Commission has given due consideration to the issues raised by the stakeholders and the replies submitted by the Petitioner. The Petitioner should continue to take all possible steps to reduce the arrears, in order to improve its cashflows. However, it is clarified that collection of arrears will not result in tariff reduction, as the tariffs are determined on accrual basis and not on cash basis.

...

3.5.2 Collection Efficiency

The Petitioner submitted that UPCL has achieved collection efficiency of 98.53% during FY 2020-21 as against the approved collection efficiency of 99.15%. The Petitioner, however, submitted that it had received an arrear amount of Rs. 201.96 Crore from M/s IDPL which has been adjusted as the same was abnormal transaction, hence, the actual adjusted collection efficiency in FY 2020-21 is 95.55%. The Petitioner submitted that UPCL has undertaken several initiatives such as organizing revenue realization camps, agreement with third parties for increasing payment centres, AMR billing for high value consumers, IT enablement of day-to-day business processes of metering, billing and collection, etc. Further, *the Petitioner submitted that any further improvement in collection efficiency beyond 99% may not be possible and achievable given the increased LT consumers and existing large consumer base. Therefore, UPCL has proposed an improvement of 0.50% in collection efficiency in FY 2021-22 and during each year of the 4th Control Period considering the actual adjusted collection efficiency of 95.55% achieved during FY 2020-21.*

The Petitioner submitted that following measures are planned to be carried out to achieve the proposed collection efficiency for the fourth Control Period:

- *Android based billing system.*
- *Installation of pre-paid meters.*
- *AMR based billing for high value consumers.*
- *Instant Bill delivery on Consumer Premises using Spot Billing Machines.*
- *Photo based billing started in some areas to remove meter reader malpractices & improve customer satisfaction.*
- *SMS based alerts on bill generation, payment reminders & other customer centric actions*
- *SMS based services using 8108114333.*
- *Pre-Paid Metering for Temporary Connections.*

The collection efficiency trajectory proposed by the Petitioner is as shown in the Table below:

Table 3.14: Collection efficiency trajectory proposed by the Petitioner for FY 2022-23 to FY 2024-25

Particulars	FY 2020-21 (Actual)	FY 2021-22 (Rev. Estimate)	FY 2022-23 (Projected)	FY 2023-24 (Projected)	FY 2024-25 (Projected)
Collection Efficiency	95.55%	96.00%	96.50%	97.00%	97.50%

The collection efficiency (without arrears) achieved by the Petitioner against the approved levels for FY 2017-18 to FY 2020-21 is as shown in the Table below:

Table 3.15: Collection efficiency for FY 2017-18 to FY 2020-21

Particulars	FY 2017-18		FY 2018-19		FY 2019-20		FY 2020-21	
	Approved	Actual	Approved	Actual	Approved	Actual*	Approved	Actual*
Distribution Losses	98.75%	98.90%	99.00%	97.44%	99.05%	91.87%	99.10%	95.55%

**COVID affected years*

It is observed that the Petitioner has achieved collection efficiency of 98.90% and 97.44% for FY 2017-18 and FY 2018-19 respectively as against the approved collection efficiency of 98.75% for FY 2017-18 and 99.00% for FY 2018-19. However, the collection efficiency thereafter in FY 2019-20 and FY 2020-21 has deteriorated due to the impact of COVID-19. In view of the past achieved targets (pre-COVID) the collection efficiency proposed by the Petitioner for the fourth Control Period is very low and such poor collection efficiencies would be detrimental to the financial health of the Petitioner Company. It is to be further *noted that the Petitioner in its Business Plan Petition for the third Control Period had projected collection efficiency in the range of 99.05% to 99.15%.*

In view of the above, the Commission is of the view that collection efficiency needs to be improved and cannot be lowered down vis-à-vis earlier targets. It is further to be noted that the Petitioner has projected a significant amount of capital expenditure towards cash collection centres, consumer care centres and e-payment of bills which should result in increase in the collection efficiency. However, with regards to the present norms, the Commission is of the view that improving collection efficiency beyond 99.15% as approved for FY 2021-22 would be difficult and, therefore, the Commission has approved the collection efficiency of 99.15% for FY 2022-23 to FY 2024-25. The collection efficiency trajectory approved by the Commission for the fourth Control Period from FY 2022-23 to FY 2024-25 is as shown in the Table below:

Table 3.16: Collection Efficiency for FY 2022-23 to FY 2024-25

Particulars	FY 2021-22	FY 2022-23		FY 2023-24		FY 2024-25	
	Approved	Proposed	Approved	Proposed	Approved	Proposed	Approved
Collection Efficiency	99.15%	96.50%	99.15%	97.00%	99.15%	97.50%	99.15%

However, the Commission would like to point out that it does not determine the ARR and Tariffs of UPCL based on the AT&C loss levels but based on the distribution loss levels. The shortfall in collections is covered through an allowance in working capital for the distribution licensee to the extent of collection inefficiency. The licensee should strive for maximum collections to improve its financial health and prevent any receivables turning bad. Further, the scheme of surcharge waiver should not be encouraged as it gives a wrong signal to the honest consumers who pay their dues in time. The Petitioner is required and expected to improve its bill collection system and monitor its receivables to prevent them from turning into bad and unrealizable.

...

8.1.31 Average Collection Period and Collection Efficiency Ratio

The Petitioner was directed to submit within 3 months, an action plan to improve its collection period. The Commission directed UPCL to submit a plan to demonstrate as to how it will work in the direction of improving its actual collection even during initial quarters during a financial year so that the gap between the actual collection efficiency and the collection efficiency approved by the Commission may be brought to minimum.

The Commission has noted the Petitioner's submission in this regard. The Petitioner is directed to submit within 3 months, an action plan to improve its collection period. The Commission directs UPCL to submit a plan to demonstrate as to how it will work in the direction of improving its actual collection so that the gap between the actual collection efficiency and the collection efficiency approved by the Commission may be brought to minimum."

40) Further, it is also pertinent to note that UPCL in Format 18.9 has shown the Status of Metering for FY 2023-24 wherein Govt. Public Utilities have 14.5% defective Meters. This is repeated non- compliance of the Commission's Directions as UPERC in past Tariff Orders have time and again directed the DISCOM to contain Defective Meters within 3%. Relevant extract of the Tariff Order dtd. 28/03/2024 for FY 2024-25 is as follows:

> ***"6.2.1.1 Replacement of Improper, Non-Functional, Stop/Stuck up defective meters (referred to as Identified defective meters (IDF))***
>
> *In this regard, the Commission vide its Tariff Order dated 30.03.2023 had directed the Petitioner to restrict percentage defective meters (IDF) to 2% in plain and 3% for hilly areas of the State, failing which the concerned Chief Engineer (Distribution), Superintending Engineer (Distribution), Executive Engineer (Distribution) & Executive Engineer (Test) shall be held responsible for non-compliance of the Commission's directions and appropriate action under the Act/ Rules/ Regulations may be initiated.*
>
> ...
>
> *It is an admitted fact that by expeditious replacement of defective meters on the basis of well laid down defective meter replacement programme, the Petitioner would not only be able to control this menace but shall also comply with the provisions of SOP Regulations.*
>
> *The Petitioner should put its all efforts for reducing the IDF cases below 2% in plains areas and 3% in hilly areas as per UERC (Standards of Performance) Regulations, 2022 where the actual IDF cases are above the target level so that Provisional Billing cases can be minimized and revenue can be enhanced.*
>
> ***Therefore, the Commission directs the Petitioner to restrict percentage defective meters (IDF) to 2% for plain areas and 3% for hilly areas, failing which the concerned Chief Engineer (Distribution), Superintending Engineer (Distribution), Executive Engineer (Distribution) and Executive Engineer (Test) shall be held responsible for non-compliance of the Commission's directions and appropriate action under the Act/Rules/Regulations may be initiated."***

41) As noted above, UPCL has not put in efforts to change the Defective meters of Govt. Public utilities which have staggering 14.5% Defective meters now. Besides non-compliance of Commission's Directions, in such a case it is not possible to carry out proper Energy Accounting and computing Distribution losses for Govt. Public utilities which lead to poor revenue collection from the said category of consumers. This is substantiated by the fact that in Format 18.9 ***"Ageing Schedule of Receivables"*** UPCL has shown that the total receivables pertaining to Govt. Public Utilities are huge,

i.e., Rs. 700 Cr. *(31% of the total).* Through defective metering, there is substantial reduction in the Average billing rate (ABR) of Govt. Public utilities which has also been acknowledged by Hon'ble Commission in Tariff Order dtd. 28/03/2024 for FY 2024-25. Relevant extract of the Commission's Order is as follows:

> ***"3.1.1 Sales***
>
> *The Commission in its previous Tariff Orders has been analysing the division wise commercial statements of UPCL and observed that the average billing rate (ABR) of certain categories of consumers in some divisions were even less than the energy charge approved for that category and had directed the Petitioner to rectify such anomalies. However, no efforts have been noticed from the Petitioner's end to rectify such anomalies, nor any satisfactory reply has been provided to the Commission on the same. Accordingly, the Commission during truing up of previous years has been re-casting the category wise sales of those categories that were having abnormally low ABR.*
>
> ...
>
> ***c) Government Public Utilities:***
>
> *Similarly, for Government Public Utilities, normative ABR has been computed for each Division considering the energy charges (including additional energy charges approved vide Order dated September 28, 2022, and FCA approved vide Orders dated August 29, 2022, November 15, 2022 and February 13, 2023) and fixed charges approved by the Commission and the same has been compared with the average division wise ABR and, wherever,* ***the actual division wise ABR is found to be lower than the normative ABR, sales have been re-estimated based on the actual revenue and normative ABR."***

42) With reduction in ABR due to defective meters, the revenue collection impacts which is turn impacts the Revenue Gap of DISCOM. The poor revenue collection of Govt. Public utilities burdens other consumer categories as the tariff hike to meet the Revenue Gap is applicable for all consumer categories.

43) In view of above, PFI requests Hon'ble UERC to take stern action against UPCL for Defective metering issue of Govt. Public utilities and initiate proceedings u/s 142 of the Electricity Act, 2003. Further, UPCL may be directed to replace all their defective meters which constitutes 15% of the total meters of that category within 6 months of the initiation of such proceedings and DISCOMs should ask to submit monthly Status report in this regard.

44) **Further, PFI feels that UERC to be prudent enough to seek an Action Plan from UPCL for realization of receivables especially from the Govt. public Utilities within a period of 2 years. Also, UPCL should provide an Action Plan for recovery of amount of Rs. 851 Cr. from Domestic, Rs. 276 Cr. from Commercial and around Rs. 200 Cr. from Industrial category of consumers which is shown as pending as per their submission in Form 18.8 of the True-up Petition.**

45) **As a deterrent measure related to repeated non- compliance of the UERC's directions and huge % of defective meters, around Rs. 2,250 Cr. which is 22% of their ARR, UERC should consider 33% of said receivable every Trued-Up year from FY 2023-24 onwards.** The said inefficiency of UPCL in the past has been borne by honest consumers because in the past years when such receivables were not collected and did not form part of the revenue then UERC must have hiked the Tariff in order to bridge the Gap of ACoS and ABR. Had such amount been collected by UPCL at that point of time the Tariff shock could have been avoided for the consumers at large for the State of Uttarakhand. **Now the benefit on account of the pending receivables to be considered in Revenue will be passed on to such consumers over a period of 3 years. Any default in Collection of pending receivables to the tune of 33% every year should be to the account of UPCL and govt. of Uttarakhand should bear the pending receivables of Govt. Public Utilities category in the form of Subsidy.**

46) **Thus, PFI submits that the revenue to be considered for True-Up of FY 2023-24 will be actual revenue collected, i.e., Rs. 9,235.84 Cr. plus 33% of actual pending receivables (Rs. 2248 Cr.) as per Form 18.8 of the Tariff Petition, i.e., Rs. 741.84 Cr. summing the Revenue to Rs. 9,977.68 Cr.**

F. Summary of Disallowances in True-Up of FY 2023-24

47) In view of above, submissions made by PFI, the summary of Disallowances worked out for True-Up of FY 2023-24 is as follows:

(Rs. Cr.)

Particulars	Claimed	PFI Working	Disallowances
Power Purchase Cost	8369.65	7699.87	(670)
O&M Expenses	790.91	639.03	(152)
Employee Expenses	*413.92*	*303.66*	*(110)*

Particulars	Claimed	PFI Working	Disallowances
R&M Expenses	*309.5*	*280.5*	*(29)*
A&G Expenses	*67.49*	*54.87*	*(13)*
Other Expenses	1230.53	1230.53	0
Net ARR	**10391.09**	**9569.43**	**(822)**
Revenue from Sale of Power	9235.84	9977.68	(742)
Net Revenue (Gap)/Surplus	**(1,155)**	**408**	**(1,564)**

G. Other Issues

Recasting of Energy Sales

48) Hon'ble Commission in past Tariff Orders has been repeatedly observed that ABR of certain categories of consumers are less than the ABR approved for that category and had directed the DISCOM to rectify such anomalies. However, no efforts have been noticed from the DISCOM to rectify such anomalies, nor have any satisfactory reply has been provided to the Commission on the same. Accordingly, the Commission during truing up of previous years has been re-casting the category-wise sales of those categories that were having abnormally low ABR. Relevant extract of the latest Tariff Order dtd. 28/03/2024 for FY 2024-25 is as follows:

> ***"3.1.1 Sales***
>
> *The Commission in its previous Tariff Orders has been analysing the division wise commercial statements of UPCL and observed that the average billing rate (ABR) of certain categories of consumers in some divisions were even less than the energy charge approved for that category and had directed the Petitioner to rectify such anomalies. However, no efforts have been noticed from the Petitioner's end to rectify such anomalies, nor any satisfactory reply has been provided to the Commission on the same. Accordingly, the Commission during truing up of previous years has been re-casting the category wise sales of those categories that were having abnormally low ABR."*

49) PFI submits that due to unavailability of necessary information pertaining to Commercial data of FY 2023-24, PFI is unable to verify that whether ABR of different consumer categories are equivalent to the approved ABR for that consumer category. Hon'ble UERC has sought the above information from UPCL, however, UPCL submit this information in soft copy to Hon'ble UERC which is not available in the Public Domain. In view of above, PFI submits before Hon'ble Commission to carry out prudence check of consumer category wise ABR for FY 2023-24.

H. REVENUE GAP: (ELECTRICITY (AMENDMENT) RULES, 2024 DTD. 10/01/2024)

50) MoP vide *Electricity (Amendment) Rules, 2024* dtd. 10/01/2024 has specified the following with regards to Revenue Gap between approved Annual Revenue Requirement and estimated Annual Revenue from approved tariff:

> ***"23. Gap between approved Annual Revenue Requirement and estimated annual revenue from approved tariff–*** *The tariff shall be* ***cost reflective*** *and there* ***shall not be any gap*** *between approved Annual Revenue Requirement and estimated annual revenue from approved tariff except under natural calamity conditions:*
>
> *Provided that such gap, Created if any,* ***shall not be more than three percent of the approved Annual Revenue Requirement.***
>
> ....."

51) The Rules have clearly specified that the tariff shall be cost reflective and there shall not be any gap between approved Aggregate Revenue Requirement and Estimated Annual Revenue from approved tariff except under natural calamity conditions. And if at all, the Gap is Created it shall not be more than 3% percent of the approved Annual Revenue Requirement.

52) It is noted from the UPCL Tariff Petition for ARR of FY 2025-26 there is a Revenue Gap of Rs. 1,341 Cr. at existing Tariff which is 12.01% of the ARR projected for FY 2025-26.

53) Hon'ble APTEL in its judgement dated 11/11/2011 in OP 1 of 2011 has laid the significance of cost reflective tariff as follows:

> *"56. It is to be pointed out in this context, that the legislative intent in enacting the Act, 2003 is to secure effective Regulations characterised by tariff rationalisation with timely cost reflective tariff determination based on the principles set out in Section 61 read with the National Tariff Policy. ..."*

54) Section 62 of the Act empowers SERCs to determine the Tariff on cost plus basis for the utilities regulated by them engaged in generation, transmission and distribution of electricity. Section 63 empowers SERCs to adopt the Tariff discovered through transparent process of bidding. Determination of cost-reflective tariff of Distribution Licensees by SERCs plays a significant role as it lays the foundation of routing revenue up the supply chain.

55) Hon'ble Supreme Court's in its judgement in PTC India Vs. CERC dated 15/03/2010 has ruled that the term "tariff" includes within its ambit not only the fixation of rates but also the rules and regulations relating to it. Through Sections 61 and 62 of the Act, the Appropriate Commission shall determine the actual tariff in accordance with the provisions of the Act, including the terms and conditions which may be specified by the Appropriate Commission under Section 61 of the said Act. Under the 2003 Act, it becomes clear from Section 62 with Section 64, that although tariff fixation is legislative in character, the same under the Act is made appealable vide Section 111. These provisions, namely, Sections 61, 62 and 64 indicate the dual nature of functions performed by the Regulatory Commissions, viz, decision-making and specifying terms and conditions for tariff determination.

56) Similarly, Hon'ble APTEL vide its judgment dated 4/09/2012 in Appeal No. 94 of 2012 has stated that the term 'Regulate' has got a wider scope and implication not merely confined to determination of tariff. Section 61 and 79 not only deal with the tariff but also deal with the terms and conditions of tariff. The terms and conditions necessarily include all terms related to tariff.

57) Further, Tariff Policy, 2016, also states that in terms of Section 61(g) of the Act, the Appropriate Commission shall be guided by the objective that the tariff progressively reflects the efficient and prudent cost of supply of electricity.

58) In view of above, PFI submits before Hon'ble UERC to determine cost-reflective Tariff for FY 2025-26 as per the principles stipulated in MoP rules dated 10/01/2024 considering the impact of consistent default of UPCL on account of imprudent power procurement planning, lower collection efficiency and other issues as stipulated above in True-up of FY 2023-24.

I. NO ROAD MAP FOR ENERGY STORAGE

59) India's evolving energy storage policy framework underscores its commitment to enhancing grid flexibility and supporting renewable energy integration. Since 2019, a robust regulatory ecosystem has been crafted to support energy storage deployment through national initiatives around technical standards, legal frameworks, transmission charges, Resource Adequacy (RA) planning, market mechanisms, and financial incentives, as well as state-level initiatives.

60) In a significant regulatory development, the MoP clarified Legal Status to ESS on January 29, 2022. The order identifies Energy Storage Systems (ESS) as an essential component of the power system under the Electricity Act of 2003, permitting ESS to function as a standalone or integrated element within generation, transmission, or distribution networks. The ESS can be operated by various entities, and standalone ESS projects can be licensed independently and granted connectivity under specific rules, encouraging broader ESS applications and ownership models.

61) The Waiver of Inter-State Transmission System (ISTS) Charges for solar, wind (onshore and offshore), and green hydrogen projects was mandated by the Ministry of Power (MoP) on November 23, 2021, with subsequent amendments in November 2021, December 2022, and May and June 2023. This waiver also applies to Hydro Pumped Storage Projects (PSP) and Battery Energy Storage Systems (BESS) commissioned up to June 30, 2025.

62) The Central Electricity Authority (CEA) on 28/06/2023, has established RA planning guidelines at both national and state levels, an important step forward, and has recently come up with state-wise RA reports with up to 5-year or 10-year RA projections. The CEA Resource Adequacy guidelines also outline a framework for incorporating ESS in RA planning.

63) Recent national and state government policies have begun to lay a foundation that will support ESS deployment and its integration into RA planning and procurement, electricity markets, and system operations.

64) The CEA in its Report for Resource Adequacy Plan[1] for the State of Uttarakhand for the period from FY 2024-25 to FY 2034-35 has identified that:

- The share of coal based capacity in the total capacity mix of the state is likely to increase from 15% as on June,2024 to 31.1 % by 2034-35. As per the studies, the state requires coal based capacity addition of 1,878 MW in order to meet its increasing demand starting from the year 2029-30.

[1] https://cea.nic.in/wp-content/uploads/resource_adequacy_st/2024/09/Report_on_Resource_Adequacy_Plan_for_Uttarakhand_Upto_2034_35.pdf

- As per the projected capacity addition as furnished by the state, the state would require additional DRE capacity addition from the year 2028-29 till 2035 in order to meet the RPO obligations for Distributed RE sources. For studies this requirement is seen to be about 41 MW in 2028-29 from Solar based DRE (Solar Rooftop) which increases to 103 MW till the year 2034-35.
- As per the Resource Adequacy studies, the total projected contracted capacity for the year 2034-35 is 8,009 MW (along with 200 MW of PSP based Storage) which consist of 2,488 MW of coal, 390 MW of Gas, 111 MW of Nuclear, 3308 MW of Hydro(3027 MW of Large Hydro and 281 MW of Small Hydro), 52 MW of Cogeneration, 100 MW of Wind, 804 MW of Solar and 756 MW of DRE. Additionally, 1,600 MW from short term/medium term/market based tie ups may be required.

65) Many DISCOMs in the country have initiated the bidding process for ESS and for many of them the tariff discovered has also been adopted by respective SERCs. Few such DISCOMs along with their ESS proposal pertaining to the objective of Energy Arbitrage are as follows:

Category	Energy Storage Tender_ DISCOMs	Capacity
BESS	GUVNL Phase II (March 2024)	500 MWh
	GUVNL Phase III (June 2024)	1000 MWh
	MSEDCL (August 2024)	600 MWh
	UPPCL (August 2024)	1200 MWh
	GUVNL Phase IV (August 2024)	800 MWh
PSP	MSEDCL (Sept 2024)	24000 MWh

66) Various SERCs, have approved the Energy Storage based on the proposal received from their DISOCMs. Like, in Delhi, DERC has approved a 20 MW/40 MWh standalone BESS project for their DISCOM on 1/05/2024. On 26/09/2024, MERC approved the procurement of 1000 MW of energy storage from pumped hydro storage (PHS) projects in Maharashtra, with an additional greenshoe option of 2000 MW, allowing for potential expansion. The bid results, as outlined in MERC's order, provide a benchmark for competitive energy storage costs in the region. For projects designed to discharge up to 8 hours daily, with a maximum continuous discharge of 5 hours—enabling two cycles per day—the levelized cost of storage is estimated at ₹3.2 per kWh. This price is highly competitive.

67) Standalone and co-located ESS can play an important role in meeting RA requirements under India's emerging RA framework. Going forward, state-level RA frameworks need to be closely aligned with long-term planning and resource procurement processes to support cohesive implementation.

68) **However, in the Tariff Petition for ARR of FY 2025-26, it is noted that the UPCL has not submitted any proposal for compliance of ESS target. In view of above, PFI submits that Energy Storage is an effective tool for Energy arbitrage for DISCOMs in optimization of their Power Purchase Cost. For instance, in BESS, Batteries can be charged in the off-peak hours and can be discharged in Peak hours, thus, avoiding reliance of DISCOMs on high-cost short term Power from markets or not scheduling the high-cost Power Plants. With steep reduction in Battery prices in CY 2024 and active participation by various DISCOMs, as stipulated above, UPCL necessitates to also consider Energy Storage as part of their Power Procurement Planning in line with Resource Adequacy Planning formulated by CEA.**

J. PM SURYA GHAR – MUFT BIJLI YOJNA AND DEMAND SIDE MANAGEMENT

69) PM Surya Ghar: Muft Bijli Yojana, the world's largest domestic rooftop solar initiative, is transforming India's energy landscape with a bold vision to supply solar power to one crore households by March 2027. By March 2025, installations under the scheme are expected to exceed 10 lakh, with the numbers doubling to 20 lakh by October 2025, reaching 40 lakh by March 2026, and ultimately achieving the target of one crore by March 2027[2]. The scheme is projected to add 30 GW of solar capacity through rooftop installations in the residential sector, significantly contributing to India's renewable energy goals.

70) Through this rooftop solar scheme many domestic consumers will have Net metering connections which will have a sizeable impact on the domestic category sales. However, in the Tariff Petition for ARR of FY 2025-26, it is noted that the UPCL have not submitted any proposal related to **PM Surya Ghar – Muft Bijli Yojna**.

71) Further, UPCL has also not submitted any proposal related to **Demand Side Management (DSM) initiatives**. DSM is a strategic approach to energy

[2] https://pib.gov.in/PressReleasePage.aspx?PRID=2081250

conservation that seeks to manage consumer demand for energy rather than simply supply it. It is a coordinated set of activities and programs undertaken by electric utilities, developers, government agencies, and end-use customers to ensure that electric power service can be delivered to consumers at the lowest cost consistent with reliable supply. DSM also seeks to promote energy conservation and peak load reduction through voluntary or mandatory actions taken by the above-mentioned participants.

72) In view of above, PFI submits that Sales forecast for UPCL in ARR of FY 2025-26 may be done considering the impact of **PM Surya Ghar – Muft Bijli Yojna and Demand Side Management (DSM) initiatives**.

K. TIME OF DAY (ELECTRICITY (RIGHTS OF CONSUMERS) AMENDMENT RULES, 2023 DTD. 14/06/2023)

73) *Electricity (Rights of Consumers) Amendment Rules, 2023* dtd. 14/06/2023 stipulates that every consumer category except Agriculture should have Time of Day (TOD) Tariff with effect from 01/04/2025 and shall be made effective immediately after installation of Smart Meters, for consumers with Smart Meters.

74) Further, the Rules also stipulate that ToD Tariff for Commercial and Industrial consumers during peak period of the day shall not be less than 1.20 times the normal tariff and for other consumers, it shall not be less than 1.10 times the normal tariff. Further ToD during Off-peak hours should be at least 20% less than the normal tariff (not more than 80% of the normal tariff). Although, the MP DISCOMS have proposed Off-peak and peak Tariff for HT and LT consumers (except Domestic) which is in compliance with the Consumer Rules formulated by MoP.

75) **However, it is to be noted that UPCL has not proposed any Peak hours ToD for Domestic consumers upto 10 kW, where Smart Meters have been installed for FY 2025-26.**

76) **Further, UPCL has also not submitted the status of ToD in their area (tariff category wise). The said status report should provide benefit derived from ToD through flattening of Load Curve and avoiding procurement of costly power in Peak Period.**

77) PFI observes that the cost of power purchase during peak hours is quite high. Time of Day (ToD) Tariff is an important Demand Side management (DSM) measure to flatten the load curve and avoid such high-cost peaking power purchases. Accordingly, in ToD Tariff regime peak hour consumption is charged at higher rates which reflect the higher cost of power purchase during peak hours. At the same time, a rebate is being offered on consumption during off-peak hours. This is also meant to incentivise consumers to shift a portion of their loads from peak time to off-peak time, thereby improving the system load factor and flattening the load curve. The ToD Tariff is aimed at optimizing the cost of power purchase, which constitutes over 80% of the Tariff charged from the consumers. It also assumes importance in the context of propagating and implementing DSM and achieving energy efficiency.

78) Introduction of higher peak hour Tariff would initially generate additional revenue which would compensate for the reduction in revenue on account of lower Tariff during off peak hours. In the long run, this would provide signals to the consumers to reduce load during peak hours and, wherever possible, shift this consumption to off-peak hours. Any loss of revenue to the utility on account of shifting of load from peak to off-peak hours in the long run would by and large get compensated by way of reduction of off-peak surplus to the extent of increase in off-peak demand.

79) The ToD Tariff would thus have immediate as well as long-term benefits for both, consumers as well as the utility and contribute towards controlling the rise in power purchase costs

80) **Thus, PFI requests UERC to formulate ToD Tariff for all eligible consumers in line with the MoP Electricity (Rights of Consumers) Amendment Rules, 2023 dtd. 14/06/2023 as amended from time to time.**

PRAYERS BEFORE HON'BLE UERC :-

1) **To consider the comments / suggestions of Power Foundation of India (PFI) on UPCL Tariff Petition No. 4 of 2025 : True-up FY 2023-24 & ARR & Tariff for FY 2025-26.**

2) **To restrict and disallow the imprudent Power Purchase Cost of UPCL, as proposed by PFI, during True-up of FY 2023-24 which is in violation of Merit Order Despatch (MoD) principle as stipulated under UERC MYT Regulations 2021. Source-wise details of MoD should be available in Public Domain especially for period when procurement from costly Gas based plants and Short-Term power is made.**

3) **To regulate and estimate Power Purchase Cost of UPCL during ARR of FY 2025-26 as per Merit Order Despatch principle stipulated under UERC MYT Regulations 2024.**

4) **To initiate proceedings under Section 142 of the Electricity Act 2003 related to non-adherence of Hon'ble MPERC repeated directions for optimizing the Power Purchase Cost with lesser dependance on Short Term Markets.**

5) **To disallow impact of lower collection efficiency and non-recoverable of huge receivables despite investment in revenue collection CAPEX.**

6) **To pass on the benefit of the pending receivables of Govt. Public Utilities, Commercial, Domestic and Industrial consumers in Revenue to consumers over a period of 3 years. Any default in Collection of pending receivables to the tune of 33% every year should be to the account of UPCL and Govt. of Uttarakhand should bear the pending receivables of Govt. Public Utilities category in the form of Subsidy.**

7) **To disallow, as proposed by PFI, the imprudent / escalated expenses under Employee, A&G and R&M Expenses.**

8) **To consider all other suggestions of PFI pertaining to True-up of FY 2023-24 and ARR of FY 2025-26.**

9) **To consider the additional submissions, if any, made by PFI in the said Tariff Petitions.**

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