

Before
UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

Petition No. 46 of 2023

In the Matter of:

Petition under Section 61, 62 & 86 of the EA, 2003 read with Regulation 50(6) of the UERC (Terms & Conditions for Determination of Multi Year Tariff) Regulations, 2018 & 2021 for recovery of under recovered energy charges due to shortfall in energy generation for reasons beyond the control of generating stations during the FY 2020-21 in respect of Dhakrani, Dhalipur and Kulhal Hydro Power Stations of UJVN Ltd.

And

In the Matter of:

UJVN Limited,
"UJJWAL", Maharani Bagh, GMS Road,
Dehradun.

...Petitioner

And

In the Matter of:

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

...Respondent

Coram

Shri M. L. Prasad	Chairman
Shri Anurag Sharma	Member (Law)

Date of Order: May 09, 2025

ORDER

This Order relates to the Petition filed by UJVN Ltd. (hereinafter referred as 'the Generator' or 'the Petitioner') seeking approval of the Commission under Section 61, 62 & 86 of the EA, 2003 read with Regulation 50(6) of the UERC (Terms & Conditions for Determination of Multi Year Tariff) Regulations, 2018 & UERC (Terms & Conditions for Determination of Multi Year Tariff) Regulations, 2021 for recovery of under recovered energy charges due to shortfall in energy generation for reasons beyond the control of

generating stations during the FY 2020-21 in respect of Dhakrani, Dhalipur and Kulhal Hydro Power Stations of UJVN Ltd.

Background

2. The Petitioner vide its letter No. 117/UJVNL/03/D(P)/ dated **29.11.2023** submitted its Petition under Section 61, 62 & 86 of the EA, 2003 read with Regulation 50(6) of the UERC (Terms & Conditions for Determination of Multi Year Tariff) Regulations, 2018 & UERC (Terms & Conditions for Determination of Multi Year Tariff) Regulations, 2021 for recovery of under recovered energy charges due to shortfall in energy generation for reasons beyond the control of generating stations during the FY 2020-21 in respect of Dhakrani, Dhalipur and Kulhal Hydro Power Stations of UJVN Ltd.

3. The Petitioner has filed its Petition under following legal Provisions:

“

1. ***Specific Legal Provision under which Petition is being filed:***

...

1.2 *Regulation 50(6) of UERC (Terms and conditions for determination of Multi Year Tariff) Regulations, 2018 and 2021 specifies as below-*

“50(6) In case actual total energy generated by a Hydro Generating Station during a year is less than the Design Energy for reasons beyond the control of the Generating Company, the following treatment shall be applied on a rolling basis on an application filed by generating company:

a) in case the energy shortfall occurs within ten years from the date of commercial operation of a generating station, the ECR for the year following the year of energy shortfall shall be computed based on the formula specified in sub-Regulation(5) above with the modification that the DE for the year shall be considered as equal to the actual energy generated during the year of the shortfall, till the Energy Charge shortfall of the previous year has been made up, after which normal ECR shall be applicable;

Provided that in case actual generation from a hydro generating station is less than the design energy for a continuous period of 4 years on account of hydrology factor, the generating station shall

approach CEA with relevant hydrology data for revision of design energy of the station.

- b) *In case the energy shortfall occurs after ten years from the date of commercial operation of a generating station; the following shall apply:*

Explanation: Suppose the specified annual Design Energy (DE) for the station is DE MWh, and the actual energy generated during the concerned (first) and the following (second) financial years is A1 and A2 MWh, respectively, A1 being less than DE. Then, the design energy to be considered in the formula in sub-Regulations (5) above for calculating the ECR for the third financial year shall be moderated as $(A1 + A2 - DE)$ MWh, subject to maximum of DE MWh and a minimum of A1 MWh.

- c) *Actual energy generated (e.g. A1, A2) shall be arrived at by multiplying the net metered energy sent out from the station by $100/(100 - \text{AUX})$.*

4. The Petitioner under the facts of the case has submitted that:

*“
...*

- 3.3 *The said regulation allows recovery of shortfall in energy charges during a year, in the following year/next to following year, in case total energy generated by a Hydro Generating Station during a year is less than the Design Energy for reasons beyond the control of the Generating Company ...*
- 3.4 *The Hon'ble Commission has determined the tariff of 10 LHPs of UJVNL for FY 2020-21 vide its Tariff order dated 18.04.2020. The True up of FY 2020-21 was approved by the Hon'ble Commission vide order dated 31.03.2022. In the True up (Table 4.46, pg. 116 of tariff order dated 31.03.2022), the allowable EC for Dhakrani, Dhalipur, Kulhal, Ramganga, MB-I and Khatima was less than 50% of the AFC due to shortfall in energy generation in FY 2020-21.*
- 3.5 *During FY 2020-21 the energy generated by a Dhakrani, Dhalipur, Kulhal, Ramganga, MB-I and Khatima Hydro Generating Station was less than the Design Energy for reasons beyond the control of the Generating Company.*

- 3.6 Aforementioned Regulation 50(6) specifies provision for recovery of under recovered energy charges due to shortfall in energy generation for reasons beyond the control of generating station. Accordingly, UJVNL has calculated Modified Energy Charge Rate (ECR) on the basis of Original Design Energy as per the calculation attached at **Annexure-1** to enable Hydro Power plants to recover under recovered energy Charges of FY 2020-21 in FY 2022-23 and accordingly raised bills to UPCL. However, UPCL, allowed shortfall in energy Charges to UJVNL by calculating Modified ECR on the basis of Revised Design Energy approved by the Hon'ble Commission for FY 2022-23...
- 3.7 On the basis of Modified ECR calculated by UPCL the under recovered energy charges of Ramganga, MB-I and Khatima for FY 2020-21 were recovered during FY 2022-23. However, the under recovered energy charges of Dhakrani, Dhalipur & Kulhal could not be recovered from UPCL.
- 3.8 UPCL paid amount against Shortfall in Energy Charges to UJVNL on the basis of Modified ECR during FY 2022-23. The shortfall against Energy Charges in FY 2020-21 for Dhakrani, Dhalipur and Kulhal HEP could not be recovered by UJVNL during FY 2022-23 as per the Shortfall Tariff calculated by UPCL as per the Regulation 50(6) of UERC Tariff Regulations. The details of unrecovered shortfall amount are as under-

TABLE-1

S. N.	Plant Name	Shortfall in Energy Charges amount as per True up of FY 2020-21 (Rs.)	Export during FY 2022-23 (kWh)	Shortfall Tariff as per UPCL (Rs/Unit)	Shortfall Amount Recovered in FY 2022-23 (Rs.)	Unrecoverable Shortfall Amount (Rs.)
1	Dhakrani	31,00,000	9,97,82,127	0.015	14,96,731	16,03,269
2	Dhalipur	33,00,000	14,86,69,336	0.000	0	33,00,000
3	Kulhal	1,06,00,000	11,93,40,478	0.015	60,86,365	45,13,635
Total		1,70,00,000	36,77,91,941	-	75,83,096	94,16,904

- 3.9 It is evident from aforesaid table that the shortfall of EC against FY 2020-21 amounting to Rs. 94,16,904/- could not be recovered by UJVNL in FY 2022-23. Now, the financial Year 2022-23 has ended and mechanism for realization of unrecovered shortfall amount is not specified in the aforesaid regulation.
- 3.10 Here it is pertinent of mention that the intent of Regulation 50(6) is to ensure recovery of Energy Charges up to 50% of the Annual fixed charges determined by

the Hon'ble Commission. It is also to submit that as per CERC (Terms and Conditions of Tariff) Regulations, 2019 Shortfall in energy charges in comparison to fifty percent of the annual fixed cost is allowed to be recovered in six equal monthly instalments.

- 3.11 *As the Energy Charges for FY 2020-21 could not be fully recovered in FY 2022-23 after revision of ECR for FY 2022-23, therefore, the petitioner most humbly requests the Hon'ble Commission that the under recovered energy charges of FY 2020-21 amounting to Rs. 94,16,904/- as per above TABLE-1 may kindly be allowed to be recovered from UPCL in FY 2023-24.*
- 3.12 *Here it is pertinent to mention that similar to the aforementioned cases of Dhakrani, Dhalipur & Kulhal, it is likely that Ramganga Power Station of UJVNL Ltd would not be able to recover the under recovered energy charges due to shortfall in energy generation in FY 2021-22, in the current FY 2023-24 even after modified ECR.*
- 3.13 *In view of all above, UJVNL further requests the Hon'ble Commission for providing directions/clarifications in the matter for recovery of aforesaid shortfall in Energy Charges so that the dues pertaining to Shortfall in Energy Charges against FY 2020-21 and ensuing years can be settled between UJVNL and UPCL accordingly."*

5. Further, the Petitioner under the section 'Relief sought' has mentioned that:

"

The "Petitioner" very humbly prays that the Hon'ble Commission may kindly: -

- (i) *Allow recovery of under recovered energy charges due to shortfall in energy generation for reasons beyond the control of generating station during the FY 2020-21 in respect of Dhakrani, Dhalipur and Kulhal HydroPower Stations of UJVNL.*
- (ii) *Issue directions/clarifications in the matter of under recovered energy charges due to shortfall in energy generation for reasons beyond the control of generating station, so that the dues pertaining to under recovered Energy Charges against FY 2020-21 and ensuing years can be settled between UJVNL Ltd. and UPCL accordingly.*
- (iii) *Pass Orders, as the Hon'ble Commission may deem fit and proper keeping in view the facts and circumstances of the case and in the interest of the justice.*
- (iv) *Grant suitable opportunity to the Petitioner to file additional material information (if any) that may be subsequently available."*

6. The Commission vide its letter dated 26.04.2024 issued Notice for Hearing on Merits to Petitioner namely UJVN Ltd. & Respondent namely UPCL to be held on 28.05.2024. Further, on preliminary examination, the Commission vide its aforesaid Notice dated 26.04.2024 had also issued following deficiencies/infirmities/need of additional information to UJVN Ltd. and directed it to submit point-wise reply before the Commission latest by 15.05.2024:

“

1. The Petitioner is required to furnish the details of energy shortfall during FY 2020-21 in its Dhakrani, Dhalipur & Kulhal HEP along with the reasons and documentary evidence for justification of the same in the following format:-

Name of Plant.....

Revised Saleable Design Energy for FY 2020-21.....

Total Energy Generated (ex-bus) in FY 2020-21.....

Shortfall in generation in FY 2020-21.....

A. Shortfall due to reasons within the control of the Petitioner

Sl. No.	Period			In MUs	Reasons
	From	To	No. of days		

B. Shortfall due to reasons within the control of the Petitioner

Sl. No.	Period			In MUs	Documentary evidence	Whether shortfall in MUs claimed earlier under any other scheme/mechanism	Reasons
	From	To	No. of days				

2. The Petitioner is required to provide the details of insurance claim pertaining to business loss/generation loss occurred in FY 2020-21 for its Dhakrani, Dhalipur & Kulhal HEP.”
7. In compliance to the aforesaid deficiencies/infirmities, UJVN Ltd. vide its letter dated 17.05.2024 submitted its reply as mentioned below:-

“

Name of Plant:- Dhakrani Power House

Revised Saleable Design Energy for FY 2020-21= 149.79 MU

Total Energy Generated (ex-bus) in FY 2020-21= 146.611 MU

Shortfall in generation in FY 2020-21=

3.179 MU

A. Shortfall due to reasons within the control of the petitioner

Sl. No.	Period			In MUs	Reasons
	From	To	No of days/ Occurrence		
1	12.04.2020	12.04.2020	1.00	0.0025	Due to Unit A UGB problem
2	13.04.2020	13.04.2020	1.00	0.04283	Due to Unit A UGB problem
3	14.04.2020	14.04.2020	1.00	0.096	Due to Unit A UGB problem
4	14.04.2020	14.04.2020	1.00	0.0083	Due to Unit C turbine problem
5	15.04.2020	15.04.2020	1.00	0.0395	Due to Unit A UGB problem
6	16.04.2020	16.04.2020	1.00	0.13967	Due to Unit A UGB problem
7	20.04.2020	20.04.2020	1.00	0.003	Due to Unit B turbine Fault
8	27.04.2020	27.04.2020	1.00	0.001	Due to Unit B turbine Fault
9	27.05.2020	27.05.2020	1.00	0.0001	Due to Unit B turbine Fault
10	15.06.2020	15.06.2020	1.00	0.00117	Unit A turbine Fault
11	05.07.2020	05.07.2020	1.00	0.00075	Unit A overall protection relay trip
12	19.07.2020	19.07.2020	1.00	0.014	Unit A trip
Total				0.34882	

B. Shortfall due to reasons beyond the control of the petitioner

Sl. No.	Period			In MUs	Documentary evidence	Whether shortfall in MU claimed earlier under any other scheme/mechanism	Reasons
	From	To	No of days/ Occurrence				
1	01.05.2020	28.02.2021	18	0.165110	Copy of Generation loss sheet of monthly Energy Account enclosed		Due to grid disturbance
2	01.07.2020	31.10.2020	32	1.785080			Due to Choking & flood pass at Dakphtar barrage
3	01.09.2020	30.09.2020	1	0.107700			Due to Search Operation Carried Out at DKP Barrage
Total				2.057890			

Name of Plant:- Dhalipur Power House

Revised Saleable Design Energy for FY 2020-21=

181.48 MU

Total Energy Generated (ex-bus) in FY 2020-21=

174.322 MU

Shortfall in generation in FY 2020-21=

7.158 MU

A. Shortfall due to reasons within the control of the petitioner

Sl. No.	Period			In MUs	Reasons
	From	To	No of days/ Occurrence		
1	19.05.2020	19.05.2020	1	0.005	Bucholz Relay Trip
2	2.06.2020	2.06.2020	1	0.0025	Governor Problem

Sl. No.	Period			In MUs	Reasons
	From	To	No of days/ Occurrence		
3	10.06.2020	10.06.2020	1	0.067	Governor Problem
4	30.06.2020	30.06.2020	1	0.005	Governor Problem
5	13.07.2020	13.07.2020	1	0.019	Governor Problem
6	27.07.2020	27.07.2020	1	0.00625	Governor Problem
7	25.08.2020	25.08.2020	1	0.049	Synchronization Problem
8	26.08.2020	26.08.2020	1	0.08625	Synchronization Problem
9	1.09.2020	1.09.2020	1	0.044	Governor Problem
10	14.09.2020	14.09.2020	1	0.0725	Bus PT Burst
11	14.09.2020	14.09.2020	1	0.08	Bus PT Burst
Total				0.4365	

B. Shortfall due to reasons beyond the control of the petitioner

Sl. No.	Period			In MUs	Documentary evidence	Whether shortfall in MU claimed earlier under any other scheme /mechanism	Reasons
	From	To	No of days/ Occurrence				
1	1.04.2020	29.09.2020	182	58.6657	Copy of Generation loss sheet of Monthly energy account enclosed		RMU of Unit-B
2	1.05.2020	28.02.2021	4	0.1975			Grid Disturbance
3	1.07.2020	31.10.2020	8	1.9905			Flood Pass
4	1.09.2020	30.09.2020	1	0.05			Due to search operation carried out at Dakpathar Barrage
Total				60.9037			

Name of Plant:- Kulhal Power House

Revised Saleable Design Energy for FY 2020-21= 147.87 MU

Total Energy Generated (ex-bus) in FY 2020-21= 130.988 MU

Shortfall in generation in FY 2020-21= 16.882 MU

A. Shortfall due to reasons within the control of the petitioner

Sl. No.	Period			In MUs	Reasons
	From	To	No of days/ Occurrence		
1	01-04-2020	28.05.2020	53	5.106	Due to planned outage of Unit B. Scheduled Maintenance Period of Unit B was 29-01-2020 to 28-05-2020
2	21-05-2020	21-05-2020	1	0.037	Due to forced outage of Unit A
3	15-07-2020	15-07-2020	1	0.004	Due to tripping of Unit C
4	16-08-2020	16-08-2020	1	0.029	Due to forced outage of Unit B
5	18-08-2020	18-08-2020	1	0.025	Due to forced outage of Unit B
6	26-12-2020	26-12-2020	1	0.033	Forced outage of Unit B

Sl. No.	Period			In MUs	Reasons
	From	To	No of days/ Occurrence		
7	24-03-2020	24-03-2020	1	0.025	Forced outage of Unit A
Total				5.258	

B. Shortfall due to reasons beyond the control of the petitioner

Sl. No.	Period			In MUs	Documentary evidence	Whether shortfall in MU claimed earlier under any other scheme/mechanism	Reasons
	From	To	No of days/ Occurrence				
1	24-04-2020	31-10-2020	34	3.37119	Copy daily generation loss sheet of monthly energy account is attached		Due to flushing and choking and high TRC level [high debris in power channel (under the control of UPID) from downstream of Kulhal to Khara PH]
2	01-08-2020	31-08-2020	9	2.74349			Due to flood pass at Dakpathar /Asan Barrage
3	27-05-2020	27-05-2020	1	0.03099			Due to system condition/grid disturbance
4	04-06-2020	04-06-2020	1	0.01417			Due to system condition/grid disturbance
5	29-05-2020	31-07-2020	64	11.255	Copy of approved time extension is attached		Due to extended planned outage of Unit B. Major overhauling of Unit B delayed due to Corona Pandemic and lockdown Scheduled Maintenance Period of Unit B was 29-01-2020 to 28-05-2020 .Actual Maintenance Period of Unit B: 30-012020 to 30-07-2020
6	06-09-2020	07-09-2020	2	0.279	Copy daily generation loss sheet of monthly energy account is attached		Search Operation for dead body at DKP & Asan Barrage closure
7	01-09-2020	30-09-2020	30	0.095			Due to choking at Asan Barrage
8	01-10-2020	04-10-2020	4	0.177			Due to Flushing at Asan Barrage/Dakpathar Barrage
Total				17.966			

”

8. UPCL vide its letter dated 22.05.2024 requested the Commission for adjournment/extension of the aforesaid scheduled hearing which was accepted by the Commission and further rescheduled the same to 09.07.2024.
9. Further, UPCL vide its letter dated 02.07.2024 submitted its reply on Petition filed by UJVN Ltd. as mentioned below:

“

4. *Although the Petitioner has made varying misleading and irrelevant averments in the present petition yet the main issue that emerges from the case of the petitioner set up in the present petition and the relief sought hereunder is as under-*

“Whether the under recovered energy charges for FY 2020-21 which remained unrecovered in FY 2022-23 following the revision of the Energy Charge Rate (ECR) for FY 2022-23 be recovered from the respondent in the current FY 2024-25?”

The petitioner has submitted that during the FY 2020-21 the energy generated by Dhakrani, Dhalipur, Kulhal, Ramganga, MB-I and Khatima Hydro Generating Station was less than the design energy for reasons beyond the control of the generating company. As Regulation 50 (6) of the UERC (Terms and Conditions for Determination of Multi Year Tariff) Regulation, 2018 (herein after referred as MYT Regulation, 2018) specifies provision for recovery of under recovered energy charges due to shortfall in energy generation for the reasons beyond the control of the generating station, therefore, the petitioner calculated modified energy charge rate on the basis of original design energy as per the calculation attached at Annexure 1 of the petition, to recover under recovered energy charges of the FY 2020-21 in FY 2022-23 and accordingly raised bills to the respondent in FY 2022-23. However, respondent allowed the recovery of shortfall in energy charges to the petitioner by calculating ECR on the basis of Revised Design Energy.

5. *The petitioner in its petition has further submitted that the under recovered energy charges of the plants namely Ramganga, MB-I and Khatima for the FY 2020-21 were recovered during the FY 2022-23 on the basis of modified ECR calculated by the respondent.*
6. *The respondent respectfully submits that the calculation for shortfall in energy charges by calculating the Energy Charge Rate (ECR) based on revised design energy as approved by the Hon'ble Commission is correct. The respondent was obligated to compute the ECR according to the Revised Design Energy as specified by the Hon'ble Commission for UJVNL in its tariff order for FY 2022-23. The calculation of the revised design energy was explicitly undertaken by the Hon'ble Commission itself in the said order. Therefore, the respondent's actions were in accordance with the directives provided therein.*

7. *The petitioner's position appears inconsistent in the present petition. On one hand, it asserts that under-recovered charges for the plants namely, Ramganga, MB-I, and Khatima for the FY 2020-21 were recovered during the FY 2022-23 based on a modified ECR, which was actually calculated on the basis of Revised design energy only, while on the other hand the petitioner is advocating for the recovery of under-recovered energy charges on the basis of original design energy for the plants namely, Dhalipur, Dhakrani and Kulhal Power Plants.*
8. *...Therefore, this under recovery of energy charges are required to be investigated for the reasons of shortfall in energy, whether the same were within the control of the petitioner or the petitioner is trying to hide its inefficiency in achieving the desired generation target viz-a-viz the revised design energy, as approved by the Hon'ble Commission.*
- ...
13. *"Whether the petitioner, invoking regulation 50 (6), is entitled to recover under-recovered energy charges allegedly caused by a shortfall in energy generation due to reasons beyond its control, in the absence of reasons and the considerable evidences substantiating the same".*
- ...
14. *That the respondent hereby submits that a bare reading of the above Regulation makes it amply clear that the treatment outlined therein applies strictly under specific conditions. Specifically, the Regulation applies when the actual total energy generated by a hydro generating station falls short of its design energy due to reasons beyond the control of the generating company. Therefore, for the generating company to avail itself of the provisions of this Regulation regarding recovery of energy shortfall, it is incumbent upon them to first establish and substantiate the reasons beyond their control that resulted in the shortfall of actual energy generation compared to the design energy during the relevant period. This requirement underscores the regulatory intent to ensure that claims for under-recovered energy charges are justified and supported by clear evidence of circumstances beyond the generating company's control, thereby upholding the integrity and purpose of the regulatory framework governing such claims. Thus, adherence to these procedural and substantive requirements is essential in determining the applicability and legitimacy of any claim made under regulation 50(6) of the MYT Regulation, 2018.*

...

16. *In view of the aforementioned facts and circumstances, the respondent asserts that the petitioner is not entitled to any relief. The relief sought by the petitioner is vague and cannot be granted under legal principles. The petitioner has failed to substantiate its claims with any evidence, relying solely on unsupported statements. Consequently, the petition lacks merit and should be dismissed accordingly.*

However, if the petitioner submits additional documents or makes further submissions, the respondent requests an opportunity to provide a corresponding reply."

10. On the scheduled date of hearing i.e. 09.07.2024, the Commission heard the matter and observed that UPCL raised its concerns regarding issues viz. (a) generation loss due to inefficiency on part of the Petitioner (b) perplexity arisen due to application of Revised Design Energy and Original Design Energy interchangeably in the formula for its plants while computing the energy shortfall (c) the recovery of shortfall should be in accordance with the formula provided in the Regulation 50(6) of UERC (MYT) Regulations, 2021, etc. and accordingly directed Petitioner to furnish its reply on the same with copy to Respondent and accordingly Respondent was directed to submit its rejoinder. The Commission in this regard issued a daily Order dated 09.07.2024.
11. In compliance to the directions of Commission's daily Order dated 09.07.2024, the Petitioner vide letter dated 18.07.2024 submitted its reply as mentioned below:-

"

(a) *generation loss due to inefficiency on part of the Petitioner:*

The operation of the Dhakrani, Dhalipur and Kulhal power plants was done in efficient manner by the petitioner which can be seen from actual Plant Availability factor achieved by these plants. The plant availability factor Yearly (PAFY) achieved by UJVNL during FY 2020-21 against the target Normative Annual Plant Availability Factor (NAPAF) approved by the Hon'ble Commission is as below-

<i>Generating Station</i>	<i>NAPAF approved by the Hon'ble Commission (%)</i>	<i>Actual/ *Restated PAFY (%)</i>
<i>Dhakrani</i>	66.17 %	67.27 %
<i>Kulhal</i>	65.00 %	67.20 %
<i>Dhalipur</i>	61.07 %	*60.00%

The above actual /restated PAFY was approved by the Hon'ble Commission during true up of FY 2020-21 vide order dated 31.03.2022.

Dhakrani: *Petitioner achieved higher PAFY of 67.27 % against target NAPAF of 66.17%, thus there is no inefficiency on the part of generator.*

Kulhal: *Petitioner achieved higher PAFY of 67.20 % against target NAPAF of 65.00%, thus there is no inefficiency on the part of generator.*

Dhalipur: *One of the Units of Dhalipur HEP was under RMU during FY 2020-21, thus there was unavailability of one unit during FY 2020-21 for power generation. The NAPAF set by the Hon'ble Commission in the MYT order dated 27.02.2019 was 61.07 % without considering the impact of RMU. Also, the Hon'ble Commission while approving the Design Energy of Dhalipur LHP has not taken consideration of RMU of plant.*

Dhalipur LHP achieved PAFY of 54.38 % against the approved NAPAF of 61.07% during FY 2020-21 in spite of unavailability of one unit on account of RMU. UJVNL sought relaxation in NAPAF due to RMU of one Unit of Dhalipur LHP for True up of FY 2020-21. The Hon'ble Commission has restated the PAFY of Dhalipur LHP as 60.00% based on the average PAFM of last 5 years.

The Hon'ble Commission's analysis regarding relaxation of NAPAF is reproduced as below (page 62 of Tariff Order dated 31.03.2022): -

“Commission's Analysis

Dhalipur HEP: With regard to NAPAF of Dhalipur for FY 2020-21, the Petitioner has achieved PAFY of 54.38% against the approved NAPAF of 61.07%.

The NAPAF was set by the Commission in the MYT Order dated February 27, 2019 without considering any RMU.

The Petitioner's submission in the instant Petition shows that RMU works of Unit 2 was carried out from February 7, 2019 to June 07, 2021. In cases where the NAPAF has not been achieved by the Petitioner on account of genuine reasons, the approach adopted by the Commission is to allow the Petitioner to recover maximum of the

approved AFC of the Plant owing to such closure. Considering the fact that Unit 2 of Dhalipur HEP was under shutdown since February 7, 2019, the Commission has considered the same and has re-stated the PAFY of Dhalipur LHP as 60.00% for FY 2020-21 based on the average PAFM of last 5 years. "

It is evident from above that the Hon'ble Commission has considered the relaxation sought by UJVNL and restated the same to 60% which is near to the approved NAPAF of 61.07% for Dhalipur LHP for FY 2020-21. Therefore, there is no inefficiency on the part of generator.

In view of above it is evident that actual/restated PAFY approved by the Hon'ble Commission after True up of FY 2020-21 is higher/near to the approved NAPAF which indicated that LHPs were operating in efficient manner. UJVNL had put all its effort to achieve best performance of the plants in spite of Covid-19 pandemic during FY 2020-21.

(b) *perplexity arisen due to application of Revised Design Energy and Original Design Energy interchangeably in the formula for its plants while computing the energy shortfall.*

Regarding application of Revised/Original Design Energy following is to submit-

- 1. As per formula provided in the Regulation 50(6)(b) The annual design energy DE for the third year is to be moderated as $(A1+A2-DE)$ MWh subject to maximum of DE MWh and a minimum of A1 MWh. Where A1 is the actual energy generated during Concerned(first) year in which Shortfall has occurred and A2 is the actual energy generated during the following (second) financial year.*
- 2. While presenting its claim to UPCL for recovery of shortfall of FY 2020-21, UJVNL had calculated revised ECR for FY 2022-23 as per the formula provided in Regulation 50(5) by replacing DE with moderated DE i.e. $A1+A2-DE$ as per Regulation 50(6). The DE taken in the calculation by UJVNL was original design energy approved by the Hon'ble Commission. In tariff orders the Hon'ble Commission approves Original and Revised Design energy, UJVNL had taken original design energy in its calculation*

so that the calculation may not get impacted in case of any revision in design energy.

3. However, UPCL has recalculated the ECR on the basis of revised design energy for recovery of shortfall in energy charges. UPCL had released amount of shortfall of energy charges of FY 2020-21 along with monthly energy bills of FY 2022-23 on the basis of its calculation based on revised design energy. UJVNL has not objected to the revised ECR calculation of UPCL. Accordingly, the bills were settled between UPCL and UJVNL during FY 2020-21.

4. Moreover, it is to submit that for recovery of shortfall for next FY i.e., FY 2021-22 the revised ECR was calculated on the basis of revised Design Energy and therefore, UJVNL has agreed to the application of revised design energy in the formula for calculation of revised ECR as desired by UPCL.

In view of above it is evident that no perplexity has arisen due to application of Revised Design Energy and Original Design Energy interchangeably in the formula for its plants while computing the energy shortfall.

(c) The recovery of shortfall should be in accordance with the formula provided in the Regulation 50(6) of UERC (MYT) Regulations, 2021, etc.

UJVNL has recovered shortfall for FY 2020-21 in FY 2022-23 in accordance with the Modified ECR calculated based on the formula provided in the Regulation 50(6) of UERC (MYT) Regulations, 2021. But this recovered amount in FY 2022-23 was still less than the shortfall in energy charges in comparison to the fifty percent of annual fixed cost in FY 2020-21.

As UJVNL could not recover the full amount of shortfall in energy charges in comparison to the 50% of annual fixed cost therefore the matter has been brought to the notice of Hon'ble Commission to allow the recovery of unrecovered shortfall amount.

The intent of the Regulations 50(6) is to allow Shortfall in energy charges in comparison to 50% of the annual fixed cost. The same is clear from the highlighted portion of the Regulation 50(6) reproduced as below: -

...

Full shortfall amount could not be recovered with modified ECR in case of Dhakrani, Dhalipur and Kulhal LHPs. As difference in rate of modified ECR and ECR determined by Hon'ble Commission for FY 2022-23 was too little to recover the full Shortfall amount. Thus, the provision/formula provided in the Regulation 50(6) lacks to meet the requirement of full shortfall recovery of FY 2020-21 in FY 2022-23.

The provision 45(7) of shortfall recovery in CERC Tariff Regulations, 2019 is as below-

"45(7) Shortfall in energy charges in comparison to fifty percent of the annual fixed cost shall be allowed to be recovered in six equal monthly instalments:

Provided that in case actual generation from a hydro generating stations is less than the design energy for a continuous period of 04 years on account of hydrology factor, the generating station shall approach the Central Electricity Authority with relevant hydrology data for revision of design energy of the station."

As the intent of Regulation 50(6) is to allow Shortfall in energy charges in comparison to 50% of the annual fixed cost and same has been provisioned by the Hon'ble CERC vide its Regulation 45(7) of the CERC Tariff Regulation, 2019. Therefore, the generator should be allowed to recover full shortfall amount.

In view of the above, it is respectfully submitted that UJVNL should be allowed to recover the unrecovered shortfall amount of Energy Charges of FY 2020-21 in respect of Dhakrani, Dhalipur and Kulhal LHPs in the current financial year in monthly instalments as deemed fit by the Hon'ble Commission."

12. Further, UPCL vide its letter dated 26.07.2024 had submitted its rejoinder on the aforesaid submission of UJVNL Ltd. dated 18.07.2024 as mentioned below:-

"

1. *That the petitioner in its latest reply concedes that their Power Availability Factor (PAF) exceeds the Normative Annual Power Availability Factor (NAPAF) for the plants namely Dhakrani, Kulhal and Dhalipur HEP. However, they have nonetheless failed to achieve the targeted generation levels i.e. Design Energy. This failure is compounded by the petitioner's lack of any substantive explanation or justification for not meeting these targets. The respondent has previously raised this issue in its reply also, asserting that the petitioner's inability to meet the generation targets despite a higher PAF indicates a fundamental deficiency in their claim.*

2. *That the petitioner's reference to Regulation 50 (6) of the UERC MYT Regulation is misplaced if considered in isolation. According to Regulation 50 (6), the treatment for shortfall in energy generation is applicable only if the petitioner first establishes that the shortfall was due to reasons beyond their control. The regulation explicitly states that such treatment will be applied "in case" the actual total energy generated by the hydro station is less than the design energy "for reasons beyond the generating company's control".*

Thus, the regulation mandates that the petitioner must substantiate their claim with evidence demonstrating that the shortfall was indeed due to uncontrollable factors. This essential prerequisite has not been fulfilled by the petitioner, as they have failed to provide the necessary evidence or detailed justification for their shortfall. As highlighted in the respondent's initial reply, without meeting this requirement, it is not possible for the Hon'ble Commission or the respondent to appropriately assess or apply the regulatory provisions".

3. *That this issue was previously raised by the respondent in their initial reply also, where it was emphasized that the petitioner must substantiate such claims with concrete evidence which the petitioner has failed to provide.*
4. *Therefore, in view of the above and earlier submissions, it is respectfully submitted that the petition be dismissed."*

Commission's Observations, Views & Directions:-

13. On examination of the Petition and subsequent submissions made by Petitioner and Respondent, the Commission observed that during FY 2020-21 the Petitioner's Hydro Electric Plants (HEPs) namely Dhakrani, Dhalipur, Kulhal, Ramganga, MB-I and Khatima generated less energy than the Design Energy approved by the Commission. Based on the Modified ECR calculated by UPCL, the Petitioner had fully recovered energy charges of HEPs namely Ramganga, MB-I & Khatima and partially recovered the energy charges against shortfall of Dhakrani & Kulhal during FY 2022-23. However, energy charges shortfall of FY 2020-21 for Dhalipur HEP could not be recovered in FY 2022-23 even after modification of ECR.
14. The Respondent namely UPCL has raised its concern for the recovery of shortfall in energy charges due to less generation in FY 2020-21 for Dhakrani, Dhalipur &

Kulhal HEPs only even after applying the methodology specified in the MYT, Regulations. Since, under recovered energy charges of HEPs namely Ramganga, MB-I & Khatima were recovered and Respondent has not raised any concerns on the same, therefore, the same has been considered as settled. The instant bone of contention pertains to the under recovery of shortfall against energy charges for Dhakrani, Dhalipur & Kulhal HEPs due to less generation in FY 2020-21 against the design energy approved by the Commission.

15. Further, on examination, it has been observed that in the matter following issues arise:
 - (1) Whether the recovery of energy shortfall shall be allowed upto Revised Design Energy or Original Design Energy?
 - (2) In case the energy shortfall is not recovered by the formula specified in the Regulation, then what should be the recovery mechanism?
 - (3) The recovery of shortfall in energy charges should only be allowed for the reasons beyond the control of generators as per relevant Regulations.
16. Views of the Commission on the aforesaid aspects mentioned at para 15 above are as follows:
 - (1) The Commission in its Tariff Orders for the Petitioner determined the Energy Charge Rate for its all HEPs, wherein, the Commission had considered the Revised Design Energy for computation of ECR and accordingly, Energy charges were allowed to be recovered to the extent of half of Annual Fixed Cost (AFC). The other half of AFC was to be recovered through Capacity charges. Since, Energy Charge Rate are computed on Revised Design Energy, therefore, it is amply clear that shortfall in energy should be allowed upto Revised Design Energy subject to the reasoned justification that the same was due to reasons not attributable to the Petitioner and accordingly, the same should be taken in the formula of ECR moderated to the extent as specified by the Commission in Regulation 50(6) of UERC (Multi Year Tariff) Regulations, 2018.

- (2) With regard to Petitioner's submission that it was unable to fully recover its energy charges based on the aforesaid Formula specified in the Regulation, the Commission is of the view that shortfall in energy charges, against the reasons that are beyond the control of the Petitioner or not attributable to it, shall only be allowed as pass through for recovery of Energy charge shortfall. Further, the Commission understands the Petitioner's concerns that in some cases the full recovery of shortfall against energy charges might not be recovered in the year next to the following year of shortfall from the specified formula and recovery of such balance under recovered energy charges may roll over to the extended period in ensuing years depending on the generation of subsequent years. However, the same cannot be understood to mean that this shortfall in energy cannot be recovered by the said formula in the Regulation.
- (3) The Commission in Regulation 50 (6) of UERC (Multi Year Tariff) Regulations, 2018 had clearly mentioned that the under recovery of shortfall in energy charges should be allowed for the reasons that would be beyond the control of generators on rolling basis.

17. On examination of the submissions of the Petitioner dated 17.05.2024, it has been observed that the Petitioner has submitted the total shortfall in energy during FY 2020-21, however, the instant matter deals with the recovery of energy shortfall on account of UPCL's share. The generated energy from the Petitioner's Plant namely Dhakrani, Dhalipur & Kulhal are being supplied to UPCL & HPSEB Ltd. with the following share percentage:

Sl. No.	HEPs	UPCL Share's	HPSEB Share's
1	Dhakrani	75%	25%
2	Dhalipur	75%	25%
3	Kulhal	80%	20%

Therefore, the recovery of shortfall in energy from UPCL should also be inline with its aforesaid energy share.

18. The Commission has gone through the submission of the Petitioner dated 17.05.2024 and found that the Petitioner has substantiated the reasons for shortfall that are beyond its control through generation loss sheet of its monthly energy account. The Commission has observed that the Petitioner has claimed shortfall on account of 'reasons beyond Petitioner's control' on grounds namely 'Grid disturbance', 'Choking, flood pass & Search operation carried out at Barrage', 'Flushing', 'RMU of Unit' and 'delay in overhauling of Unit due to corona pandemic'. The Commission finds that primarily the aforesaid grounds were beyond the control of the Petitioner. However, it is prudent to highlight that in accordance with the provisions of the Regulations, the recovery against the energy charges is restricted upto 50% of the approved AFC only. Accordingly, if the aforesaid grounds are fully considered then the same would result in excess recovery i.e. beyond the allowed limit of 50% of the approved AFC which would be against the Regulations.
19. Further, with regard to the submission made by the Petitioner during the meeting held on 21.10.2024 that shortfall in generation had also occurred due to less hydrology in FY 2020-21, the Commission finds that the same has not been substantiated by the Petitioner with the documentary evidence, even after sufficient opportunity has been granted, therefore, the Commission is not considering the shortfall in energy that occurred on account of less hydrology during FY 2020-21.
20. Accordingly, the Commission is considering the shortfall in energy to be recovered for the aforesaid reasons that are 'beyond the control of Petitioner to the extent of UPCL's share' or 'the share of UPCL on account of differences between the total shortfall and shortfall that are within the control of Petitioner', whichever is lower. The HEP-wise shortfall in energy during FY 2020-21 as submitted by the Petitioner and allowed by the Commission are mentioned below:

Table: 1

Sl. No.	HEPs	Revised Saleable Design Energy (in MUs)	Generated energy at ex-bus (in MUs)	Total Shortfall (in MUs)	Shortfall as per Petitioner's submission dated 17.05.2024 (in MUs)		Shortfall considered by the Commission on account of UPCL's share (in MUs)
					Due to reasons within control of Petitioner	Due to reasons beyond the control of Petitioner	
a	b	c	d	e = c-d	f	g	h = lower of [[respective UPCL's share x g] or [respective UPCL's share x (e-f)]]
1	Dhakrani	149.79	146.611	3.179	0.349	2.058	1.544
2	Dhalipur	181.48	174.322	7.158	0.437	60.904	5.041
3	Kulhal	147.87	130.988	16.882	5.258	17.966	9.299
Total				27.219	6.044	80.928	15.884

21. Further, the under recovered Energy Charges for the HEPs during FY 2020-21 are mentioned below:

Table: 2

Sl. No.	HEP Name	As per True up of FY 2020-21 for UPCL				Shortfall in energy considered by the Commission as per Table-1 (in kWh)	Shortfall in amount to be recovered (in Rs)	Shortfall in amount already recovered (in Rs)	Balance/ (Excess) Shortfall in amount to be recovered/ (refunded) (in Rs)
		Energy Charges (EC) to be recovered (in Rs)	Energy Charges already recovered (in Rs)	Shortfall in Energy Charges (in Rs)	Per Unit rate approved for EC computation (in Rs/kWh)				
a	b	c	d	e=c-d	f	g	h=gxf	i	j=h-i
1	Dhakrani	9,90,00,000	9,59,00,000	31,00,000	0.881	15,44,000	13,60,264	14,96,731	(1,36,467)
2	Dhalipur	8,81,00,000	8,48,00,000	33,00,000	0.647	50,41,000	32,61,527	0	32,61,527
3	Kulhal	8,91,00,000	7,85,00,000	1,06,00,000	0.753	92,99,000	70,02,147	60,86,365	9,15,782
Total		27,62,00,000	25,92,00,000	1,70,00,000		1,58,84,000	1,16,23,938	75,83,096	40,40,842

Therefore, the Commission directs UJVN Ltd. to recover/refund the balance/excess amount against the energy charges of FY 2020-21 as shown in the Table-2 above for its Dhakrani, Dhalipur & Kulhal HEPs from UPCL in accordance with the provisions of Regulation 50(6) of UERC (Terms and Conditions for Determination of Multi Year Tariff) Regulations, 2018 from the month of May 2025 onwards till it is recovered fully on a rolling basis. UPCL is directed to ensure payment against the aforesaid claims of UJVN Ltd.

Ordered accordingly.

(Anurag Sharma)
Member (Law)

(M.L. Prasad)
Chairman