### **Before**

## UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

### Petition No. 01 of 2021

### In the matter of:

Determination of additional surcharge in accordance with the provisions of UERC (Terms and Conditions of intra–State Open Access) Regulations, 2015 to meet the fixed cost of UPCL arising out of its obligation to supply electricity to the open access consumers for the period April 2021 to September 2021.

#### And

Uttarakhand Power Corporation Limited (UPCL)

...Petitioner

#### CORAM

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

Date of Order: March 23, 2021

This Order relates to the Petition dated 28.12.2020 filed by Uttarakhand Power Corporation Ltd. (hereinafter referred to as "the Petitioner" or "UPCL" or "Licensee") under Section 42(4) of the Electricity Act, 2003, Clause 8.5.4 of the Tariff Policy issued by Ministry of Power, Government of India, and Regulation 23 of UERC (Terms and conditions for Determination of Tariff) Regulations, 2015 seeking determination of additional surcharge in accordance with the provisions of UERC (Terms and Conditions of intra–State Open Access) Regulations, 2015 to meet the fixed cost of UPCL arising out of its obligation to supply electricity to the open access consumers for the period April 2021 to September 2021.

## 1. Background

1.1. Section 42(4) of the Electricity Act, 2003 stipulates as follows:

"Where the State Commission permits a consumer or class of consumers to receive supply of electricity from a person other than the distribution licensee of his area of supply, such consumer shall be liable to pay an additional surcharge on the charges of wheeling, as may be specified by the State Commission, to meet the fixed cost of such distribution licensee arising out of his obligation to supply."

## 1.2. Clause 8.5.4 of Tariff Policy stipulates as follows:

"The additional surcharge for obligation to supply as per section 42(4) of the Act should become applicable only if it is conclusively demonstrated that the obligation of a licensee, in terms of existing power purchase commitments, has been and continues to be stranded, or there is an unavoidable obligation and incidence to bear fixed costs consequent to such a contract. The fixed costs related to network assets would be recovered through wheeling charges."

- 1.3. Regulation 23 of the UERC (Terms and Conditions of Intra State Open Access)
  Regulations, 2015 in respect of applicability of Additional Surcharge specifies as under:
  - "(1) Any consumer, receiving supply of electricity from a person other than the distribution licensee of his area of supply, shall pay to the distribution licensee an additional surcharge on the charges of wheeling, in addition to wheeling charges and cross-subsidy surcharge, to meet out the fixed cost of such distribution licensee arising out of his obligation to supply as provided under sub-section (4) of Section 42 of the Act.
  - (2) This additional surcharge shall become applicable only if the obligation of the licensee in terms of power purchase commitments has been and continues to be stranded or there is an unavoidable obligation and incidence to bear fixed costs consequent to such a contract. However, the fixed costs related to network assets would be recovered through wheeling charges.
  - (3) The distribution licensee shall submit to the Commission, on six monthly basis, a detailed calculation statement of fixed cost which the licensee is incurring towards his obligation to supply.

The Commission shall scrutinize the statement of calculation of fixed cost submitted by the distribution licensee and obtain objections, if any, and determine the amount of additional surcharge.

Provided that any additional surcharge so determined by the Commission shall be applicable on prospective basis on all open access consumers.

(4) Additional surcharge determined on per unit basis shall be payable, on monthly basis, by the open access consumers based on the actual energy drawn during the month through open access.

Provided that such additional surcharge shall not be levied in case distribution access is provided to a person who has establish a captive generation plant for carrying the electricity to the destination of his own use."

- 1.4. For justification of applicability of additional surcharge and its determination, the Petitioner submitted that due to its obligation, it has made arrangement to supply power to the Consumers including Open Access Consumers which they were buying earlier through Open Access. Due to power purchase through open access by the consumers, the fixed power purchase cost of the Petitioner has become stranded which needs to be recovered from the open access consumers as per provisions of the Electricity Act, 2003.
- 1.5. The Petitioner has submitted month wise Stranded Energy due to Open Access and Open Access energy drawn by the Open Access consumers at State periphery for the period April, 2020to September, 2020 as shown in the Table below:

Table 1

S. No.	Month	Stranded Energy (MU)	Open Access Energy (MU)
1	April 2020	7.26	7.26
2	May 2020	16.61	17.79
3	June 2020	25.92	26.29
4	July 2020	17.40	17.88
5	August 2020	16.60	17.55
6	September 2020	14.99	15.55
	Total	98.78	102.32

1.6. Further the Petitioner submitted the details of energy received, energy surrendered, total energy entitled at State periphery and fixed cost of 04 plants for the period from April, 2020 to September, 2020 and the same is shown in the table below:

Table 2

S. No.	Name of Plant	Energy Received at State Periphery (MU)	Energy Surrendered at State Periphery (MU)	Total Energy Entitled at State Periphery (MU)	Total Fixed Costs Incurred (Rs. Cr)	Average Fixed cost (Rs/kWh)
1	Jhajjar Aravali	0.38	44.78	45.16	6.33	1.40
2	Dadri Gas	23.35	131.56	154.91	8.54	0.55
3	FG Unchahar-4	85.02	33.56	118.58	17.01	1.43
4	FG Unchahar-3	38.63	13.71	52.34	6.05	1.16
	Total	147.38	223.61	370.99	37.93	1.02

1.7. As per the Petitioner the computation of per unit additional surcharge to be levied for the period April 2021 to September 2021 has been shown in the table below:

Table 3

S.	Particulars	Value
No.		
a	Average fixed cost at State periphery (Rs. / unit)	1.02
b	Average fixed cost at consumer end after considering	1.20
	approved PTCUL losses @ 1.40% and distribution losses	
	14% @ (Rs. / unit)	
С	Stranded energy (MU)	98.79
d	Open access energy (MU)	102.32
e	Proposed additional surcharge (b x c / d) (Rs. / unit)	1.16

1.8. A Public Notice inviting comments from the Stakeholders on UPCL's Petition was published by the Petitioner in the following News Papers:

**Table 4: Publication of Notice** 

S.	No.	Newspaper Name	Date of Publication
	1.	Times of India	10.01.2021
	2.	Amar Ujala	09.01.2021

1.9. Through above notice the Commission received in all two objections/suggestions/comments in writing on the Petition filed by UPCL.

### 2. Stakeholders Comments

- 2.1. In response to the Public Notice, the following stakeholders filed their written objections/suggestions/comments.
  - (i) M/s Indian Energy Exchange Ltd., Unit No. 3,4,5& 6, Fourth Floor, TDI Centre, Plot No. 7, Jasola District Centre, New Delhi-110025
  - (ii) Uttarakhand Steel Manufacturers Association (USMA), D-314, Ground Floor, Defence Colony, New Delhi-110024
- 2.2. The primary concerns of the stakeholders have been summarised as under:

- 2.2.1. M/s Uttarakhand Steel Manufacturers Association stated that as per provisions of the Electricity Act, 2003, the distribution licensee have no obligation to supply power to consumers having load more than 1 MW and accordingly the additional surcharge should be computed keeping this fact in mind. The additional surcharge computed in this manner will be less.
- 2.2.2. M/s Uttarakhand Steel Manufacturers Association further averred that the additional surcharge for obligation to supply as per Section 42 (4) of the Electricity Act, 2003 should become applicable only if it is "conclusively demonstrated" that the obligation of the distribution licensee in terms of existing power purchase commitments, has been and continues to be stranded, or there is an unavoidable obligation and incidence to bear fixed cost consequent to such a contract.
- 2.2.3. According to M/s Uttarakhand Steel Manufacturers Association the consumers who avail open access do maintain a contract demand with the distribution licensee. Therefore, in any event a certain percentage of the demand / fixed charges becomes payable by the consumers irrespective of the fact that even one unit is not consumed by such consumers from the distribution licensee. It is also settled that while passing the tariff order by the Commission, the total demand charges which the distribution licensees need to pay to the generators are divided amongst the various categories of consumers who also pay a two-part tariff consisting of demand charges/fixed charges and variable charges/energy charges. Therefore, even if the open access consumers do not take any power from the distribution licensees, they pay demand charges based on their respective contracted demand. As such, the demand charges to be paid by the distribution licensees to its generating companies gets recovered from the Open Access consumers irrespective of whether even one unit of power is consumed by them from the distribution licensees. Therefore, it needs to be made sure that the distribution licensees do not seek a double/penal recovery from the Open Access consumers through the levy of additional surcharge. Levying double penalty in terms of additional surcharge on open access is making the open access unviable for the consumers and the very objective of the Electricity Act, 2003 is being defeated.

- 2.2.4. M/s Indian Energy Exchange Ltd. stated that the Petitioner in the current Petition has calculated additional surcharge at consumer end (considering intrastate transmission loss (1.40%) and distribution loss (14.00%) increasing the average fixed cost from Rs. 1.02 per kWh to Rs. 1.20 per kWh. It is pertinent to mention that a consumer while purchasing power through Open Access is already compensating distribution and intra-state transmission losses in kind as per Hon'ble Commission's Regulations and Order issued time to time. Also, the stranded power is nothing but backed down of generator thereby no power flows in the intra-state transmission or distribution system. Therefore, consideration of the State T&D losses while computing additional surcharge entails burdening the Open Access consumer with double the losses of the Licensees and the losses which never occurred.
- 2.2.5. Further M/s Indian Energy Exchange Ltd. submitted that the consumers in the State pay demand charges even while availing power through Open Access. These demand charges account for some part of the fixed cost borne by the Licensee and ought to be considered while working out of the fixed cost obligation of the Open Access consumers. The petitioner has not deducted the fixed cost already paid by the embedded open access consumers on account of demand charges to the licensee. It is vital for the Hon'ble Commission to deduct this amount from the amount of the additional surcharge in order to avoid double collection of revenue from the open access consumers.
- 2.2.6. M/s Indian Energy Exchange Ltd. further submitted that the Commission while computing Cross Subsidy Surcharge takes into account the demand charges paid by the Open Access consumers to the Distribution Licensee as a regular consumer. Such fixed cost is already incurred by the OA consumers and is also a part of the CSS determined by the Hon'ble Commission. Therefore, it is also important to adjust fixed component of CSS while determining Additional Surcharge.

# 3. Petitioner's Response

- 3.1. The Petitioner's response to the stakeholder's comments have been summarised as under:
  - 3.1.1. UPCL stated that as all the consumers even having load above 1 MW have

supply agreement with UPCL, UPCL is required to supply electricity to them and accordingly, additional surcharge is charged on the energy drawn by such consumers through Open Access as per the provisions of The Electricity Act, 2003.

3.1.2. According to the Petitioner the Petition has been prepared considering the legal provisions as specified in the Electricity Act, 2003, the National Tariff Policy, 2016, UERC (Terms and Conditions of Intra – State Open Access) Regulations, 2015 and methodology approved by the Commission in its order dated 29.08.2019 and 19.06.2020.

To the contention of the M/s Uttarakhand Steel Manufacturers Association that the additional surcharge for obligation to supply should become applicable only if it is "conclusively demonstrated" that the obligation of the distribution licensee in terms of existing power purchase commitments, has been and continues to be stranded, or there is an unavoidable obligation and incidence to bear fixed cost consequent to such a contract, the Petitioner countered the contention by reproducing para 4.3 of the UERC's order dated 29.08.2019 which is reproduced below:

"M/s IEX Ltd. and M/s Kashi Vishwanath Textile Mill (P) Ltd. stated that in the MYT Petition for third control period (FY 2019-20 to FY 2021-22) for UPCL, it has been shown that there is a persistent deficit scenario during the entire control period and UPCL has proposed to buy power from short term bilateral market and also proposed to do forward banking arrangement to meet the shortfall in winter by utilising the summer surplus. Therefore, it cannot be said that there was Stranded power in the State and the question of levying additional surcharge on the OA consumers does not arise. In this regard it is to state that the grid conditions vary on real time basis and the Demand vs. Supply scenario needs to be analysed on a per slot per day basis in the manner real time scheduling is conducted under the IEGC/State Grid Code. It is possible that during certain time slots in a day there might be surplus power available however, taking a period as a whole (say a day or a month or a year) into consideration it is possible that such period might be deficit in power. Short term OA consumers avail open access mostly in those slots when the power is available in the grid at cheaper rates, i.e. when the grid has surplus power and during other slots when there is shortage of power in the grid, i.e. when the power is expensive in comparison to the power supplied by the Discom, the open access consumers draw power from the Discom. On the basis of above, it is possible that a period (i.e a day or a month or a year) may be deficit in power but still it is possible that embedded consumers might be drawing power through open access in certain time slots when there is excess of power. During winter season when there is deficit of power in the State due to low hydro generation, UPCL receives back the power banked during the surplus summer months, as such there is no shortage of power during the winter season as well, therefore there is a possibility of power getting Stranded during the winter season also when the embedded consumers draw power through open access. Therefore, the contention of the Respondents that as there is a persistent deficit scenario during the entire control period from FY 2019-20 till FY 2021-22, power cannot be Stranded does not hold good."

3.1.3. To counter the contention of M/s Indian Energy Exchange Ltd and M/s Uttarakhand Steel Manufacturers Association that the Petitioner while determining the additional surcharge, should have deducted the fixed cost already paid by the embedded open access consumers on account of demand charges, the Petitioner in its reply quoted para 4.4 of the Commission's Order dated 29.08.2019 which is reproduced below:

"M/s Shree Cement has stated that the methodology used to calculate Stranded fixed charges is incorrect as UPCL has not taken into account the recovery of fixed cost component through demand charges whereas M/s Alps industries has stated that all fixed costs against network cost is being levied through transmission and wheeling charges, therefore, demand charges are being recovered against fixed cost of generation therefore, there is no reason for levying Additional Surcharge. In this regard it is pertinent to discuss that demand charges applicable on the consumers do not cover the entire fixed cost of Discom (UPCL), i.e. fixed costs relating to the network costs and power purchase costs. These demand charges to a larger extent cover only the network fixed cost. However, wheeling charges applicable on embedded open access consumers along with demand charges applicable on such embedded consumers covers the network fixed cost substantially while the fixed cost incident on Discom on account of power purchase is not included in the said charges and is recovered from consumers in

their energy charges. Hence, for any drawal of power by embedded consumers through open access (from supply other than Discom) the fixed cost of power purchase does not get recovered and remains stranded until unless an additional surcharge is levied on such embedded open access consumers. Therefore, it is understood that demand charges and additional surcharge are not correlated in any manner. At the existing level of demand charges, recoveries only on account of the investments made by the Discom in the distribution network such as transformers, wires and sub-stations etc. is ensured, whereas, additional surcharge is meant to compensate the Discom for the fixed cost of the stranded power out of the capacity entitled/scheduled for the Discom on account of embedded consumers going for open access during some part of the day."

### 4. Commission's views and decision

- 4.1. The Commission has gone through the Petition filed by UPCL, objections/suggestions/comments raised by the Stakeholders and response of the Petitioner, i.e. UPCL.
- 4.2. The Additional surcharge determined by the Commission has been done in accordance with the provisions of the Electricity Act, 2003, Tariff Policy and UERC (Terms and Conditions of Intra State Open Access) Regulations, 2015.
- 4.3. The Commission observes that most of the queries of the Stakeholders are similar to the one received earlier during determination of additional surcharge for the previous periods. Since the Commission has already spelt out its views in the previous Orders for determining additional surcharge, the Commission has nothing new to express in this Order.
- 4.4. The Commission examined the relevant data submitted by the Petitioner pertaining to slot wise energy surrendered, open access availed in that particular slot, and the calculation submitted for working out the average fixed cost during the period (April 2020 to September 2020 of the 04 generating stations namely Jhajjar Arawali, Dadri Gas, FG Unchahar-3 and FG Unchahar-4. The procedure followed by the Commission for working out the additional surcharge during the period is as detailed below:
  - 4.4.1. Slot-wise surrendered power (in MW) was calculated for each day of the period (April 2020 to September 2020) by taking the difference of entitlement and the net schedule of all the allotted Inter-State generating stations (ISGS) as per the

last revision available on the NRLDC website. Thereafter, month wise surrendered units (in MUs) were calculated.

4.4.2. Slot-wise stranded power (in MW) was calculated for each day of the period (April 2020 to September 2020) by considering the lower of the quantum of open access power including short term open access transactions (RTM) and surrendered power in that particular time slot. This was done to ensure that only that surrendered power is taken for calculating additional surcharge which corresponds to power stranded due to open access consumers only. Thereafter, total stranded power (in MUs) for the period was calculated by summing up the stranded power for each month as shown in the Table below:

Table 5

S. No.	Month	Open Access Energy (MU)	Stranded Energy (MU)
1	April 2020	7.26	7.26
2	May 2020	17.80	16.65
3	June 2020	26.25	25.69
4	July 2020	19.80	19.10
5	August 2020	19.50	18.30
6	September 2020	17.43	16.59
Total		108.04	103.59

4.4.3. The Commission calculated the average fixed cost of the power purchased through 04 generating station namely Jhajjar Arawali, Dadri Gas, FG Unchahar-3 and FG Unchahar-4 on the basis of actual bills raised against the respective generating stations during the period April 2020 to September 2020. The Commission for calculation of stranded power, energy received from the aforesaid 4 stations and open access power at consumer end has taken distribution losses as 14.00% and Transmission losses as 1.40%.

Table 6

S.	Month	Total Entitlement at State	<b>Total Fixed Cost</b>
No.		periphery (in MU)	(Rs. Cr)
1	Jhajjar	46.14	6.33
2	Dadri Gas	158.77	8.54
3	F G Unchahar-3	52.99	6.05
4	F G Unchahar-4	121.00	17.01
Total		378.90	37.93

4.4.4. For arriving at the stranded cost of power (in Rs. Crore) due to open access consumers during the period April 2020 to September 2020, the Commission has considered the weighted average fixed cost (Rs/unit) derived hereinabove

and the quantum of stranded power due to open access drawl (MUs). Thereafter, the Commission has considered recovery of the said stranded cost over the next six months period, i.e. from April 2020 to September 2020. The per unit Additional Surcharge to be levied by the Distribution licensee for the period 01.04.2021 to 30.09.2021 shall be as shown in the table below:

Table 7

a)	Stranded Power due to open access consumers at State Periphery (MUs)	103.59
b)	Stranded Power due to open access at consumer end (MUs)	87.84
c)	Billed fixed cost of 4 Generating Stations during the period April 2020 to September 2020 (Rs Cr)	37.93
d)	Energy received at State periphery from the 4 ISGS stations during the period April 2020 to September 2020 (MUs)	378.90
e)	Corresponding energy received from the 4 ISGS stations during the period at Consumer end (MUs)	321.30
f)	Weighted average fixed cost of 4 stations at consumer end (Rs./Unit) [(c)*10/(e)]	1.18
g)	Total cost of Stranded power due to open access consumers (Rs. Cr) $[(f)*(b)/10]$	10.37
h)	Total Open Access Units at State periphery for the period April 2020 to September 2020 (MUs)	108.04
i)	Corresponding Open Access power at consumer end (MUs)	91.61
j)	Applicable Additional Surcharge for the period April 2021 to September 2021 (Rs./Unit) based on the open access units for the period April 2020 to September 2020 [(g)*10/(i)]	1.13

4.5. In view of the above, the Commission determines Additional Surcharge as Rs. 1.13 Unit. The additional surcharge so determined shall be effective for the period 01.04.2021 to 30.09.2021.

Ordered accordingly.

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