

**Before**

**UTTARAKHAND ELECTRICITY REGULATORY COMMISSION**

**Petition No. 15 of 2019**

**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.

**And**

Uttarakhand Power Corporation Limited. (UPCL)

...Petitioner

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

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

**Date of Hearing: June 06, 2019**

**Date of Order: August 29, 2019**

This Order relates to the Petition dated 27.03.2019 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 FY 2019-20.

## 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 presently, the Open Access Consumers with the Petitioner Company are of embedded nature, i.e. these Open Access Consumers buy power from the Petitioner Company as well as through Open Access as per their financial suitability. However, the Petitioner is always required to have an arrangement of power sufficient to meet the total requirement of these Consumers. In case these Open Access Consumers decide to go for Open Access, the power of the Petitioner becomes stranded to the extent of the quantum of open access and the Petitioner is required to bear the fixed costs of such stranded power in terms of existing power purchase commitments. Therefore, according to the Petitioner, these Open Access Consumers are required to bear fixed component of power purchase cost (about 30% of total power purchase cost) of the Petitioner.
- 1.5. According to the Petitioner, the fixed cost incurred by it towards its obligation to supply of electricity for the period from April, 2018 to September, 2018 is as under:

<b>S. No.</b>	<b>Particulars</b>	<b>Values</b>
a.	Variable power purchase cost from April, 2018 to September, 2018	Rs. 1907.00 Cr.
b.	Fixed power purchase cost from April, 2018 to September, 2018	Rs. 849.24 Cr.
c.	Total power purchase cost from April, 2018 to September, 2018	Rs. 2756.24 Cr.
d.	Actual billed energy from April, 2018 to September, 2018	6025.32 MU

S. No.	Particulars	Values
e.	Actual distribution losses from April, 2018 to September, 2018	17.27%
f.	Billed energy from April, 2018 to September, 2018 at the approved distribution losses of 14.50%	6227.06 MU
g.	Energy drawn though open access at consumer meter from April, 2018 to September, 2018 (open access energy at distribution periphery: 76.92 MU x 85.50%)	65.77 MU
h.	Stranded fixed cost component of power purchase from April, 2018 to September, 2018 ( Rs. 849.24 Cr. x 65.77 MU / 6227.06 MU)	Rs. 8.97 Cr.

- 1.6. According to the Petitioner, the additional surcharge for Open Access Consumers for FY 2019-20 may be computed as follows based on the values approved in the Tariff Order for FY 2019-20.

S. No.	Particulars	Values
a.	Total power purchase cost approved in the Tariff Order for FY 2019-20	Rs. 5400.74 Cr.
b.	Estimation of fixed component of power purchase cost for FY 2019-20 based on the proportion of fixed power purchase cost in the total power purchase cost from April, 2018 to September, 2018 (Rs. 5400.74 Cr. / Rs. 2756.24 Cr. x Rs. 849.24 Cr.)	Rs. 1664.05 Cr.
c.	Approved billed energy for FY 2019-20	12397.76 MU
d.	Additional surcharge (b/c)	Rs. 1.34 p.u.
e.	Applicable energy charge on HT Industrial consumers during normal hours (having load factor above 40%)	Rs. 4.35 / KVAH
f.	Additional surcharge as a percentage of energy charge (Rs. 1.34 p.u. / Rs. 4.35 p.u.)	30.80% of energy charge

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

S. No.	Newspaper Name	Date of Publication
1.	Times of India	28.04.2019
2.	Amar Ujala	28.04.2019
3.	Dainik Jagran	28.04.2019

- 1.8. Through above notice the Commission received in all four objections/suggestions/comments in writing on the Petition filed by UPCL.
- 1.9. On the perusal of the Petition, the Commission observed that UPCL submitted the Petition in a very casual manner as it did not file the detailed calculations of

additional surcharge alongwith the supporting data. Therefore, the Commission vide its letter dated 15.05.2019 directed the Petitioner to submit the following information for the period October 2018 to March 2019 latest by 30.05.2019:

- “1. Time block wise, generator wise entitlement/declared capacity in MW.
2. Time block wise, generator wise drawl schedule in MW.
3. Time block wise, open access transactions by each open access consumer in MW
4. Total fixed charges paid by UPCL during the period
5. Power Purchase data (Com Data) and Commercial Diary for the period”

1.10. A Public Hearing in the matter was held on 11.06.2019 wherein 03 stakeholders presented their objections/suggestions/comments.

1.11. A meeting was held with the officers of the Petitioner on 08.07.2019 regarding submission of information as desired by the Commission. The Petitioner submitted the information as desired vide its letter dated 30.07.2019.

The month wise Stranded Energy due to open access and open access energy drawn by the open access consumers at state periphery was submitted by the Petitioner as shown in the Table below:

Sl. No.	Month	Stranded Energy (MU)	Open Access Energy (MU)
1	October, 2018	10.32	11.52
2	November, 2018	21.72	21.75
3	December, 2018	23.76	23.76
4	January, 2019	26.41	26.41
5	February, 2019	34.63	34.69
6	March, 2019	38.50	38.67
	<b>Total</b>	<b>155.34</b>	<b>156.80</b>

Further, the Petitioner submitted details of power surrendered for 04 plants for the duration October 2018 to March 2019 as detailed in the Table below:

Sl. No.	Name of Plant	Actual Entitlement (MU)	Actual Entitlement at State periphery	Total Fixed Cost incurred (Rs. Cr)	Average Fixed Cost (Rs/kWh)
1	Jhajjar Arawali	51.34	50.3132	8.05	1.60
2	Dadri Gas	188.39	184.6222	9.76	0.53
3	FG Unchar-4	55.16	54.0568	8.52	1.58
4	FG Unchar-3	50.42	49.4116	6.13	1.24
	<b>Total</b>	<b>345.31</b>	<b>338.4038</b>	<b>32.46</b>	<b>0.96</b>

## 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.
- (ii) M/s Shree Cement Ltd.
- (iii) M/s Kashi Vishwanath Textile Mill (P) Ltd.
- (iv) M/s Alps Industries Ltd.

2.2. The primary concerns of the stakeholders have been summarised as under:

- 2.2.1. The DISCOM has not shared data to conclusively demonstrate that power stranded is on account of open access consumers.
- 2.2.2. According to M/s IEX Ltd. UPCL has claimed average fixed charges as Additional Surcharge which inter-alia means that when there is payment of fixed charges without scheduling of electricity for any reason whatsoever even though it is not caused by the open access consumer, the open access consumers will still have to pay the additional surcharge.
- 2.2.3. M/s IEX Ltd. and M/s Kashi Vishwanath Textile Mill (P) Ltd. have averred that in the Tariff Order for FY 2019-20, it has been shown that there is a persistent deficit scenario during the entire control period, i.e. from FY 2019-20 till FY 2021-22 and UPCL have proposed to buy power under short term bilateral market and also proposed to do banking arrangement to meet the shortfall in winter by utilising the summer surplus, which is contrary to the requirement of persistent surplus/stranded capacity for levy of additional surcharge. Therefore, the first requirement, i.e. continuous stranded capacity has not been satisfied for levy of additional surcharge. Further, during the summer months there is surplus power available which is utilised under forward banking transactions. In other words the capacity which could be stranded in these months due to open access has been avoided by entering in to banking transactions. Hence, the second requirement for levy of additional surcharge i.e. unavoidable obligation has also not been satisfied. Therefore, the claim of additional surcharge by UPCL is not justified.
- 2.2.4. M/s Shree Cement Ltd. contended that most of the open access consumers purchase open access power only during peak hours, the period when UPCL also faces power shortage, therefore the claim of stranded power capacity does not

hold good. Further, the methodology used to calculate fixed charges is incorrect as it has not taken into account the recovery of fixed cost component through demand charges. The stranded fixed cost recovered through additional surcharge should be reduced to that extent.

2.2.5. M/s Alps Industries Ltd. has stated that since 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 unnecessarily. Power purchase commitments cannot be taken as stranded if utility is purchasing short term power/overdrawing under UI during the period and shutting / backing down its generating plants.

### **3. Petitioner's Response**

3.1. The Petitioner's response to the stakeholders comments have been summarised as under:

3.1.1. UPCL has stated that all the required data available and justification for levy of additional surcharge has been submitted in the Petition.

3.1.2. For justification of applicability of additional surcharge and its determination, UPCL reiterated its submission as stated in para 1.4 above. Further, UPCL stated that the power procurement plan of the distribution licensee may include purchase of long term, medium term and short term power. Inclusion of medium term and short term power in the mix of power purchase is necessary to avoid the risk of lower demand due to any reason. In case all the power requirement is managed only through long term power procurement, the burden of fixed cost shall be passed on to the consumers due to demand during the year being lower than the projections. Thus, inclusion of short term power in the mix of power procurement plan reduces the burden of fixed cost on the consumer's tariff. According to the Petitioner the Commission vide its Tariff Order for FY 2019-20 has approved procurement of power equivalent to 93.25% from long term sources and the remaining 6.75% from short term sources. This short term power has also been arranged by the petitioner. In case open access consumers go for open access forever and UPCL has no obligation to supply power to them, UPCL will plan to reduce its long term power procurement so that the existing level of mix of long term power and short term power is maintained, i.e. at 93.25% and 6.75% &

accordingly the burden of fixed cost of long term power will be reduced on the consumers tariff.

#### **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 Commission is of the considered view that additional surcharge is payable by open access consumers under the provisions of Section 42(4) of the Electricity Act, 2003, Regulation 23 of UERC (Terms and Condition of Intra-State Open Access) Regulations, 2015 and clause 5.8.3 of National Electricity Policy. As per Regulation 23 of UERC (Terms and Condition of Intra-State Open Access) Regulations, 2015, if and only if it is conclusively demonstrated by the distribution licensee that its obligation in terms of power purchase commitment has been and continues to be stranded or there is an unavoidable obligation and incidence to bear cost consequent to such a contract. Moreover, the licensee has to submit on six monthly basis a detailed calculation statement of fixed cost which it is incurring towards its obligation to supply.
- 4.3. 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.

4.4. 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.

4.5. 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 (October, 2018 to March, 2019) of the 04 generating stations namely Jhajjar Arawali, Dadri Gas, FG Unchahar-3 and FG Unchahar-4. The Commission accepted the quantum of surrendered energy and open access energy at the state periphery submitted by the Petitioner to arrive at the per unit additional surcharge. The procedure followed by the Commission for working out the additional surcharge during the period is as detailed below:

4.5.1. Slot-wise surrendered power (in MW) was calculated for each day of the period (October 2018 to March 2019) 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.

4.5.2. Slot-wise stranded power (in MW) was calculated for each day of the period (October 2018 to March 2019) by considering the lower of the quantum of open access power 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.

4.5.3. The Petitioner 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 October 2018 to March 2019. The Petitioner has taken an average PGCIL losses of 2% (from NR periphery to State periphery) for calculating the energy received at the State periphery. The per unit rate of the fixed cost of the said generating stations as calculated by the Petitioner at State periphery comes out to Rs 0.96/unit. The Commission accepts the average fixed cost as calculated by the Petitioner and factoring in the transmission losses (1.55%) and the distribution losses 14.5% derives the same as Rs. 1.14 /Unit at consumer end.

4.5.4. For arriving at the stranded cost of power (in Rs. Crore) due to open access

consumers during the period October 2018 to March 2019, the Commission has considered the weighted average fixed cost (Rs/unit) derived hereinabove and the quantum of stranded power due to open access drawal (MUs). Thereafter, the Commission has considered recovery of the said stranded cost over the next six months period, i.e. from October 2019 to March 2020. The per unit Additional Surcharge to be levied by the Distribution licensee for the period 01.10.2019 to 31.03.2020 shall be as shown in the table below:

a) Stranded Power due to open access consumers at State Periphery (MUs)	155.34
b) Stranded Power due to open access at consumer end (MUs)	130.76
c) Billed fixed cost of 4 Generating Stations during the period October 2018 to March 2019 (Rs Cr)	32.46
d) Energy received at State periphery from the 4 ISGS stations during the period October 2018 to March 2019 (MUs)	338.40
e) Corresponding energy received from the 4 ISGS stations during the period at Consumer end (MUs)	284.85
f) Weighted average fixed cost of 4 stations at consumer end(Rs./Unit) [(c)*10/(e)]	1.14
g) Total cost of Stranded power due to open access consumers (Rs. Cr) [(f)*(b)/10]	14.90
h) Total Open Access Units at State periphery for the period October 2018 to March 2019 (MUs)	156.80
i) Corresponding Open Access power at consumer end (MUs)	131.99
j) Applicable Additional Surcharge for the period October 2019 to March 2020 (Rs./Unit) based on the open access units for the period October 2018 to March 2019 [(g)*10/(i)]	<b>1.13</b>

4.6. In view of the above, the Commission determines Additional Surcharge at Rs. 1.13/Unit.

Although the UERC (Terms and Conditions of intra-State Open Access) Regulations, 2015 requires the distribution licensee to 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 based on which additional surcharge has to be approved, and since, already 5 months have elapsed since submission of the Petition, hence, the Commission in order to provide certainty not only to the open access consumers but also to UPCL to plan their requirements decides to exercise its power under Regulation 41 to remove the

difficulties and holds that the additional surcharge determined as above, shall be levied and collected w.e.f. 01.10.2019 till 31.03.2020.

4.7. UPCL is hereby directed to file all future Petitions for levy of additional surcharge on open access consumers for the period April to September of the financial year based on the data of the corresponding previous period by 31<sup>st</sup> December and for the period October to March of the financial year based on the data of the corresponding previous period by 30<sup>th</sup> June of the same financial year.

Ordered accordingly.

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

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