# **Before**

# UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

#### Petition No. 24 of 2014

#### In the matter of:

Application seeking review of the Tariff Order dated 10.04.2014 on the Annual Performance Review and Tariff petition of UPCL for FY 2014-2015.

#### **AND**

#### In the matter of:

Uttarakhand Power Corporation Ltd.

....Petitioner

#### **CORAM**

Shri C.S. Sharma Member Shri K.P. Singh Member

Date of Hearing: October 13, 2014 Date of Order: November 07, 2014

The Order relates to the Petition filed by Uttarakhand Power Corporation Ltd. (hereinafter referred to as "UPCL" or "Licensee" or "Petitioner") seeking review of the Tariff Order issued by the Commission on 10.04.2014 on the Annual Performance Review and Tariff Petition of UPCL for FY 2014-2015. The Petitioner vide its petition had requested the Commission for reviewing/ reconsidering the formula for computation of Load Factor laid down in the tariff schedule for HT industrial consumers in the Tariff Order for FY 2014-15.

## 1. Background

1.1 The Commission vide its Retail Supply Tariff Order dated 10.04.2014 while approving the tariffs for all consumer categories also laid down a formula for computation of Load Factor for HT Industrial consumers under RTS-7 Category as follows:

#### For tariff purposes Load Factor (%) would be deemed to be =

in the billing

Consumption (excluding the energy received through open access) during the billing period

Maximum Demand or Contracted Demand whichever is less x No. of hours

1.2 UPCL vide its Petition dated 31.07.2014 sought review of the aforesaid Tariff Order dated 10.04.2014 under Section 94(1)(f) of the Electricity Act, 2003 and Regulation 68(1) of the UERC (Conduct of Business) Regulations, 2004. Vide its Petition, UPCL has requested the Commission to review/reconsider the formula of Load Factor in the impugned order in terms of the submissions made by the petitioner and modify the same as follows:-

Consumption (excluding the energy received through open access) during the billing period

X100

(Maximum Demand or Contracted Demand whichever is less minus maximum contracted capacity for open access during the billing period) x No. of hours in the billing period

- 1.3 UPCL submitted that the formula laid down by the Commission for computation of Load Factor for HT Industrial consumers of RTS-7 category in the Retail Tariff Order dated 10.04.2014 was erroneous for the following reasons:
  - 1.3.1 The Commission had excluded the energy received by the consumer through open access in the numerator for determination of the load factor, a suitable adjustment in the Maximum Demand or the Contracted capacity corresponding to energy sourced through open access has not been made in the denominator of the calculation leading to determination of a lower load factor for the consumer and loss of revenue for the petitioner even when in real terms the consumer's load factor based on the capacity contracted through the petitioner and the corresponding energy supplied to the consumer may be higher than that determined by the calculation approved by the Commission under RTS-7 of the aforesaid Order.
  - 1.3.2 The Petitioner referred to the UERC (Terms and Conditions of Intra-State Open Access) Regulations, 2010 wherein, Embedded Open Access Consumers was defined as consumer who has a supply agreement with the distribution licensee in whose area of supply the consumer is located and avails the option of drawing part or full of its demand from any other person under open access, in any one or more time slots during a day or more in any month or more during the year, without ceasing to be a consumer of the distribution

licensee and continues to pay monthly demand charges and other charges as per the rate schedule applicable to the relevant category.

UPCL further submitted that there are consumers falling under the Embedded Open Access category who draw power simultaneously through the petitioner's network as well as through open access in the same time block. UPCL also submitted a sample of tentative drawl schedule of such embedded open access consumers namely India Glycol, Shriram Foundry, Shree Cement Ltd, Hero Motorcorp Ltd. etc. which according to it indicated that such consumers may draw power simultaneously through open access and from the Petitioner's network. The Commission's calculation for load factor assumed that a consumer avails power either through open access or from the Petitioner in any time block and that the recorded maximum demand related only to the power drawn from the Petitioner's network, which was not the case.

- 1.3.3 The Petitioner also submitted that in order to have a lower load factor, consumers can plan their power procurement from the petitioner and through open access in a manner that their power factor falls in lower tariff category, whereas they consume power as per their requirement which would in turn cause financial loss to the Petitioner.
- 1.3.4 UPCL also submitted that as the demand charges were adjusted towards wheeling charges in respect of energy drawn through open access by the consumer, the contracted load and maximum demand of the consumer may be deemed net of the contracted capacity for open access. However, in absence of the same, the consumers availing power from both the sources, i.e. from the petitioner and open access are required to pay less tariff in comparison to the consumers availing power only from the Petitioner which is not permitted under Section 62(3) of the Electricity Act, 2003.
- 1.4 The Commission held a hearing on 19.08.2014 to decide upon the admissibility or otherwise of the Petition. The Commission vide its Order dated 19.08.2014 directed the Petitioner as follows:

"U.P.C.L. is required to demonstrate, through records including load surveys, as to how the maximum demand of an embedded open access consumer is getting affected by the Open Access transactions and which in turn is adversely affecting the financial health of the petitioner within 15 days of the Order."

In response to the above direction, UPCL submitted its reply vide letter dated 10.09.2014. In its reply, UPCL submitted the details of 06 no. embedded consumers for the

months of April to July, 2014 showing the maximum demand and energy drawn through open access in the time slot of maximum demand. UPCL also submitted the details of open access transactions and load survey report in respect of these consumers. Details submitted by UPCL in respect of above 6 nos. are as follows:

S.N.	Name of Consumer	Billing Month	Contract Load (KVA)	MD (KVA) Without MF	MF	MD (With MF) (KVA)	Date	Time	Open Access Schedule (KVA)
1	India Glycols,	4		39.169	560	21934.64	22.03.2014	2:00	-
	Kashipur	5	30000	40.7488	560	22819.328	21.04.2014	12:30	-
	(LnT	6		40.103	560	22457.68	17.05.2014	23:30	-
	09578058)	7		38.7117	560	21678.552	26.06.2014	16:30	-
2	Kashi	4	12000	37.32	200	7464	27.04.2014	9:30	-
	Vishvanth	5		41.56	200	8312	13.05.2014	7:30	-
	Steel,	6		37.28	200	7456	30.06.2014	2:00	8200
	Kashipur (UPC98975)	7		37.24	200	7448	01.07.2014	5:30	-
3	Tata Motors, Rudrapur (LnT11135156)	4	15000	18.3587	400	7343.48	19.03.2014	9:30	7900
		5		23.3669	400	9346.76	17.04.2014	14:30	-
		6		23.5321	400	9412.84	06.05.2014	12:30	-
		7		23.9724	400	9588.96	17.06.2014	9:30	-
4	Ganesh	4	4 5 6 4000	36.501	75	2737.575	03.03.2014	17:30	-
	Polytex,	5		37.7706	75	2832.795	13.04.2014	10:30	-
	Rudrapur	6		41.1408	75	3085.56	25.05.2014	17:00	2700
	(LnT 11135175)	7		39.4302	75	2957.265	01.06.2014	20:30	Not availed
5	Air Liquid 4	4	8000	32.3879	200	6477.58	09.03.2014	12:00	-
	North India,	5		32.0719	200	6414.38	04.04.2014	3:30	-
	Roorkee ®	6		31.6913	200	6338.26	30.05.2014	3:00	-
	(LnT 13265063)	7		30.8519	200	6170.38	01.06.2014	5:30	Not availed
6	BST Textile	4	2950	45.9628	60	2757.768	04.03.2014	2:30	-
	Mills,	5		45.3989	60	2723.934	08.04.2014	14:00	1000
	Rudrapur	6		45.0154	60	2700.924	31.05.2014	13:30	1000
	(LnT 06763327)	7		-	-	-	-	-	-

UPCL also submitted that the load factor varies when it is calculated by considering the total energy with the total demand and when it is calculated by considering only the energy drawn from UPCL with total demand and accordingly, the formula laid down by the Commission, is causing financial loss to it. UPCL also submitted that to consider actual maximum demand in respect of UPCL's energy for calculation of load factor is not a practical approach as in some cases the maximum demand is recorded only when power is scheduled through open access and accordingly, maximum demand in respect of UPCL's energy should be treated as zero, which may not be a correct approach as the consumer would manage the

maximum demand to get the benefit of lower tariff. On the other hand, there are cases where maximum demand is recorded at the time when only energy from UPCL was being drawn. Hence, if for the purpose of calculation of load factor, energy drawn from open access is excluded from the total consumption, then in such cases maximum demand and contracted demand may also be reduced appropriately.

- 1.5 Since the matter related to the calculation of load factor which in turn was used to arrive at the energy charges to be billed to the HT industrial consumers in the State, the Commission issued a Public Notice seeking objections/suggestions on the Petition filed by UPCL from all the stakeholders. The Commission also held a Public Hearing on 13.10.2014 so that stakeholders may submit their views/response on the same before the Commission. Only one comment was received by the Commission in the matter from M/s Kashi Vishwanath Steel Ltd. Further, no stakeholder except the Petitioner attended the aforesaid Public Hearing on the stipulated date and time. The Commission vide its Order dated 14.10.2014 directed UPCL for submission of its reply on the comments received from stakeholder latest by 21.10.2014.
- 1.6 The comments of M/s Kashi Vishwanath Steel Ltd. on the Petition and reply of UPCL on the same are dealt hereunder:

### (i) Comments

The said formula was invented by the Hon'ble Commission on the pattern of <u>more consumption and more payment basis</u>. Considering shortage of power, UPCL had to purchase power from open market on higher price, hence, the Commission decided to discourage higher consumption of electricity by the industrial consumer. From the starting of this formula, industrial consumers are regularly paying higher rate of tariff if they consume more power and have higher load factor.

#### **UPCL's reply**

As per section 45 (3) of the Electricity Act, 2003, the charges for supply of electricity by a distribution licensee may include a fixed charge in addition to the energy charge. Fixed charges are levied for recovery of the fixed cost of the distribution licensee to ensure revenue stability. About 50% of the UPCL's total costs are fixed in nature including the capacity/fixed charge of power purchases and this fixed cost is partly recovered through fixed/demand charges.

Further, as per section 62(3) of the Electricity Act, 2003, the tariff may be differentiated according to the consumer's load factor. In two part tariff, the effective tariff per unit reduces with increase in each unit of consumption and increases with decrease in each unit of consumption. With a view to have uniform average effective tariff for both the categories (i.e. having high consumption and having low consumption categories), load factor tariff was introduced.

#### (ii) Comments

So far as consumer on Open access is concerned, it is pertinent to mention here that every open access consumer is paying full demand charges for 30/31 days of the month and they are even purchasing 20% or more monthly power through open access.

There is no relationship between energy consumption and demand because demand charges are leviable on the connected load while energy consumption is based upon use of per hour electricity. If an industrial unit has a contracted load of 10000 kVA and run their unit 4 hours per day then they fall in below 33% load factor on the same demand and shall pay lower rate of tariff. If an industrial unit has a contracted load of 10000 kVA and run their unit 24 hours per day then they fall in above 50% load factor on the same demand and shall pay higher rate of tariff. Hence, there is no relationship between load and consumption of unit. If any industrial unit purchases power through open access then they not only help the UPCL to fulfill the demand of consumer but also help UPCL in avoiding purchasing power on higher rate.

If any consumer purchases power through open access then they should be kept away from the levy of high load factor tariff because UPCL is not procuring power to meet the requirement of power during shortage of power from their firm sources.

If an open access consumer is purchasing 20% of their monthly consumption of power due to any reason, they are paying full demand charges to UPCL along with distribution charges and other charges as per the Regulation framed by UERC.

### **UPCL's reply**

As the Embedded Open Access Consumers are receiving power supply from UPCL and through Open Access only on one connection sanctioned by UPCL and the wheeling charges for the Open Access Energy are being adjusted from the demand charges which are fixed for UPCL Energy, the contracted/maximum demand of the connection should be

apportioned on both the energy i.e. on UPCL Energy and on Open Access Energy. As the Commission, while defining the load factor formula, reduced the Open Access Energy from the total consumption but has not reduced the demand against the Open Access Consumption from the total contracted/maximum demand, this formula needs to be revised as proposed by UPCL in the petition.

### (iii) Comments

It is a very tough task to purchase power through open access because of various formalities and secondly there is huge losses, recurring charges and fixed charges involved in procuring power through open access. Consumer purchases power through open access during the period when UPCL fails to supply power continuously due to reasons best known to them. Hence, the formula framed by the Commission is unique and appropriate for every open access consumer and there is no need to change as suggested by <u>UPCL</u>.

As against the demand of electricity in the state, the availability of power from firm sources (including central sector) is about 75% and to meet the gap of demand and availability, UPCL buys power from open market. Hence, it is not correct to say UPCL is not procuring power to meet the requirement during shortage. It is also relevant to mention here that as per the provisions of tariff order, average 18 hours per day power supply shall be ensured to the HT Industrial Consumers, failing which UPCL will be penalized by losing its demand charges by 20%.

### 2. Commission's Views & Decisions

2.1 Regulation 68 (1) of the UERC (Conduct of Business ) Regulations, 2004 specifies as under:

"The Commission may on its own or on the application of any of the persons or parties concerned, within 90 days of the making of any decision, direction or order, review such decisions, directions orders and pass such appropriate orders as the Commission thinks fit."

The Order dated 10.04.2014 was issued on 08.05.2014 and UPCL approached the Commission vide its Petition dated 31.07.2014 for reviewing the same, i.e. well within 90 days as specified in the above referred regulations.

2.2 Further, in accordance with the Order XLVII (1) of the Code of Civil Procedure, 1908 an Order issued by the Commission may be reviewed if:

- (a) There is discovery of new and important matter or evidence which, after the exercise of due diligence, was not within his knowledge or could not be produced at the time when the Order was passed or order made.
- (b) There is any error or mistake apparent on the face of the record.
- (c) Or there is any other sufficient reason.
- 2.3 The application for review has to be considered with great caution to ensure that it fulfill one of the above requirements to be maintainable under law. On the discovery of new evidence, the application should conclusively demonstrate that (1) such evidence was available and was of undoubted character; (2) that it was so material that its absence might cause miscarriage of justice. From the analysis of the details submitted by UPCL in this regard, it has been observed that in case of some consumers availing power through open access also, the maximum demand is recorded during the period the power has been availed through open access. Accordingly, the need arises to review the formula of load factor stipulated by the Commission in its Tariff Order for FY 2014-15. The Commission accordingly, decides that the Petition satisfies the test of review.
- 2.4 Prior to the issue of the Tariff Order dated 10.04.2014 for FY 2014-15, the formula for computation of Load Factor was as follows:

#### Consumption during the billing period

X 100

Maximum Demand or Contracted Demand whichever is less x No. of hours in the billing period

During the proceedings of tariff determination for FY 2014-15, some of the stakeholders had raised the issues related to Open Access and had submitted that for computation of Load Factor for tariff purposes, power availed through open access is not excluded. They also submitted that this anomaly has arisen on account of erroneous sale accounting by UPCL who have been including power availed through open access also as sale by its divisions. The Commission in Order to correct the above referred anomaly, had modified the formula by excluding the power availed through open access from the consumption during the billing period in the numerator for computation of Load Factor as reproduced at Para 1.1 above.

2.5 As has been mentioned earlier, the Commission with a view to test nexus of maximum demand with power availed through open access had directed UPCL to furnish details to sustain their contention that availing power through open access results in record of higher maximum

demand. These details have been examined. The Commission observes that UPCL has submitted details of six nos. embedded consumers depicting contracted load, maximum demand alongwith the date & time, and demand met through open access by these consumers for the billing months of April, May, June & July 2014. The Commission has examined the above details vis-a-vis the load survey report and details of "Scheduling Request for Collective Transaction to Uttarakhand" published by Indian Energy Exchange (IEX). It has been observed that:

- (i) In respect of M/s India Glycols, UPCL has submitted details of maximum demand recorded for the months of March, April, May & June 2014, however, no power has been scheduled through open access by the consumer during the time when maximum demand was recorded. The same has also been verified from both load survey report and details of "Scheduling Request for Collective Transaction to Uttarakhand" published by IEX.
- (ii) In respect of M/s Kashi Vishvanth Steel, UPCL has submitted details of maximum demand recorded during the months of March, April, May & June 2014, however, no power has been scheduled through open access by the consumer during the time when maximum demand was recorded during the month of March, April & May 2014. In respect of June 2014, UPCL has submitted that 8200 kVA of power has been scheduled through open access on 30.06.2014 at 02:00 Hrs whereas the maximum demand of 7456 kVA has been recorded during the same time block.
- (iii) In respect of M/s Tata Motors, UPCL has submitted details of maximum demand recorded during the months of March, April, May & June 2014, however, no power has been scheduled through open access by the consumer during the time when maximum demand was recorded during the month of April, May & June 2014. In respect of March 2014 UPCL has submitted that 7900 kVA of power has been scheduled through open access on 19.03.2014 at 09:30 Hrs, however, during the same time block the maximum demand of 7343 kVA has been recorded for the month. The same has been verified from both load survey report and details of "Scheduling Request for Collective Transaction to Uttarakhand" published by IEX.
- (iv) In respect of M/s Ganesh Polytex, UPCL has submitted the details of maximum demand recorded during the months of March, April, May & June 2014, however, no power has been scheduled through open access by the consumer during the time when maximum demand was recorded during the month of March, April & June 2014. In respect of May

- 2014 UPCL has submitted that 2700 kVA of power has been scheduled through open access on 25.05.2014 at 17:00 Hrs impacting the maximum demand of 3086 kVA during the same time block for the month. The same has been verified from load survey report and details of "Scheduling Request for Collective Transaction to Uttarakhand" published by IEX.
- (v) In respect of M/s Air Liquid North India, UPCL has submitted details of maximum demand recorded during the months of March, April, May & June 2014, however, no power has been scheduled through open access by the consumer during the time when maximum demand was recorded during these months. The same has been verified from load survey report and details of "Scheduling Request for Collective Transaction to Uttarakhand" published by IEX.
- (vi) In respect of M/s BST Textile Mills, UPCL has submitted details of maximum demand recorded during the months of March, April, May & June 2014, however, no power has been scheduled through open access by the consumer during the time when maximum demand was recorded during the month of March & June 2014. In respect of April, 2014 UPCL has submitted that 1000 kVA of power has been procured through open access on 08.04.2014 at 14:00 Hrs impacting the maximum demand of 2723 kVA for the month. Similarly, in respect of May, 2014 UPCL has submitted that 1000 kVA of power has been procured through open access on 31.05.2014 at 13:30 Hrs impacting the maximum demand of 2701 kVA for the month. These details have been verified from load survey report and details of "Scheduling Request for Collective Transaction to Uttarakhand" published by IEX.
- 2.6 From the above analysis, it is apparent that out of 24 instances of maximum demand & respective scheduling of power from open access submitted by UPCL, only 4 instances of maximum demands might have been affected by open access scheduling as verified from load survey report and details of "Scheduling Request for Collective Transaction to Uttarakhand" published by IEX. Embedded open access consumers are availing power simultaneously from licensee & open access, however, only in few instances of power scheduled through open access impact on maximum demand of the consumer has been observed. It needs to be borne in mind that maximum demand is a once a month occurrence and may be a result of combination of factors. The above analysis also brings out that in only a few cases any correlation between availing power through open access and recording of maximum demand is established. That it

is a result of availing power through open access or is merely coincidental is a matter of surmise. As such adjustment of the entire scheduled open access capacity from the denominator in the formula, as proposed by the Petitioner, shall not be appropriate as this would lead to undue increase in Load Factor and charging of higher tariff.

Moreover, it is also to be borne in mind that a consumer of the licensee is in any way paying it demand charges irrespective of the fact that it is availing power from UPCL or not. Even in case of embedded consumers drawing power through open access, adjustment of demand charges is made from wheeling charges as the consumer cannot be made to pay for the same network twice. Since, he is already paying demand charges on the contracted load, necessary adjustment is made in calculation of wheeling charges in case power is drawn through open access.

2.7 However, considering the instances of occurance of maximum demand during the time when power was being drawn through open access in case of few consumers, the Commission is of the opinion that it would be in fitness of things to review the formula. Accordingly, the Commission appreciating need for the review of the Order dated 10.04.2014 decides to amend the formula by adding the proviso as follows:

# For tariff purposes Load Factor (%) would be deemed to be =

Consumption (excluding the energy received through open access) during the billing period

Maximum Demand or Contracted Demand whichever is less x No. of hours in the billing period

X 100

Provided that in cases where maximum demand during the month occurs in period when open access is being availed by the consumer, then maximum demand for the purpose of computation of load factor shall be that occurring during the period when no open access is being availed.

- 2.8 The above amendment shall be applicable w.e.f. enforcement of the tariff order dated 10.04.2014.
- 2.9 Ordered accordingly.

(K.P. Singh) Member (C.S. Sharma) Member