

Before

UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

Petition No. 18 of 2012

In the matter of:

Suo-moto proceedings initiated by the Commission for non-compliance by UPCL under UERC (Tariff and Other Terms for Supply of Electricity from non- conventional and Renewable Energy Sources) Regulations, 2010 and UERC (Compliance of Renewable Purchase Obligation) Regulations, 2010 and also on the Petition filed by UPCL for revision of Renewable Purchase Obligation due to difficulties faced in procurement of power from renewable power producers by it.

And

In the matter of:

Uttarakhand Power Corporation Limited

...Petitioner

Coram

Shri Jag Mohan Lal	Chairman
Shri C.S. Sharma	Member
Shri K.P. Singh	Member

Dated: 19th December 2012

ORDER

This Order relates to the suo-moto proceedings initiated by the Commission for non-compliance by Uttarakhand Power Corporation Limited (hereinafter referred to as "UPCL" or "Petitioner" or "licensee") under UERC (Tariff and Other Terms for Supply of Electricity from non- conventional and Renewable Energy Sources) Regulations, 2010 (hereinafter referred to as "RE Regulations, 2010") and UERC (Compliance of

Renewable Purchase Obligation) Regulations, 2010 (hereinafter referred to as “RPO Regulations, 2010”) and also on the Petition filed by UPCL for revision of Renewable Purchase Obligation due to difficulties faced by it in procurement of power from renewable power producers.

1 Background

1. UPCL vide its letter dated 29.03.2012 had requested the Commission to revise its Renewable Purchase Obligation (RPO) to the level of actual renewable energy available to it during FY 2011-12 or to allow it the carry forward of the RPO that could not be fulfilled during FY 2011-12 to the ensuing years considering the development of renewable energy sources in the State. UPCL in the said letter submitted that the Commission under RE Regulations, 2010, had specified RPO of UPCL as 4.50% for non-solar and 0.025% for solar energy against which UPCL estimated that it would be able to meet only 3.90% towards non-solar and 0.005% towards solar energy for FY 2011-12. UPCL also submitted that it had executed various PPA's with all the eligible Renewable energy generators who offered their power to UPCL with a view to fulfill its RPO but since these resources could not be developed in the State, power procured from them during FY 2011-12 would be less than the target fixed by the Commission. UPCL also submitted that it did not refuse to purchase power from any eligible RE generator who offered its power to UPCL. Further, due to heavy losses of the Company it was not in a position to buy renewable energy certificate specified under RPO Regulations, 2010. Hence, the RPO fixed by the Commission needs to be reviewed accordingly.
2. UPCL vide its letter dated 10.07.2012 revised its estimate submitted earlier for power procured from solar and non-solar sources to 0.006% and 4.10% respectively which was based on the actual data. It also submitted that Renewable Energy Certificates (RECs) for solar energy were not available in the exchange during the month of March, 2012 and that the demand of non-solar RECs was also more than the availability of the same implying that non-solar RECs were also not available during the month of March, 2012. Hence, in accordance with Regulation 7(2) of RPO Regulations, 2010, UPCL requested the Commission to allow it the carry forward of the RPO that could not be fulfilled by it during FY 2011-12.

3. In response, the Commission asked UPCL to submit the information regarding the bids made by it for procurement of non-solar RECs during FY 2011-12. UPCL vide its letter dated 09.08.2012 informed the Commission that it did not bid for procurement of non-solar RECs during FY 2011-12.
4. The Commission taking cognizance of the non-compliance by UPCL of RE Regulations, 2010 and RPO Regulations, 2010 issued a show cause notice to UPCL on 06.09.2012 to show cause and explain as to why appropriate action should not be taken in accordance with Section 142 read with Section 146 of the Electricity Act, 2003.
5. In response to the show cause notice, UPCL submitted its reply on 14.09.2012 where, in addition to its original submission, it also submitted the following:
 - a) The Commission had fixed the RPO in RE Regulations, 2010 for FY 2011-12 to be met by UPCL. Accordingly, UPCL was obliged to procure the specified minimum percentage of its total electricity requirement for own consumption from the eligible Renewable Energy Sources. The Commission in the above referred Regulations also provided that the above quantum of RPO by the obligated entities may be reviewed by the Commission from time to time based on the actual development of these resources.
 - b) RPO Regulations, 2010 provided that the certificates issued under the CERC (Terms and Conditions for recognition and issue of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010, shall be the valid instrument for the discharge of mandatory obligations for the obligated entities to purchase electricity from renewable energy sources. Regulation 7(2) of the said Regulation provides that in case of genuine difficulty in complying with the purchase obligation because of non-availability of certificates, the obligated entity can approach the Commission for carry forward of the RPO to the next year.
 - c) UPCL submitted that there was no deliberate non-compliance by it and it has complied with the provisions of the RE Regulations, 2010, and RPO Regulations, 2010 within the resources available to it and with a view that the consumers of State are not overburdened with the additional cost of RECs. UPCL also submitted that it is committed to comply with each and every directions issued by the

Commission as well as the provisions of the Electricity Act, 2003 and Rules and Regulations made thereunder and, accordingly, requested the Commission not to initiate penal action under the provisions of the Electricity Act, 2003 against it and its officers as there was no willful non-compliance of the directions issued by the Commission in the above matter.

6. In the meanwhile UPCL filed a separate petition dated 10.09.2012 requesting the Commission to:
 - a) Review the existing RPO targets in view of underdevelopment of renewable energy sources in the State of Uttarakhand and set RPO target for Non-Solar and Solar as 3.91% and 0.0056% respectively for the year 2012-13 and, accordingly, for ensuing years also.
 - b) Issue necessary clarification as to whether the units purchased from RE generators through APPC mechanism without additional purchase of RECs entitle UPCL for including the same units in fulfillment of the RPO.
 - c) Issue necessary and specific directions to RE generators to sign Power Purchase Agreement with UPCL at generic tariff (preferential tariff) until UPCL achieves RPO target of respective year.
7. UPCL in its petition submitted that it could not achieve the RPO target specified for FY 2010-11 as well as for FY 2011-12. The reasons furnished by UPCL for non-achievement of RPO are as under:
 - a) The RE generation from sources other than SHPs has not developed so far in the State. RE generation from these sources would still require a lot of time to develop.
 - b) Increasing number of existing and up coming RE generators are submitting application to UPCL for sale of power at APPC tariff in lieu of preferential tariff. The SHPs are generating renewable energy by utilizing resources of the State of Uttarakhand and are driven by profit motives as they want to sell power to UPCL for short term at APPC tariff. Accordingly, UPCL cannot plan as to how it will achieve its RPO target in long run. UPCL also submitted that it shall not be able to achieve its RPO on account of the following difficulties:

- i. It heavily depends on generation from SHP in order to achieve its RPO targets. However, generation from SHP depends heavily on weather related parameters and prediction of generation from SHP is always not right.
 - ii. Further, UPCL submitted that due to unpredictable nature of generation from SHPs, it can ascertain quantum of RECs to be purchased by the end of January only in a year because of which the procurement of RECs become costlier & therefore additional purchase of RECs along with purchase of energy at APPC tariff becomes costlier in comparison to purchase of renewable energy at generic tariff (preferential tariff) for achieving RPO.
 - c) UPCL also referred to its financial position and submitted that since it is already into losses, therefore, the additional burden on account of purchase of RECs would severely affect its financial condition in the current financial year as well as in the years to come as the RPO target will increase every year.
8. Since the suo-moto proceedings initiated by the Commission and the petition filed by UPCL were of similar nature, therefore, the Commission decided to club the two matters and deal with them together in the current proceedings. The Commission heard UPCL in the matter on 23.11.2012 wherein UPCL reiterated the submissions made before the Commission earlier.

2 Commission's Views

1. Section 86 (1)(e) of the Electricity Act, 2003 provides the following as one of the function of the State Electricity Regulatory Commission:

"promote co-generation and generation of electricity from renewable sources of energy by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licence;"

Accordingly, the Commission in its RE Regulations, 2010 had specified the following:

"9. Minimum Quantum of electricity to be purchased by distribution licensees from 'non-fossil fuel based co-generation and generation of electricity from renewable energy sources'

(1) In line with the provisions of the Act, National Electricity Policy and the Tariff Policy, to promote development of renewable and non-conventional sources of energy, all existing and future distribution licensees, captive users and open access customers, hereinafter referred to as "Obligated Entity", in the State shall be obliged to procure minimum percentage of their total electricity requirement for own consumption, as indicated below, from eligible renewable energy sources as defined under Regulation 4. The same shall be called the Renewable Purchase Obligation (RPO) of the Obligated Entities.

Year	Renewable Purchase Obligation -Non-Solar	Renewable Purchase Obligation - Solar
2010-11	4.00%	0.000%
2011-12	4.50%	0.025%
2012-13	5.00%	0.050%

* Percentage RPO as stipulated above denotes Minimum Quantum of purchase from non-fossil fuel based co-generation and generation of electricity from renewable energy sources " as a percentage of total energy purchased from all sources/generated by the Obligated Entity during the year for own consumption

(2) The Commission may, however, review the quantum of Renewable Purchase Obligation (RPO) by obligated entities from time to time based on actual development of these sources within the applicability period of these regulations."

2. UPCL has referred to Regulation 9(2) of the RE Regulations, 2010 reproduced above and has sought review of the quantum of RPO applicable to it. Here it would be relevant to mention that the Commission after specifying the RPO target in its RE Regulations, 2010, had subsequently notified the RPO Regulations, 2010 on 03.11.2010. Regulation 3(1) of the RPO Regulations, 2010 specifies as under:

"Every obligated entity shall purchase a minimum percentage of its total electricity requirement (in kWh) from renewable energy sources under the renewable purchase obligation during each financial year as specified by the Commission under UERC (Tariff and Other Terms of Supply of Electricity from Co-generation and Renewable Energy Sources) Regulations, 2010..."

3. In case the obligated entity or the distribution licensee (UPCL in this case) fails to meet its RPO obligation through procurement of generation from renewable energy sources for meeting its electricity requirement then the Regulations provides for

supplementing the RPO through purchase of RECs, which is a valid instrument for discharge of the mandatory obligation of the obligated entity. The relevant provision in this regard specified under Regulation 4(1) of RPO Regulations, 2010 is reproduced below:

“Subject to the terms and conditions contained in these regulations the Certificates issued under the CERC (Terms and Conditions for recognition and issue of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010, shall be the valid instruments for the discharge of the mandatory obligations set out in these regulations for the obligated entities to purchase electricity from renewable energy sources.

Provided that in the event of the obligated entity fulfilling the renewable purchase obligation by purchase of certificates, the obligation to purchase electricity from generation based on solar as renewable energy source can be fulfilled by purchase of solar certificates only, and the obligation to purchase electricity from generation based on renewable energy other than solar can be fulfilled by purchase of non- solar certificates”

Thus, from the above reading of the Regulation it is amply clear that UPCL has to purchase a minimum percentage of its total electricity requirement (in kWh) from renewable energy sources under the RPO during each financial year as specified by the Commission and the REC shall be the valid instruments for the discharge of the mandatory obligations set out in the regulations for the obligated entities to purchase electricity from renewable energy sources. Hence, in the event of not meeting the RPO by purchase of renewable energy the obligated entity can fulfill its RPO by purchase of RECs.

4. The provision of review of the RPO targets in RE Regulations, 2010 was kept so that the obligated entities may not be burdened in case the development of these sources do not match pace with the targets specified by the Commission. However, after notification of RPO Regulations, 2010 this proviso became superfluous as RPO Regulations, 2010 provided that any deficit in meeting the RPO can be bridged by purchase of certificate. Hence, there is no question of review of RPO target by the Commission.
5. Moreover, the control period of the RE Regulations, 2010 is going to be complete on 31.03.2013. UPCL did not approach the Commission earlier for revising its RPO and

now when it has become liable for action under the Act and Regulations it has sought revision in its RPO. Regarding RPO targets for subsequent years, the same would be considered by the Commission during the next control period keeping in view the requirement provided under Nation Action Plan on Climate Change (NAPCC) and Jawaharlal Nehru National Solar Mission (JNNSM).

6. NAPCC has provided that starting 2009-10 the national renewable standard may be set at 5% of total grid purchase, which shall be increased by 1% each year for 10 years. Thus, according to the suggestions of NAPCC the RPO obligation has to be atleast 15% by the end of 2019-20. Similarly, JNNSM provides that the solar power purchase obligation for States may start with 0.25% in the phase I which shall go up to 3% by 2022.

However, against the requirement stipulated under NAPCC for achieving 15% by 2019-20, the RPO for non-solar has been fixed at 4.5% for FY 2011-12 and 5% for FY 2012-13. Similarly, the RPO for solar has been specified as 0.050% for FY 2012-13 against the requirement of achieving 3% by 2022 under JNNSM. Hence, it can be seen that the RPO targets for UPCL are way behind the target that it has to achieve and UPCL should start planning to reach the level of 15% in case of non-solar by 2019-20 and 3% in case of solar by 2022. In light of the stipulations provided under the NAPCC and JNNSM, the Commission does not see any need to revise the RPO target downwards but is of the view that the RPO's for the ensuing years would have to be significantly increased so as to meet the targets specified by the Central Government.

7. UPCL has referred to non-development of renewable energy resources other than SHPs in the State and also to shifting of SHPs from long term preferential tariff agreement to short term APPC as the reasons for non-achievement of its RPO. In this regard, it would be relevant to mention that UPCL is a commercial organization and it is expected to be aware of the obligations entrusted to it. If the renewable energy is not available in the State, it should make suitable arrangements to tie-up the purchase of renewable energy from generators outside the State. Further, in case of non availability of such energy, UPCL is required to meet the short fall by purchase of certificates under RPO Regulations, 2010. Financial conditions of the Company can in no way be the pretext of shying away from the obligations cast

upon UPCL under the Act and Regulations. Weak financial position of UPCL is due to its own inefficiencies which cannot be used as a plea for not meeting its obligation. It is also to be borne in mind that any financial implication of purchase of RE certificate and RE energy, if prudently incurred, will be allowed as pass through in the ARR.

8. UPCL has also submitted that it has to depend on generation from SHPs in order to achieve its RPO targets. However, such generation is dependent on weather and predictions of which is not always right and as a result the actual quantum of RE certificate can be ascertained only by the end of January, when the availability of REC from power exchange become costlier. It is not denied that generation from SHPs is dependent on weather conditions. However, the variation in projected generation may not be significant on annual basis. In this regard, UPCL can obtain the data of the generation projected by the SHPs for the Financial Year as the SHPs are always better placed to estimate their generation. Moreover, being a commercial organization proper planning of power purchase is expected from UPCL at the beginning of the year itself and if such planning is being done regularly the amount of deficit in the RPO can be ascertained at the beginning of the year itself which will give UPCL sufficient time to purchase REC from the exchange at reasonable prices. Hence, this ground of UPCL also does not hold merit.
9. UPCL in response to the show cause notice issued by the Commission had submitted that there was un-availability of solar RECs in the month of March, 2012. Further, the demand of non-solar RECs was also more than the availability of the same, implying that non-solar RECs were also not available during the month of March, 2012. In this regard, Commission examined the REC data at Indian Energy Exchange (IEX) during April, 2011 to March, 2012 both for solar as well as non-solar. It was observed that no sell bids were available for solar during FY 2011-12 although buy bids were made in the Exchange. However, sell bids for non-solar sources were available right from April, 2011 to March, 2012 barring few months when the buy bids exceeded sell bids. It would be pertinent to take note of the fact that UPCL did not make any bids. UPCL ought to have realised its obligations and to comply with the provisions of the Regulations, should have atleast made efforts to procure energy from RE sources outside the State or to bid for purchase of RECs

in the exchange even if its bid would have been unsuccessful. The inefficiency of UPCL in realising its obligations and making concerted efforts in meeting its RPO obligations reflects towards lackadaisical approach of UPCL.

10. In this regard, Forum of Regulators (FOR) had discussed on the issue of RPO compliance, monitoring and enforcement during the meeting held on 7th and 8th December, 2012. In the said meeting, FOR has recognized that the resolution of the issues of RPO compliance, monitoring and enforcement will require a combination of actions on market design, incentivisation, monitoring and enforcement. It has also been recognized that RE implementation on a large scale will have certain additional costs till RE costs are at par or below the costs of conventional power. Hence, the Obligated Entities (distribution utilities in particular) need to be supported through incentive measures to overcome at least a part of the additional costs they incur.

Further, a study was commissioned by FOR/CERC to evaluate a set of potential incentives for the utilities for RPO compliance as it was felt that the formulation of RPO/SPO created a new market framework for RE which faced several transition challenges. The REC market, while providing a novel platform for RE projects, had its own challenges in terms of economics of procurement of the RECs by the obligated entities.

The study has proposed that to permit the nascent RE market to develop through the RPO mechanism it is essential to provide some incentive support to the distribution utilities in resource rich states to institute reasonable RPO levels and also exceed their RPOs. Similarly, incentives during the transition period would also help distribution utilities in resource deficit states to institute and comply with reasonable RPO requirements.

Beyond existing incentives, the study has suggested additional incentivisation through the following:

- (a) Incentive 1: A graded (escalating) incentive mechanism for resource rich states that starts at a specific level of achievement (say 70%) under FIT up to 100% of RPO achievement as per the targets derived from the NAPCC framework. The

incentive would offset higher procurement costs and also the cost of grid management with increasing penetration levels;

- (b) Incentive 2: A graded incentive framework for RE generation beyond the normative RPO in the resource rich states for generation beyond RPO (irrespective of procurement at FIT or APPC) to help offset the grid management and transmission costs for generation beyond RPO levels in the state.
- (c) Incentive 3: A graded incentive for resource deficit states that starts at a specific level of achievement (say 50%) under FIT up to 100% of RPO achievement as per the targets derived from the NAPCC framework. The incentive would offset higher procurement costs in the form of REC or the costs for direct purchase of electricity through the ISTS.
- (d) Incentive 4: Institutional incentives for training of system operators to handle variable RE, resource forecasting, procurement of tools and establishment of scheduling and dispatch processes for RE. Even as the quantum of Incentive 4 is likely to be lower than the direct incentives for power procurement and infrastructure establishment, the study deems this to be very critical for effective and well managed expansion of RE.

The study has suggested that the graded incentive scheme aimed at supporting obligated entities (distribution licensees) to procure RE can be more cost efficient than across the board GBI for RE resources since it would raise the RE penetration levels and support superior compliance. However, the draft report on 'Incentives for RPO Compliance' is under consideration / approval.

- 11. Hence, considering the discussions held in the meeting of FOR, the Commission is of the view that since, FOR has yet to approve the recommendations of the study initiated by it and direct for further necessary action in this regard, and this being the first instance of non-compliance by UPCL of RPO Regulations, 2010, the Commission taking a lenient view in the matter has decided not to take any penal action under the Act against the company or the officers responsible.
- 12. Regulation 7(2) of RPO Regulations, 2010 specifies as under:

“ ...

Provided that in case of genuine difficulty in complying with the renewable purchase obligation because of non-availability of certificates, the Obligated Entity can approach the Commission for carry forward of compliance requirement to the next year:"

Keeping in view the above provisions of the Regulations, the Commission directs UPCL to carry forward the unmet RPO for FY 2011-12 for both solar as well non-solar sources to 2012-13 which shall be met alongwith the RPO for FY 2012-13.

13. It is also relevant to refer to Regulation 7(1) of RPO Regulations, 2010 which specifies as under:

"7.1 If the Obligated Entity does not fulfill its commitment towards Renewable Purchase Obligation during any year as provided under UERC (Tariff and Other Terms of Supply of Electricity from Co-generation and Renewable Energy Sources) Regulations 2010, and also does not purchase adequate certificate for meeting the shortfalls, the Commission may direct the Obligated Entity to deposit into a separate RPO Fund such amount as the Commission may determine on the basis of the shortfall in units of RPO, Preferential Tariffs applicable in the State and forbearance price as decided by Central Commission:

Provided that the responsibility of intimating such shortfall within one month of close of that year shall be that of State Agency

Provided further that the fund so created shall be utilised only after approval of the Commission for purchase of certificates or as may be directed by the Commission: "

At present considering this as a first instance of default by UPCL in complying with RPO Regulations, 2010, the Commission is not invoking the above Regulation. Further, it is the responsibility of UREDA, the State agency, of intimating such shortfall within one month of close of that year not only for the distribution licensee but for all obligated entities of the State. However, it was observed that UREDA also failed in ensuring compliance of the Regulation. Hence, UREDA is also cautioned to meet its responsibility in a timely manner failing which action may also be initiated against it for violation of the Regulation.

14. With regard to the clarification sought by UPCL as to whether the units purchased from RE generators through APPC mechanism without additional purchase of RECs entitles it for including these towards fulfillment of the RPO. It would be relevant to mention here that the RPO Regulations, 2010 was notified by the

Commission in November, 2010, i.e. almost 2 years ago. UPCL has now approached the Commission to seek clarification that too through a Petition only when it had defaulted in meeting its RPO obligation. This clearly indicates casual and cavalier attitude of UPCL in understanding and abiding by the provisions of the Regulations. Infact, the Commission during the meeting held with the Managing Director and Executive Director (Commercial) of the Petitioner Company, had already informed them that under the UERC and CERC Regulations, any power procured by UPCL from renewable energy sources at APPC mechanism would not be eligible to be included towards its RPO obligation. However, UPCL ignoring this and the Commission's/CERC's Regulations in this regard, again chose to seek clarification in its Petition. In this regard, the Commission has taken strong exception and would caution UPCL to be more serious towards its obligations.

15. Regarding UPCL's request to the Commission to issue necessary and specific directions to RE generators to sign PPA with UPCL at preferential tariff. In this regard it would be relevant to refer to section 10(2) of the Electricity Act, 2003 which is reproduced below:

A generating company may supply electricity to any licensee in accordance with this Act and the rules and regulations made thereunder and may, subject to the regulations made under sub-section (2) of section 42, supply electricity to any consumer.

Hence, as provided in the Act, the generator is free to sell power to any licensee or to any consumer within or outside the State. It appears that UPCL is ignorant of the provisions of the Act and expects the Commission to issue ultra vires Orders which would be void ab-initio.

The Commission in several instances has observed dilly-dallying on the part of UPCL in executing PPAs with RE generators on flimsy pretexts. The Commission has an impression that UPCL has not been pro-active in procurement of renewable energy. A definite improvement in approach and attitude towards procurement of renewable energy is necessary. The Commission would like to caution that if such improvement is not seen in the immediate future, the Commission would be constrained to proceed against UPCL appropriately.

16. Copy of the Order may be sent to UREDA for information and necessary compliance.
17. The matter is disposed off accordingly.

(K.P. Singh)
Member

(C.S. Sharma)
Member

(Jag Mohan Lal)
Chairman