Uttarakhand Electricity Regulatory Commission

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Statement of Reasons for the "Draft Uttarakhand Electricity Regulatory Commission (Compliance of Renewable Purchase Obligation) (First Amendment) Regulations, 2013"

Statement of Reasons

1. INTRODUCTION

1.1 The Commission had notified the UERC (Compliance of Renewable Purchase Obligation) Regulations, 2010 (hereinafter referred to as Principal Regulations) vide notification dated November 3rd, 2010. The objective of these regulations was to introduce the concept of renewable energy certificate (RECs) which sought to address the mismatch between availability of renewable energy sources and the requirement of obligated entities to meet their renewable purchase obligations. The REC mechanism aimed at promoting additional investment in the renewable energy projects and to provide an alternative mode to the RE generators for recovery of their costs. Keeping in view the main objective of promoting new investments in renewable energy generation, the generating capacity tied up in PPAs was excluded from the eligibility for participating in REC mechanism.

1.2 The principal objective of this Amendment Regulations is to provide clarity on applicability of the regulations to eligible entities and bring in certain essential checks and balances in the REC related process.

1.3 The principal responsibility of determining the level of compliance of renewable energy in the distribution licensees' area, and enforcement of the same lies with the State Commissions, in terms of Section 86(1)(e) of the Electricity Act, 2003, which requires the State Commission to "*promote cogeneration 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 licensee". The Central Commission, as a consequence of its roles for market development under section 66 of the Electricity Act, 2003 has created a market framework through the REC mechanism that would help compliance of the obligations set out by the State Commissions across the country.

1.4 The Commission also appreciates that some of the issues identified are of great significance and would need to proceed along a logical path of progression. Accordingly, following issues are proposed to be addressed through the present amendment as per the details given below:

(a) Change in definition of obligated entity.

(b) Eligibility criteria for issuance of Certificate for:

- Renewable energy contracted through competitive bidding;
- Self consumption by a renewable energy based captive generating plant (CGP) and by a renewable energy based co-generation plant;
- Self consumption by a seasonal RE generator;

(c) Clarity on minimum capacity requirement for eligibility of certificate;

(d) Procurement of electricity at Average Pooled Purchase Cost (APPC) rate as determined by the Commission;

1.5 The detailed amendments proposed through modifications in the Principal Regulations are elaborated upon in the following section.

2. Definition of obligated entity:

Regulation 2(l) of UERC (Compliance of Renewable Purchase Obligation) Regulations, 2010 defines obligated entity as under:

"*Obligated Entity" means the distribution licensee, captive user (excluding co-generating based captive power plants) and open access consumer in the State, which is mandated to fulfill renewable purchase obligation under these regulations.*

The Commission had received representations from M/s Birla Tyres Kesoram Industries and other captive generators who were under the purview of obligated

entity as defined in UERC (Compliance of Renewable Purchase Obligation) Regulations, 2010. Referring to Hon'ble ATE's judgment in Appeal no. 57 of 2009 dated 26.04.2010 in Century Rayon Vs. MERC & Others. In the said judgment, Hon'ble ATE had held as under:

45. Summary of our conclusions is given below:-

(I) The plain reading of Section 86(1)(e) does not show that the expression 'co-generation' means SSR Page 33 of 37 Judgment in Appeal No. 57 of 2009 cogeneration from renewable sources alone. The meaning of the term 'co- generation' has to be understood as defined in definition Section 2 (12) of the Act.

(II) As per Section 86(1)(e), there are two categories of `generators namely (1) co-generators (2) Generators of electricity through renewable sources of energy. It is clear from this Section that both these categories must be promoted by the State Commission by directing the distribution licensees to purchase electricity from both of these categories.

(III) ***The fastening of the obligation on the co-generator to procure electricity from renewable energy procures would defeat the object of Section 86 (1)(e)****.*

(IV) The clear meaning of the words contained in Section 86(1)(e) is that both are different and both are required to be promoted and as such the ***fastening of liability on one in preference to the other is totally contrary to the legislative interest****.*

(V) Under the scheme of the Act, both renewable source of energy and cogeneration power plant, are equally entitled to be promoted by State Commission through the suitable methods and suitable directions, in view of the fact that cogeneration plants, who provide many number of benefits to environment as well as to the public at large, are to be entitled to be treated at par with the other renewable energy sources.

(VI) The intention of the legislature is to clearly promote cogeneration in this industry generally irrespective of the nature of the fuel used for such cogeneration and not cogeneration or generation from renewable energy sources alone.

46. In view of the above conclusions, we are of the considered opinion that the finding rendered by the Commission suffers from infirmity. Therefore, the same is liable to be set aside. Accordingly, the same is set aside. Appeal is allowed in terms of the above conclusions as well as the findings referred to in aforesaid paras 16,17,22 and 44. While concluding, ***we***

must make it clear that the Appeal being generic in nature, our conclusions in this Appeal will be equally applicable to all co-generation based captive consumers who may be using any fuel. *We order accordingly. No costs.""*

(Emphasis added)

Thus, from the reading of the Hon'ble ATE's judgment, it may be seen that Hon'ble ATE has held that the Appeal being generic in nature, its conclusions in this Appeal will be equally applicable to all co-generation based captive consumers who may be using any fuel.

Accordingly, in light of Hon'ble ATE's judgment referred above, there is a need to modify the definition of obligated entity to exclude co-generation based captive power plants outside the purview of the obligated entity. Accordingly, the proposed definition of obligated entity is as under:

"Obligated Entity" means the distribution licensee, captive user (excluding co-generation based captive power plants) and open access consumer in the State, who is mandated to fulfill renewable purchase obligation under these regulations.

3. **Eligibility criteria for issuance of Certificate**

3.1 **Issue regarding treatment of PPA entered through competitive bidding and not through cost plus tariff determined by the regulators**

3.1.1 REC Regulations, 2010 at present do not allow issuance of Certificates to a renewable energy generator selling power at preferential tariffs. The term "preferential Tariff" has been defined in the REC Regulations as "the tariff fixed by the Appropriate Commission for sale of energy, from a generating station using renewable energy sources, to a distribution licensee". This definition is stated to leave out the tariff adopted by the Commission under section 63 of the Act. Consequently, this is stated to cause ambiguity in treatment of a renewable energy generator selling power through tariff based competitive bidding at a tariff adopted by the Commission under section 63 of the Act. The Commission is of the view that any investor while participating under competitive bidding quotes tariff after considering all costs as well as risks involved during the life time of the operation of renewable energy generation project, and offers the green energy in its totality and not the electricity component and green attribute separately. Moreover, the distribution utility procures such renewable energy under competitive bidding for fulfilment of its renewable purchase obligation. Thus, such renewable energy generators (selected through competitive bidding under section 63 of the Act) cannot be given REC credit, as this would amount to double counting of the green attributes.

The Commission is of the view that the electricity component which is proposed to be sold at a rate determined under Section 62 or adopted under Section 63 of the Act should not be for the purpose of meeting renewable purchase obligation by the obligated entity as this would result in double redemption of the RECs.

Accordingly, it is proposed to clarify the same through suitable amendment in Clause (b) of Sub-Regulation 1 of Regulation 8 of the Principal Regulations and substitute the term preferential tariff with "tariff determined under section 62 or adopted under section 63 of the Act by the Commission".

The proposed amendments in this regard are as under:

Amendment of Regulation 2 of Principal Regulations:

(i) Clause (o) of Regulation 2 of the Principal Regulations shall be deleted.

(ii) *Clause (b) of Sub-Regulation (1) of Regulation 8 of the Principal Regulations shall be substituted as under:*

"(b) It does not have any power purchase agreement for the capacity related to such generation to sell electricity, with the distribution licensee of the State for the purpose of meeting its renewable purchase obligation, at a preferential tariff determined under section 62 or adopted under section 63 of the Act by the Commission:"

3.2 **Self consumption by a renewable energy based captive generating plant (CGP) and by a renewable energy based co-generation plant**

3.2.1 Regulation 8 of the UERC REC Regulations specifies eligibility criteria for an RE generator under REC framework. The said provision is reproduced below:

"A generating company engaged in generation of electricity from renewable energy sources shall be eligible to apply for accreditation subject to following conditions:

a. *It has connectivity to the State network;*
b. *It does not have any power purchase agreement for the capacity related to such generation to sell electricity at a preferential tariff determined by the Commission;*
c. *It sells the electricity generated either (i) to the distribution licensee of the area in which the eligible entity is located, at a price not exceeding the pooled cost of power purchase (excluding transmission charges) of such distribution licensee, or (ii) to any other licensee or to an open access consumer at a mutually agreed price, or through power exchange at market determined price; and*
d. *It possesses the necessary infrastructure required to carry out energy metering and time-block wise accounting."*

3.2.2 Representations have been made from various quarters regarding the eligibility of captive generators and co-generation projects based on renewable energy participating in REC mechanism. Electricity generated from these generating stations based on renewable energy can be divided in two parts. The first part is surplus energy which is sold just like a sale by any other generating company. This component should obviously be eligible for participating in REC mechanism subject to the conditions as applicable to any other generating company. The second component is the captive consumption or self consumption. Such a self consumption of electricity generated from renewable energy should also be made eligible for REC mechanism because such self consumption actually replaces the demand from the grid power and the entity having such self consumption in effect incurs comparatively higher costs vis-à-vis the cost of the power obtained from grid.

3.2.3 However, the principle of exclusion from REC mechanism on the basis of having availed promotional/concessional benefit needs also to be made applicable in case of electricity generated by captive generators based on renewable energy. The cardinal principle remaining the same that a renewable energy generator cannot participate in REC mechanism if it has availed promotional benefits, otherwise such entities can flood the REC market with low priced RECs placing the new investors at disadvantage which would run counter to the main objectives of the REC mechanism.

3.2.4 The Central Commission vide its Order dated 18.10.2012 clarified that any renewable energy generating plant not fulfilling the conditions of CGP as prescribed in the Electricity Rules, 2005 and availing the concessional benefits in the form of transmission or wheeling charges and/or the banking facility benefit will not be subject to the conditions to be fulfilled by a CGP. Such a plant not being a CGP will not be entitled to any of the benefits available to the CGP and in case, any cogeneration plant is availing any concessional benefits or banking facility or waiver of electricity duty etc, it shall be required to forgo these benefits before availing the RECs for the entire generation from the plant including self consumption. The relevant portion of the Order is reproduced as under:

"23. It is however observed that the CGP status of a generating plant is not static in accordance with the Electricity Rules, 2005 and it may vary from year to year depending on the amount of captive consumption. Rule 3 (2) of the Electricity Rules 2005 in this connection is extracted overleaf.

"(2) It shall be the obligation of the captive users to ensure that the consumption by the captive users at the percentages mentioned in subclauses (a) and (b) of sub-rule (1) above is maintained and in case the minimum percentage of captive use is not complied with in any year, the entire electricity generated shall be treated as if it is a supply of electricity by a generating company." It is evident from the above that where the minimum percentage of captive use is not complied with in any year, the entire electricity generated by such plant shall be deemed to be supply of electricity by the generating company. In other words, a captive generating plant will be treated on the same pedestal as any other generator if it fails to achieve minimum of 51% of

consumption for self use and consequently will be deprived of all benefits admissible to a captive generating plant under the Act. Moreover, the entire electricity generated by it shall be treated as if it is a supply of electricity by a generating company. Section 10(2) of the Act provides that a generating company may supply electricity to any licensee in accordance with the Act and the rules and regulations made there under and supply electricity to any consumer subject to regulations made under sub-section (2) of section 42. Thus a CGP which fails to achieve 51% of captive consumption in a year, its entire generation of electricity including captive consumption shall be deemed to have been supplied to the licensees or open access consumers. ***In that case such a plant will have to fulfil the conditions laid down in Regulation 5(1)(a) to(c) to avail the benefits of RECs and will not be subject to the conditions required to be fulfilled by a CGP or CPP as required under the last two provisos.***

24. There is not much difference between a co-generation plant having captive consumption of less than 50% of its generation of electricity and a CGP which has failed to use 51% of its generation for captive use. A cogeneration plant with more than 51% of its generation for captive use will be classified as a CGP under the Act and with less than 51% will be treated as any other generating station. It therefore follows that where a cogeneration plant has used less than 51% of its generation for captive consumption, its entire generation will be deemed to be treated as supply of electricity by a generating company. In other words, the captive consumption by a cogeneration plant shall be treated as supply of electricity by a generating station by operation of law and shall be eligible for RECs subject to fulfilment of the conditions specified in Regulation 5(1)(a) to (c) of the REC Regulations. Such a plant will not be subject to the conditions under last two provisos under Regulation 5(1) which are applicable to CGP/CPP only…..

25. In the light of the above discussion, we are of the view that the self consumption of electricity by co-generation plants not meeting the requirement of a CGP under the Electricity Rules, 2005, shall be deemed to be supply of electricity by a generating company which can either be to a licensee or to an open access consumer. Once, a co-generation plant is considered as any other RE Generator and its captive consumption is deemed to be supply of electricity by a generating company, it follows that its

captive consumption can be counted towards issuance of REC subject to fulfilment of the conditions laid down in Regulations 5 (1) (a) to (c) of the REC Regulations. ***Such a plant not being a CPP will not be entitled to any of the benefits available to the CPP and in case, any co-generation plant is availing any concessional benefits or banking facility or waiver of electricity duty etc, it shall be required to forgo these benefits before availing the RECs for the entire generation from the plant including self consumption."***

3.2.5 Accordingly, the Central Commission through an amendment clarified that any renewable energy generating plant not fulfilling the conditions of CGP as prescribed in the Electricity Rules, 2005 and availing the concessional benefits in the form of transmission or wheeling charges and/or the banking facility benefit shall be required to forego such benefits for the purpose of availing renewable energy certificate for self-consumption of energy generated.

3.2.6 In view of the above, this Commission through this amendment also proposes to clarify that any renewable energy generating plant not fulfilling the conditions of CGP as prescribed in the Electricity Rules, 2005 and availing the concessional benefits in the form of transmission or wheeling charges and/or the banking facility benefit shall be required to forego such benefits for the purpose of availing renewable energy certificate for self-consumption of energy generated.

3.2.7 Further, concerns have been raised from various quarters that the renewable generators having an existing PPA with a distribution utilities for sale of electricity at preferential (cost plus) tariff may attempt to breach the existing contracts with the sole objective of making profits through REC mechanism. It is being argued that such generators should not be allowed to breach the existing contracts as they have already benefited out of the preferential tariff mechanism. In order to discourage breach of existing PPAs, it is proposed to amend the eligibility conditions by providing that such a generator would be ineligible for participating in REC mechanism in respect of the generating capacity tied up in long term PPA for three years or till the expiry of the period of PPA whichever is earlier, if a competent authority finds that the termination of PPA was because of the default on the part of the generator.

3.2.8 In this regard the proposed amendments in Regulation 8 of the Principal Regulations are as under:

i) In sub-Regulation (1) of Regulation 8 of the Principal Regulations the words "including self-consumption of generation from renewable energy based captive generation plant and renewable energy based Co-generation plants"

shall be inserted between the words "sources" & "shall".

ii) Clause (a) of sub-Regulation (1) of Regulation 8 of the Principal Regulations, shall be replaced by the following:

"It has connectivity to the State network and injects power into the grid. However, in case of self consumption of generation from RE based captive generation plants and RE based Co-generation plants, they shall deem to be injecting this portion of overall generation into the grid".

iii) The following provisos are proposed to be added at the end of Clause (c) of sub-Regulation (1) of Regulation 8 of the Principal Regulations namely:

"Provided that such a generating company having entered into a power purchase agreement for sale of electricity with the obligated entity for the purpose of meeting its renewable purchase obligation, at a tariff determined under section 62 or adopted under section 63 of the Act by the Commission shall not, in case of pre-mature termination of the agreement, be eligible for participating in the Renewable Energy Certificate (REC) scheme for a period of three years from the date of termination of such agreement or till the scheduled date of expiry of power purchase agreement, whichever is earlier ,if any order or ruling is found to have been passed by the Commission or a competent court against the generating company for material breach of the terms and conditions of the said power purchase agreement:

Provided further that renewable energy sources based Captive Generating Plant (CGP) shall be eligible for the energy generated from such plant for self consumption for participating in the REC scheme subject to the condition that such CGP has not availed or does not propose to avail any benefit in the form of concessional/promotional transmission or wheeling charges and/or banking facility benefit:

Provided also that if such a CGP forgoes on its own the benefits of concessional transmission or wheeling charges and/or banking facility benefit it shall become eligible for participating in the REC scheme only after a period of three years has elapsed from the date of forgoing such benefits:

Provided also that the above mentioned condition for CGP for participating in the REC scheme shall not apply if the benefits given to such CGP in the form of concessional transmission or wheeling charges and/or banking facility benefit are withdrawn by the Commission and/or the State Government:

Provided also that any renewable energy source based Co-generation plant availing the concessional benefits in the form of transmission or wheeling charges and/or the banking facility benefit shall be required to forego such benefits for the purpose of availing renewable energy certificate for self-consumption of energy generated. It shall become eligible for participating in the REC scheme immediately after the date of forgoing such benefits:

Provided also that if any dispute arises as to whether a CGP or any other renewable energy generator has availed such concessional/promotional benefits, the same shall be referred to the Commission for decision.

Explanation: For the purpose of this Regulation, the expression 'banking facility benefit' shall mean only such banking facility whereby the CGP or renewable energy based Co-generating station gets the benefit of utilizing the banked energy at any time (excluding peak hours)."

3.3 **Issue of Seasonal PPA in cases of bagasse based cogeneration:**

3.3.1 The issue relates to quantum of self consumption of a bagasse based cogeneration plant with co-located load of sugar mill, where the capacity available for PPA based sales to the utility as per tariffs determined by the State Commission varies from season to season and year to year, depending on the nature of the internal consumption requirements of such co-gen units. In such cases, sum of the total capacity under PPA and capacity registered under REC for self consumption may exceed the installed capacity which is an impediment under the present REC Regulations.

3.3.2 Bagasse based cogeneration power plants are generally established for meeting primarily the self load requirement of Sugar Mills and sale of surplus quantum if any. In order to promote setting up of such power plants, the Commission has passed relevant regulations/orders for export of surplus power available after meeting their captive requirement.

3.3.3 The Central Commission has also clarified that under the PPA, the bagasse based Co-generation plants have been established primarily to meet their own power requirement (self consumption). The PPA is signed with the sole intention only to sell Surplus power. The cogeneration plants register the plants for REC Scheme to avail RECs only on self load; which is highly dependent on "Cane Crushing". This is an inherent characteristic of the industry and these seasonal variations should not be allowed to impact the eligibility of RECs on actual self consumption by cogeneration plants.

3.3.4 The Central Commission vide its Order dated 26.12.2012 in the above referred matter observed as under:

"21. The Commission is aware of the seasonal variation in self-consumption in the co-generation plants like that of the petitioner. After considering the provisions of the UPERC Regulations and the PPAs entered into by the UPPCL with the RE Generators in the State of Uttar Pradesh, we are of the view that a separate dispensation is required to be provided for the cogeneration plants for the purpose of accreditation and registration of their capacity on account of captive consumption. We consider it an appropriate case to exercise our power to remove difficulty to facilitate accreditation and registration of the cogeneration plants for the purpose of REC. Accordingly, in exercise

of the power under Regulation 14 of REC Regulations, we direct that in so far as eligibility under Regulation 5(1)(b) of REC Regulations is concerned, the connected load capacity of the co-generation plants as assessed/sanctioned by the concerned distribution licensee shall be considered as the capacity for captive consumption for the purpose of accreditation and registration irrespective of the capacity tied up under the preferential tariff. We also direct the staff to process the case for making appropriate provisions in the REC Regulations through amendment in the light of our decision above."

3.3.5 The Central Commission has thus issued the amendment in its REC Regulations. **In line with the same, it is proposed that following proviso shall be added at the end of Clause (b) of Regulation 8(1) of Principal Regulations as under**:

"Provided that self consumption/use of generation from renewable energy sources based captive generation plants and renewable energy sources based cogeneration plants, shall be based on the capacity as assessed by the distribution licensee of the State and the same shall be considered as the capacity for captive consumption for the purpose of issue of certificates, and the same should not be in any case covered under PPA with that distribution licensee."

4. Procurement of electricity by a local distribution licensee at the rate of pooled cost of purchase as determined by the Commission

4.1 The term "Pooled Cost of Purchase" has been explained in the Principal Regulations as under:

"for the purpose of these regulations 'Pooled Cost of Purchases' means the weighted average pooled price at which the distribution licensee has purchased the electricity including cost of self generation, if any, in the previous year from all the energy suppliers long-term and short-term, but excluding those based on renewable energy sources, as the case may be".

4.2 The Floor price and Forbearance price for RECs are determined by the Central Commission with reference to the Pooled Cost of Purchase of various States. The cash flow for the projects under the REC Scheme thus depends on the REC price

discovered in the Power Exchange(s) and the Pooled Cost of Purchase rate allowed to them by the distribution licensees in a State. A concern has been raised that such a provision, especially purchase price of the "electricity component" being lower than the Pooled Cost of Purchase rate could lead to a viability gap for the projects, especially in cases where the price discovered in the Power Exchange(s) is close to Floor price.

4.3 The Forum of Regulators (FOR) in the 25th meeting held on 29.07.2011, also held that the expression "not exceeding APPC" should be substituted by the expression "at APPC" in the eligibility criteria under CERC REC Regulations. There was a general consensus on the following in the 25th FOR Meeting;

"For the sake of regulatory certainty, there is a need for uniformity in approach to treatment of APPC. The definition of APPC as agreed earlier by the Forum and consequently as provided in the CERC Regulation may be adopted uniformly across States. The developers should be allowed APPC as determined by the State Commission in its Tariff Order. CERC may consider amending the provision in its REC Regulations and substitute expression "not exceeding APPC" by the expression "at APPC"."

It is, therefore, proposed to amend the REC Regulations to address the above mentioned issue as per the details given below.

Proposed amendment of Regulation 8 of Principal Regulations:

In Clause (c) of Regulation 8(1) of Principal Regulations, the words "at price not exceeding the pooled cost of the power purchase of such distribution licensee" shall be substituted with the words "at the pooled cost of power purchase of such distribution licensee as determined by the Commission".

5. The Commission also clarifies that electricity supplied to an obligated entity for compliance of the RPO shall not be eligible for REC, since allowing it eligible for RECs would amount to double counting of the green attributes. Hence, following amendment is proposed in the Principal Regulations:

A new Clause (e) shall be added after Clause (d) under Regulation 8.1 of the Principal Regulations as under:

"e. It does not sell electricity generated from the plant, either directly or through trader, to an obligated entity for compliance of the renewable purchase obligation by such entity."