

# GUJARAT ELECTRICITY REGULATORY COMMISSION

## AHMEDABAD

CORAM:

Dr. P. K. MISHRA, CHAIRMAN

SHRI PRAVINBHAI PATEL, MEMBER

**In the matter of**

**Procurement of Energy from Renewable Sources Regulations, 2010**

### STATEMENT OF REASONS

#### **1. BACKGROUND:**

The Electricity Act, 2003, inter-alia, seeks to promote renewable and alternative sources of energy. With this in view, the Act mandates the State Electricity Regulatory Commissions to promote cogeneration and generation from renewable energy sources by providing suitable measures for connectivity with the grid, and also to specify for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee.

The National Action Plan of Climate Change (NAPCC) has set the target of 5% renewable energy purchase for FY 2009-10 which will



increase by 1% for the next 10 years. The NAPCC further recommends strong regulatory measures to fulfil these targets.

The National Electricity Policy reiterates that the power purchase obligation from non-conventional sources of energy, as envisaged in section 86(1)(e) of the Electricity Act, 2003 should be specified by the SERCs. Progressively the share of electricity from non-conventional sources would need to be increased as prescribed by the State Commission and the same should be reflected in tariff determination.

The Tariff Policy also mandates the SERCs to fix the 'minimum' percentage of energy to be procured from Non-conventional energy sources taking into account the availability of such resources in the region and its impact on retail tariffs.

With considerations of the above aspects, the Commission had notified Regulation no. 15 titled 'Gujarat Electricity Regulatory Commission (Power Procurement from Renewable Sources) Regulations, 2005 on 29<sup>th</sup> October, 2005, in which the Renewable Purchase Obligations (RPO) was specified for the Distribution Licensees for the years 2006-07, 2007-08 and 2008-09. For the subsequent period, of 2009-10 to 2011-12, the Commission prepared draft Regulations viz. 'Gujarat Electricity Regulatory Commission (Power Procurement from Renewable Sources) Regulations, 2009 and issued Public Notice on 14-05-2009 inviting comments/objections/suggestions from the stakeholders. In the said draft Regulations, the Commission proposed a higher percentage of renewable purchase obligation by



distribution licensees and it was also proposed to extend the scope of applicability of these Regulations to open access user(s)/consumer(s) and captive user(s).

The office received objections/suggestions from 57 stakeholders. The list of the objectors, on these draft Regulations, is kept at **Annexure – 1.**

The Indian Wind Energy Association had, on 13<sup>th</sup> February 2008, filed the petition No. 933 of 2008, praying, *inter-alia*, for review of Renewable Purchase Obligation specified by the Commission in its Regulation No. 15. The Commission, while disposing of the petition, in its order dated 8<sup>th</sup> May 2009 observed that the prayer regarding applicability of Renewable Purchase Obligation to the captive consumers and open access consumers is also within the purview of the law. Aggrieved by the said observations, Special Civil Application (SCA) No. 6389 of 2009 was filed by the Reliance Industries Ltd. & others before the Hon'ble High Court of Gujarat. Hon'ble High Court of Gujarat on 30.06.2009 passed an Oral Order and granted interim stay against the above Regulations which was finally vacated on 09/11/2009. During the course of hearing of the above appeal, the Indian Wind Energy Association (InWEA) undertook to withdraw its petition no. 933 of 2008. Hon'ble High Court disposed of the SCA 6389 of 2009 on 09/11/2009 observing that the cause and reason did not survive as the Review Application No. 933 of 2008 stood withdrawn and



order dated 08/05/09 passed by the Commission had been effaced. The draft Regulations (dated 08/05/2009) also became non-existent.

Subsequently, the Commission prepared a new draft of Regulations on Power Procurement from Renewable Sources (dated 08/01/2010) and issued Public Notice and invited fresh comments / objections / suggestions from stakeholders. On this draft Regulations, 24 stakeholders have submitted their comments/objections within stipulated time. The list of the 24 stakeholders who responded to this draft Regulations is placed at **Annexure-2**. The Commission also received comments / objections from four objectors after the stipulated time of filing the objections. The Commission has considered these submissions also.

The Commission conducted a public hearing for the draft Regulations, 2010 on 4<sup>th</sup> March 2010. The list of the respondents who participated in the hearing is given at **Annexure-3**.

## **2. CONSIDERATIONS OF THE VIEWS OF THE STAKEHOLDERS AND ANALYSIS AND FINDINGS OF THE COMMISSION ON IMPORTANT ISSUES**

2.1 The Commission considered the comments received from the stakeholders on the draft Regulations and the submissions made by the stakeholders who participated in the public hearing conducted on 4th March 2010 as well as their written submissions received during and after



the public hearing. The Regulations have been finalised after detailed analysis and due considerations of the various issues raised.

### **3. PRELIMINARY OBJECTIONS TO THE REGULATIONS AND FINDINGS OF THE COMMISSION**

#### **3.1 JURISDICTION OF THE COMMISSION**

During the hearing, some of the stakeholders raised the following major issue on jurisdiction of the Commission:

- The Commission has no jurisdiction in the matter of framing of Regulations under section 86(1)(e) for the purpose of RPO
- Regulation is in violation of Article 19(1)(g) and 301 of the Constitution of India.

#### **Commission's findings:**

Promotion of renewable energy sources is in the domain of the State Electricity Regulatory Commission and is meant to facilitate and promote the development of market in electricity based on renewable energy sources. Section 86(1)(e) read with sections 61(h) and 181 of the Electricity Act, 2003 empowers the State Electricity Regulatory Commission (SERC) to frame regulation in the matter. Section 86(1)(e) of the Electricity Act, 2003 mandates the State Electricity Regulatory Commission to specify a quantum or percentage for power procurement from the renewable energy sources with reference to the total consumption of the distribution licensee area.



Section 86 (1)(e) of the Electricity Act provides that the SERC shall..... ***specify***, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of distribution licensee.

Thus, the Commission is under statutory obligation to specify the RPO as provided in the above section.

Section 2(62) reads that “**specified**” means *specified by regulations made by the Appropriate Commission or the authority as the case may be, under this Act.*

The above definition implies that whenever the word “specified” is used in the Act, the appropriate Commission is mandated to frame the relevant Regulations relating to the particular section(s) of the Act. Hence, section 86(1)(e) of the Act mandates the State Electricity Regulatory Commission to frame the regulation for Renewable Power Purchase Obligations.

Moreover, Section 181 of the Act provides powers to the State Commission to frame the Regulations.

Sub-section (1) of section 181 reads as

*“The State Commission may, by notifications, make regulations consistent with this Act and the rules generally to carry out the provisions of this Act.”*

Sub-section (2) of Section 181 reads as



*“In particular and without prejudice to the generality of the power contained in sub-section (1), such regulations may provide for all or any of the following matters.*

Sub-section (1) of Section 181 of the Electricity Act, 2003 provides general power to the State Electricity Regulatory Commission to make Regulations to carry out the provisions of the Act. This section provides wide powers to the commission to frame the Regulations which are consistent with the provisions of the Act and Rules. The first part of sub-section (2) of section 181 also recognizes the general power of sub-section (1) of section 181 regarding framing of Regulations by the Commission. It is also mandated that the Regulations should be made in all matters of the Act and Rules as per the wisdom of the Commission. It is also mandated in sub-section (2) of section 181 to frame the Regulations with respect to various clauses (a) to (zp) of sub-section (2) of section 181. Moreover, residuary item under (zp) of subsection (2) of Section 181 reads *“as any other matter which is to be or may be specified”*. The above section also provides general powers to the Commission to frame Regulations.

Thus, on a cogent reading of the above sections of the Act, it transpires that the Commission is empowered to frame the Regulations for procurement of power from renewable energy sources as a promotional measure. Based on the above analysis, the Commission decides that it has the jurisdiction to frame the Regulations.



Now, with regards to the issue of violation of Articles 19(1)(g) and 301 of the Constitution of India, it is worthwhile to read the Articles. Article 19(1)(g) reads as under:

*Article 19(1) All citizens shall have the rights:*

*Article 19(1)(g): to practice any profession, or to carry on any occupation, trade or business.*

**Article 301** of the Constitution of India reads as under:

*Subject to the other provisions of this Part, trade, commerce and intercourse throughout the territory of India shall be free.*

In this context, it will be pertinent to consider some other articles of the Constitution also. These are discussed below:

- **Article 304 and 304(b)** read as under:

*Article 304: Notwithstanding anything in article 301 or article 303, the Legislature of a State may by law -*

*Article 304(b): Impose such reasonable restrictions on the freedom of trade, commerce or intercourse with or within that State as may be required in the public interest:*

In short, the freedom under both the Articles, 19(1)(g) and 301 is subject to reasonable restrictions imposed by the State in the public interests, which must also be reasonable and not arbitrary or excessive. These limitations are inherent in both the freedoms.

- **Article 48(A) and 51(A)(g)** reads as under:





**Article 48(A):** *The State shall endeavour to protect and improve the environment and to safeguard the forests and wild life of the country.*

**Article 51(A)(g):** *to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures;*

Article 48(A) and 51(A)(g) of the Constitution of India cast a constitutional duty upon not only the state but also on every citizen to protect and improve the environment and natural resources of the country. The citizen, it is expected, should be his own monitor while exercising and enforcing his fundamental rights, remembering that he owes the duties specified in Article 51(A) to the State and that if he does not care for the duties he should not deserve the rights.

In view of above discussions, we feel that the Regulations do not violate any provisions of the Constitution.

### **3.2 RENEWABLE ENERGY CERTIFICATES UNDER REGULATIONS OF THE CENTRAL COMMISSION**

The following points were raised regarding inclusion of provision regarding Renewable Energy Certificates in the draft Regulations;

- Validity of RECs, since neither the Act nor the Policy provides for the same.



- Applicability of RECs issued under CERC Regulations to the State Regulation.

**Commission's findings:**

It is important to note that the framework of Renewable Energy Certificate (REC) is meant to facilitate and promote the development of market in electricity based on renewable energy sources. The Act and the policies envisage coordinated efforts of CERC and SERCs in promotion of renewable energy in the country. On the basis of deliberations in the Working Group of the Forum of Regulators (FOR), CERC has notified the Regulations on Renewable Energy Certificate mechanism. The SERCs have specific responsibility under section 86(1)(e) of the Act and the Forum of Regulators (FOR), where all the SERCs are represented, has already evolved a model regulation to be framed by SERCs under the said provision to facilitate inter alia implementation of the REC framework. The scheme envisages inter alia central level registry and trading of certificates at the power exchange, which can be facilitated only through a regulation by the Central Commission. This mechanism is aimed at addressing the mismatch between availability of renewable energy sources in some states and the requirement of the obligated entities to meet the renewable purchase obligation. While framing the Regulations, SERCs are eligible to adopt the provisions of CERC regulation. The Act mandates SERCs to promote the development of market including trading. The REC is an



instrument of trading, which is tradable at Power Exchange, and it is also a tool for fulfilment of RPO by the obligated entity.

The Commission therefore decides to retain the provisions regarding RECs as included in the draft regulation.

#### **4. APPLICABILITY OF RENEWABLE PURCHASE OBLIGATION**

A number of representatives of the Captive Power Generators objected to the applicability of RPO to CPP consumers. Major issues raised by CPPs representatives and other stakeholders are as under;

- Section 9 of the Electricity Act, 2003 dealing with the Captive Generation starts with a non-obstante clause. Hence, section 9 of the Electricity Act, 2003 has an overriding effect on all other sections of the Act.
- Section 9 of the Act enables a person to construct, maintain or operate a captive generating plant without any restriction
- Any Regulations made by the Commission and made applicable to Captive Generating plants are ultra vires and inconsistent with section 9 of the Act.
- To prescribe mandatory procurement of a minimum percentage of renewable energy is beyond the powers and jurisdiction of the Commission
- Applying RPO on Captive User(s) significantly impacts the profitability, affects long-term sustainability, destroys economies



of scale, and discourages setting up of Captive Generating Plants etc.

- Applicability of RPO to CPPs with installed capacity of 1 MW should be enhanced to 5 MW
- To apply RPO to Distribution Companies and CPPs / Open Access consumer(s) from different dates is discriminatory

**Commission's findings:**

The Commission recognises the fact that section 9 of the Act mandates that any person can construct, maintain or operate a captive generating plant. However, the proposed regulation, in no way, interferes with the operation of a generating plants since the RPO is not related to generation from such plants but to the consumers availing generation from such CPPs.

Section 86(1)(e) of the Act mandates the Commission to specify, for purchase of electricity for renewable energy sources, a percentage of the total consumption of electricity in the area of a distribution licensee. It is worthwhile to note that the total electricity consumption in any area comprises of:

- (i) Electricity consumption of consumers of the distribution licensee who get power supply through the distribution licensee.
- (ii) Open access user(s)/ consumer(s) who are consuming energy received from any sources other than distribution licensee in whose area they situate through utilisation of Transmission



and/or Distribution licensee network by paying necessary charges as decided by the Commission.

(iii) Captive users (who are either in isolation mode or connected with grid) who are consuming energy generated by their power plants.

As envisaged under section 86 (1) (e), the Commission is to specify for purchase of electricity from renewable energy sources, a percentage of the total consumption – the category of the consumer is not material. The objective is to ensure that electricity to the extent of the specified percentage of total consumption in the area of distribution licensee is to be purchased from renewable energy sources. It will not be sufficient to impose the renewable purchase obligation on distribution licensees alone, because in that case the specified percentage of the total electricity consumed would not have been from renewable energy sources.

Moreover, if the RPO is not imposed uniformly, it will be unfair to consumers who do not avail of captive consumption, third-party sale or open access, as they alone will be bearing the cost of renewable energy procurement.

It may be noted that section 49 gives open access consumers the freedom to purchase electricity from '*any person*'. Imposing an RPO does operate as a restriction on this freedom, since the specified percentage of the total consumption has to be from renewable energy sources (or to be compensated by purchasing RECs). However, it is a



reasonable and permissible restriction. The National Electricity Policy and the Tariff Policy are guiding principles, even while implementing the provisions of the Act, and this limited restriction, which is clearly in national, environmental and public interest, cannot be considered as a violation of section 49. Furthermore, it must be noted that the preferential tariff determined by the Commission will not be binding on open access consumers, by virtue of proviso to section 86 (1) (a). Hence, there can be no objection on that count either. This analysis could also apply, *mutatis mutandis* to captive generation consumers who under section 9 of the Act enjoy the same freedom from regulation.

Regarding different dates for effecting the RPO to Distribution Licensees and other categories of consumer, the Commission has kept in view the quantum of their consumption and mode of their operation. Some of the consumers may be operating in isolation of the grid or their consumption may not be large enough to avail supply directly from the renewable sources. Hence, it is felt that till some alternative arrangement like Renewable Energy Certificates is available, it may not be fair to impose RPO on such categories of consumers.

Some of the stakeholders have suggested that in the first phase, RPO may be made applicable to CPPs having installed capacity of 5 MW and above instead of 1 MW proposed in the draft regulation. In view of the fact that the number of CPPs in the range of 1 to 5 MW is large, maintaining records of their consumption and procurement of



renewable energy may not be practicable initially. As such, for the present, the Commission decides to apply RPO to consumption from CPPs with generating capacity of 5 MW or more.

## **5. CO-GENERATION VIS-A-VIS GENERATION FROM RENEWABLE SOURCES OF ENERGY**

It was submitted by some of the stakeholders that section 86(1)(e) of the Act mandates the Commission to promote cogeneration and generation of electricity from renewable energy sources of energy. It was argued by them that the co-generation should therefore be treated on the same footing as the generation from renewable energy sources, and electricity generated from co-generation plants should also be accounted as fulfilment of RPO.

### **Commission's findings:**

The Commission has considered the above submission. According to section 86(1)(e) the State Commission is mandated 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.”*

It was argued by some objectors that ‘cogeneration’ is to be treated on the same footing as ‘generation of electricity from renewable sources of energy’ because the word ‘and’ separates both

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the parts of the clause. A careful reading of section 86(1) (e), however, does not support the above contention. Both ‘*cogeneration*’ and ‘*generation*’ relate to ‘electricity from renewable sources of energy’. Electricity can be made available from renewable and other, say fossil fuel based, sources. Cogeneration, as defined in section 2 (12) means a process which simultaneously produces two or more forms of useful energy (including electricity). It can be from fossil fuel based sources. It can also be from renewable sources such as Bagasse. A reading of section 86 (1) (e) makes it amply clear that the provision applies to both cogeneration and generation of electricity only if it is from renewable energy sources. In other words, cogeneration from only renewable energy sources can be treated on the same footing as generation of electricity from such sources, and cogeneration from other sources such as fossil fuel does not come within the purview of section 86 (1) (e).

The Commission is therefore of the view that for fulfilling the RPO only the electricity generated or cogenerated from renewable energy sources, can be considered eligible.

## 6. QUANTUM OF RENEWABLE PURCHASE OBLIGATION

It has been expressed by some of the stakeholders that the percentage of RPO indicated in the draft Regulations is too high and not realistic with reference to the availability of power from such sources. Some other views expressed during the hearing are as under:

- RPO trajectory need to be specified for a longer period, say 5 years





- RPO should be calculated on the actual consumption net of T&D losses
- Prescribing different percentage obligation for different sources is discriminatory and not in line with the provision of the Act
- Percentage specified for other sources (like biomass, bagasse etc.) is very low compared to their potential availability.
- Inter-changeability of commitments among various sources should not be allowed

**Commission’s findings:**

As suggested by some of the stakeholders, the Commission has undertaken assessment of availability of electricity from various renewable energy sources in the state with the help of GEDA, who are the State Government agency for promotion, development, registration and monitoring of renewable energy sources based generating projects.

Based on this study, the Commission has revised the renewable purchase obligations, as given below:

| Year<br>(1) | Minimum Quantum of Purchase (in %) from renewable energy sources (in terms of energy in kWh) |             |              |  |
|-------------|--|-------------|--------------|--|
|             | Total<br>(2)   | Wind<br>(3) | Solar<br>(4) | Biomass,<br>bagasse and<br>others<br>(5) |
| 2010-11     | 5  | 4.5         | 0.25         | 0.25                                     |
| 2011-12     | 6  | 5.0         | 0.5          | 0.5                                      |
| 2012-13     | 7  | 5.5         | 1.0          | 0.5                                      |



Regarding specifying trajectory for a longer period, the Commission is of the view that most renewable energy projects are still in a nascent stage and realistic assessment of their availability in longer terms is not available. It will, therefore, not be reasonable to project a long term trajectory in the absence of realistic data.

Regarding computation of RPO on net consumption basis excluding T&D losses, it is a fact that the prescribed percentage for purchase of electricity from renewable energy sources has to be applied on the net consumption in the area of distribution licensee. However, according to Commission's orders on tariff for various sources of renewable energy, the licensee has to purchase power from the generator bus or the nearest GETCO sub-station. As such, quantum of power purchase has to be prescribed quantum at consumer's end plus T&D losses. .

Further, there are three distinct categories of renewable energy sources on the basis of natural resource they use, technology used in generation of electricity and costs involved. Potential availability of electricity from these sources is also quite different. As such, the targets for these three categories should also be different.

## **7.0 DEFINITIONS**

It was pointed out that definitions of terms "certificate", "Forbearance Price", and "Obligated Entity" are not in consonance with



the Regulations notified by the CERC. It was also pointed out that the term ‘Floor Price’ is required to be defined in the Regulations.

The Commission has noted the above observations and the draft Regulations have been modified accordingly.

## **8.0 CONSEQUENCES OF DEFAULT**

Diverse views were expressed on the clause dealing with consequences of default in achieving the prescribed targets, including Commission’s power to impose penalty on defaulter. Issue regarding utilisation of fund created by the amount collected from the defaulters was also raised by some of the stakeholders.

### **Commission’s findings:**

The Regulations are framed in pursuance of the powers vested in the Commission under section 181 of the Act. As such, power to seek compliance to the Regulations also vests with the Commission. Moreover, direction to deposit the amount to be decided by the Commission for default in RPO in a separate fund is a regulatory measure. It is designed to compensate the market mismatch caused by the licensee in question. As provided in the draft regulation, the amount accumulated in the fund shall be primarily used to purchase the certificates, which is an activity incident to promotion of generation from renewable energy sources. Moreover, time and again issues have been raised regarding development of transmission infrastructure for evacuation of power from generating stations based on renewable



energy sources. Hence, the Commission considers it apt to utilise part of the amount deposited in the fund for creation of such infrastructure.

## **9.0 OTHER ISSUES**

### **9.1 GRID CONNECTIVITY**

Gujarat Energy Transmission Corporation Ltd. (GETCO) suggested that wheeling should not be allowed for more than one location and the connectivity should not be restricted to 'nearest substation'. At the same time, some stakeholders suggested that transmission facilities should be provided to renewable energy sources at concessional rates.

The Commission feels that the above suggestions have no relevance with any clause of Regulations. The above issues are already dealt by the Commission in various orders / Regulations. Hence, the Commission decides not to deal with these issues in detail in this order.

### **9.2 CROSS SUBSIDY AND THIRD PARTY SALE**

It was suggested by some stakeholders that third party sales should not be exempted from payment of cross-subsidy surcharge. It was also suggested that banking facility should be allowed to third party sale of renewable energy.

The Commission is of the view that renewable energy sources being at a developmental stage, need some sort of support for their promotion and levy of cross-subsidy charges in present conditions would be inconsistent with this objective. At the same time, allowing



banking facility to third party sale will make the energy accounting complicated. The state is in the process of implementing intra-state ABT and the accounting procedure in the initial stage of intra-state ABT needs to be kept simple.

### **9.3 STATE AGENCY**

It was suggested that functions and powers of the State Agency needs further clarifications.

In this connection, this is to clarify that the functions and powers of the State Agency are listed in the CERC Regulations and the Commission will elaborate the same while designating an agency to act as the State Agency.

**10.0** The Commission directs that the Regulations published in, draft form dated 08/01/2010 be published in the official Gazette after incorporating the changes as decided and indicated in the foregoing paragraphs of this Order.

**Sd/-**

**(Dr. P. K. Mishra)**  
**Chairman**

**Sd/-**

**(Pravinbhai Patel)**  
**Member**

Date: 17 April 2010  
Place: Ahmedabad

