

**BEFORE THE HONORABLE GUJARAT ELECTRICITY REGULATORY COMMISSION  
AT GANDHINAGAR**

Case No.

Filing No.

**IN THE MATTER OF** Petition under GERC (Procurement of Energy from Renewable Sources) Regulations, 2010 and amendments thereto for revision in Renewable Power Purchase Obligation (RPO) in case of four subsidiary Distribution Companies of GUVNL for FY 2021-22.

**PETITIONER** Gujarat Urja Vikas Nigam Limited  
Sardar Patel Vidyut Bhavan  
Race Course  
Vadodara - 390 007



**AND**

**CO-PETITIONERS**

1. Madhya Gujarat Vij Company Ltd (MGVCL) Vadodara
2. Uttar Gujarat Vij Company Ltd (UGVCL) Mehsana
3. Paschim Gujarat Vij Company Ltd (PGVCL) Rajkot
4. Dakshin Gujarat Vij Company Ltd (DGVCL) Surat

**MOST RESPECTFULLY SHOWETH**

**1.0 PREAMBLE**

**1.1** The erstwhile Gujarat Electricity Board has been unbundled into seven functional entities under the Gujarat Electricity Industry Reorganization and Comprehensive Transfer Scheme, 2003 notified under the Gujarat Electricity Industry (Reorganization and Regulation) Act 2003. The activities of generation, transmission, distribution, bulk power purchase and supply undertaken by erstwhile Gujarat Electricity Board (GEB) has been entrusted to separate seven functional entities. The generation activity is assigned to Gujarat State Electricity Corporation Ltd (GSECL), the transmission activity is assigned to Gujarat Energy Transmission Corporation Ltd (GETCO) and the distribution activity is assigned to four Distribution companies viz. Uttar Gujarat Vij Company Ltd (UGVCL),

Madhya Gujarat Vij Company Ltd (MGVCL), Dakshin Gujarat Vij Company Ltd (DGVCL) and Paschim Gujarat Vij Company Ltd. (PGVCL). Further, the function of bulk purchase and bulk sale of power is assigned to Gujarat Urja Vikas Nigam Ltd (GUVNL) as per the re-organization scheme.

1.2 Accordingly, on behalf of its four subsidiary Distribution Companies, GUVNL is carrying the activity of bulk purchase & bulk sale of power.

1.3 The Electricity Act (EA) 2003, National Electricity Policy (NEP) 2005 and Tariff Policy 2016 envisages promotion of Renewable Energy Sources and Co-generation based generation.

1.4 The following provisions of EA 2003 provide enabling legal framework for promotion of Renewable Energy Sources by the State Electricity Regulatory Commission (SERC).

- **Section 3 (1) of the EA 2003** requires the Central Government to formulate, National Electricity Policy in consultation with CEA and State Governments for inter alia, development of renewable sources of energy.
- **Section 61 (h) of the EA 2003** mandates SERCs to specify the terms and conditions for the determination of tariff bearing in mind the promotion of co-generation and generation of electricity from renewable sources of energy.
- **Section 86 (1) (e) of the EA 2003** mandates SERCs to promote co-generation and generation of electricity from Renewable Energy Sources.

1.5 In compliance with the provisions u/s 3 of the EA 2003, the Central Government has notified NEP 2005 and Tariff Policy 2016 elaborating the role of Regulatory Commissions, mechanism for promotion and harnessing of renewable sources of energy, time-frame for implementation, etc.

- **Para 5.12 of the NEP 2005** recognizes the urgent need for promotion of generation of electricity from non-conventional and renewable sources of energy, being the most environment friendly.



- **Para 4 (e) of the Tariff Policy** provide for promotion of generation of electricity from Renewable Energy Sources.
- **Para 6.4 (1) of the Tariff Policy** provides for various aspects associated with promotion & harnessing of renewable sources of energy including fixation of minimum purchase of energy from RE sources as a percentage of total consumption of electricity in the area of a Distribution Licensee taking into account availability of such resources and its impact on retail tariffs.

The aforesaid Para 6.4 of the Tariff Policy also provides that the SERCs shall also reserve a minimum percentage for purchase of solar energy such that it reaches 8% of ***total consumption of energy, excluding Hydro Power***, by March 2022 or as notified by the Central Government from time to time.

- Further, **Para 6.4 (2) of the Tariff Policy** provides that States shall endeavour to procure power from renewable energy sources through Competitive Bidding Process to keep the tariff low, except from the waste to energy plants.

1.6 In consideration of above aspects, Hon'ble GERC through Notification dated 17.04.2010 had notified GERC (Procurement of energy from Renewable Energy sources) Regulations 2010 and subsequent Amendments through Notifications dated 04.03.2014 (1<sup>st</sup> Amendment Regulations) and 21.04.2018 (2<sup>nd</sup> Amendment Regulations). All these Regulations shall be hereinafter collectively referred as RPO Regulations.

- As per **Regulation 4.1 of the RPO Regulations**, each Distribution Licensee is required to purchase minimum stipulated percentage of the total consumption of its consumers including T&D losses during a year from RE sources.
- Further, as per **Para 2 of Regulation 4.1 of the RPO Regulations**, if the prescribed minimum quantum of power purchase either from solar or Wind or Others (including Biomass, Bagasse, MSW, etc.) is not available in a particular year, then in such cases, additional renewable energy available from solar or wind or other energy sources over and above the prescribed % shall be utilized towards



fulfilment of the Renewable Power Purchase Obligation (RPO) in accordance with the total RPO% prescribed during the particular year.

- Furthermore, as per **Regulation 4.2**, the Commission has powers to give relaxation as may be deemed necessary in the scenario of RE supply constraints or other factors not attributable to Distribution Licensees and revise the RPO targets (upon request / application from an Obligated Entity or on suo-motu basis.
- Moreover, as per **Regulation 7.2**, a Distribution Licensee is liable to pay compensation (in accordance with Regulation 9), if it defaults / does not fulfill its stipulated RPO, despite availability of RE Sources.
- As per **Regulation 9** - “Consequences of Default”, Hon’ble Commission may direct the defaulting Distribution Licensees to procure RECs from Power Exchange or deposit into a separate fund, an amount towards regulatory charges equivalent to forbearance price of RECs, in cases where the Distribution Licensee have defaulted in RPO Compliance despite availability of RE sources and/or RECs in the Market.
- As per **Regulation 12** - “Power to remove difficulty”, the Commission can suo-motu or on an application from any person generating electricity (from RE sources) or a distribution licensee or captive user or open access consumer may review, add, amend or alter these Regulations and pass appropriate orders to remove any difficulty in exercising the provisions of the RPO Regulations.



1.7 The minimum percentages as prescribed by Hon’ble Commission in the RPO regulations (and subsequent amendments) are tabulated below:-

Particulars	Year	RPO%	Non Solar		Solar
			Wind	Others	
RPO regulations, 2010	2010-11	5.00%	4.50%	0.25%	0.25%
	2011-12	6.00%	5.00%	0.50%	0.50%
	2012-13	7.00%	5.50%	0.50%	1.00%



1 <sup>st</sup> Amendment Regulations, 2014	2013-14	7.00%	5.50%	0.50%	1.00%
	2014-15	8.00%	6.25%	0.50%	1.25%
	2015-16	9.00%	7.00%	0.50%	1.50%
	2016-17	10.00%	7.75%	0.50%	1.75%
2 <sup>nd</sup> Amendment Regulations, 2018	2017-18	10.00%	7.75%	0.50%	1.75%
	2018-19	12.70%	7.95%	0.50%	4.25%
	2019-20	14.30%	8.05%	0.75%	5.50%
	2020-21	15.65%	8.15%	0.75%	6.75%
	2021-22	17.00%	8.25%	0.75%	8.00%

1.8 It is evident from the table above that initially Hon'ble GERC vide stipulating RPO Regulations had been specifying yearly RPO% in a gradual incremental manner but there was a steep and abrupt rise in RPO% notified in 2<sup>nd</sup> Amendment Regulations, 2018 on 21.04.2018 especially solar RPO%.

1.9 It is noteworthy that after knowing the prescribed RPO%, the Obligated Entities need at least 6 - 8 months' time to plan their capacity tie-up arrangements and implement tendering process for procurement of power from Wind and/or Solar Projects by floating tender(s), conducting pre-bid meeting(s), technical bid opening, financial bid opening & e-reverse auction and thereafter issue letters of intent (Lol) & execute Power Purchase Agreements (PPAs) with the Successful Bidders. Thereafter, the Successful Bidders require 18 - 24 months' period to set up the Projects awarded to them.

1.10 Thus, inspite of making efforts for aggressive capacity tie-up, such sudden increase in RPO% cannot be complied by any Distribution Licensees, since capacity and generation therefrom would only be available after the lapse of almost two - three years.

## 2.0 SUBMISSION

2.1 Hon'ble Commission had been determining preferential tariff for procurement of power by Distribution Licensees from various Renewable Energy (RE) Sources for meeting of Renewable Power Purchase Obligation (RPO) from time to time. In order to meet the RPO of its Distribution



Companies, GUVNL had been purchasing power from various RE Sources by entering into PPAs at the tariff determined by Hon'ble Commission.

2.2 Pursuant to the directives of Hon'ble Commission vide letter dated 18.03.2017 for procurement of power from Wind and Solar projects only through Competitive Bidding, GUVNL started procuring power from Wind and Solar PV Projects by conducting Competitive Bidding and by obtaining approval of Hon'ble Commission for adoption of tariff discovered thereunder.

2.3 Hon'ble GERC vide letters dated 29.04.2022 and 01.09.2022 has directed the Distribution Licensees to file Petition with necessary details / documents for RPO Compliance for FY 2021-22 as per the GERC (Conduct of Business) Regulations, 2004 and pay the requisite fees as per GERC (Fees, Fines and Charges), Regulations 2005. In response, the Petitioner vide letter dated 12.09.2022 had clarified that GUVNL / DISCOMs are yet to finalize accounts and once the same are finalized, GUVNL shall be filing the requisite Petition as per the directives of Hon'ble GERC.

2.4 Accordingly, taking into consideration the revisions in State Energy Accounts (SEA) / Regional Energy Accounts (REA) and annual accounts of GUVNL & DISCOMs, the Petitioner hereby submits the status of RPO compliance for FY 2021-22 by way of this present Petition, which is tabulated as under:

RPO Compliance for FY 2021-22	Wind	Solar	Others*	Total
<b>Actual Total Consumption (MUs)</b>				<b>108289</b>
<b>Less: Hydro Power Purchase (MUs)</b>				<b>1086</b>
<b>Actual Consumption excl. hydro (MUs)</b>				<b>107203</b>
<b>Target RPO% notified by Commission</b>	8.25%	8.00%	0.75%	<b>17.00%</b>
<b>Target RPO (MUs)</b>	8844	8576	804	18225
<b>Actual RE Purchase (MUs)</b>	8686	7247	211	16145
<b>Achieved RPO%</b>	<b>8.10%</b>	<b>6.76%</b>	<b>0.20%</b>	<b>15.06%</b>
<b>Shortfall (-) / Excess (+) (MUs)</b>	(158)	(1,329)	(593)	(2,080)
<b>Shortfall (-) / Excess (+) (%)</b>	-0.15%	-1.24%	-0.55%	-1.94%

\* Includes Mini-Hydel, Biomass co-firing, RE Attributes from Waste to Energy Projects



2.5As regard to the **Non-Solar RPO** of FY 2021-22, it is to humbly submit that GUVNL / DISCOMs have purchased 8897 MUs non-solar energy i.e. 8.30 % as against the requirement of 9648 MUs i.e. 9.00% stipulated non-solar RPO%.

2.6As regard to the **Solar RPO** of FY 2021-22, GUVNL / DISCOMs have purchased 7247 MUs solar energy i.e. 6.76 % against requirement of 8576 MUs to meet the stipulated solar RPO of 8.00%.

2.7Thus, the net shortfall in compliance of total RPO compliance for FY 2021-22 is 2080 MUs i.e. 1.94 %.

2.8As regard to the shortfall in RPO Compliance during FY 2021-22, it is pertinent to submit the following before Hon'ble Commission:-

**A. Constraints in availability of Renewable Energy / Delay in commissioning / Inadequate capacity addition despite tie-up**

- a) At the outset, it is to submit that GUVNL has undertaken Competitive Bidding Process through numerous Tenders for procurement of wind and solar power, since 2017. A detailed statement enlisting the Tenders invited by GUVNL for procurement of wind and solar power is enclosed herewith as **Annexure A**.

It is to humbly submit that GUVNL has been making consistent efforts towards promotion of RE and for meeting the increasing RPO targets by tying up RE Capacity through Competitive Bidding. However, there have been instances of delay in concluding tender(s) on account of reasons beyond control of GUVNL viz. extension in bid-deadlines based on Bidders requests, requirement of modifying Bid Security / Performance Bank Guarantees in the interest of Bidders' participation, etc. Besides, at certain times, GUVNL had to undergo scrapping of tenders and re-tendering process on account of reasons viz. discovery of higher tariffs, low participation / bid-submission by single bidder, requirement of modifying tender conditions in the interest of Bidders' participation & competition, etc. GUVNL had to undertake re-tendering for 700 MW Solar capacity to be set up at Dholera Solar Park and 100 MW at Raghnesda Solar Park. It is to submit that the aforesaid tendering process for procurement of 700



MW power has been challenged before APTEL and is stalled in wake of pendency of legal proceedings.

It is imperative to mention that a couple of Bidding Processes initiated by GUVNL have been deferred a number of times due to various reasons beyond control and factors not attributable to GUVNL. Had the same been concluded on time, GUVNL could have attained the benefit of additional generation from such procurement processes and helped mitigate RPO Compliance.

b) Moreover, it is to humbly submit that inspite of tying up capacity with certain RE Projects as mentioned hereinbelow, GUVNL could not avail the anticipated generation on account of factors solely attributable to such RE Generators and not attributable to GUVNL.

→ GUVNL had signed PPAs with the Bagasse based Co-Generation Projects (viz. 60.2 MW Project with Nitash Co-Generation Pvt Ltd and 16.8 MW Project with Vasu Bioenergy Pvt) which were not set up by the Project Developers, which otherwise could have contributed to an additional generation of **472 MUs** (@ normative CUF of 70%) and helped in RPO Compliance of GUVNL / DISCOMs.

→ The SCoD of M/s Cargo Power & Infrastructure Pvt Ltd's 25 MW Solar Thermal Project has been extended by Hon'ble Commission time and again and the project has not been set up till date. Timely execution of the Project could have entailed annual generation of **42 MUs** (@ normative CUF of 19%) and helped in RPO Compliance of GUVNL / DISCOMs.

→ Some of the PPAs executed by GUVNL for Waste to Energy (Municipal Solid Waste based) Projects have not been developed by the Project Developers and hence terminated by GUVNL on account of default on their part. Execution of 11.5 MW Project of RGE Surat Pvt Ltd could have entailed generation benefit of **86 MUs** (@ contracted PLF of 85%) and 4 MW Project of Junagadh WTE Pvt Ltd could have benefitted generation of **28 MUs** (@ normative PLF of 80%). Thus, these Projects could have attained

