

the following regulations for the development of market in power from renewable energy sources through renewable energy certificates:

**1. Short title and commencement**

1. These Regulations may be called the Central Electricity Regulatory Commission (Terms and Conditions for Renewable Energy Certificates for Renewable Energy Generation) Regulations, 2022.

2. These Regulations shall come into force from such date as may be notified by the Commission in the Official Gazette.

**2. Definition**

(1) In these Regulations, unless the context otherwise requires,

- a) 'Act' means the Electricity Act, 2003 (36 of 2003);
- b) 'Central Agency' means the agency as referred to in Regulation 3 of these regulations;
- c) 'Certificate' means the renewable energy certificate issued by the Central Agency in accordance with these regulations;
- d) 'Certificate Multiplier' means the multiplier as determined under Regulation 12 of these regulations;
- e) 'Commission' means the Central Electricity Regulatory Commission referred to in sub-section (1) of Section 76 of the Act;
- f) 'complete application' means the application complete in all respects in the format as may be stipulated in the Detailed Procedure;
- g) 'Detailed Procedure' means the procedure issued by the Central Agency under these regulations;
- h) 'eligible entity' means an entity eligible for issuance of Certificates under these regulations;
- i) 'Grid Code' means means the Grid Code specified by the Commission under clause (h) of sub-section (1) of Section 79 of the Act;
- j) 'National Load Despatch Centre' means the National Load Despatch Centre established under sub-section (1) of Section 26 of the Act;
- k) 'obligated entity' means an entity for which the State Commission has specified requirement under clause (e) of sub-section (1) of Section 86 of the Act to fulfil the renewable purchase obligation;
- l) 'Power Exchange' means a power exchange as defined under sub-clause (as) of clause (1) of Regulation 2 of the Central Electricity Regulatory Commission (Power Market) Regulations, 2021;
- m) 'REC Regulations, 2010' means the Central Electricity Regulatory Commission (Terms and Conditions for Recognition and Issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010, as amended from time to time;
- n) 'Regional Load Despatch Centre' or 'RLDC' means the Regional Load Despatch Centre established under sub-section (1) of Section 27 of the Act;
- o) 'registration' means registration of eligible entities by the Central agency for the purpose of issuance of Certificates;
- p) 'renewable energy sources' means sources of renewable energy such as hydro, wind, solar including its integration with combined cycle, biomass, bio fuel cogeneration, urban or municipal waste and such other sources as recognized or approved by the Central Government;
- q) 'renewable purchase obligation' or 'RPO' means the requirement specified by the State Commissions under clause (e) of sub-section (1) of Section 86 of the Act for an entity to purchase electricity from renewable energy sources;
- r) 'State Agency' means the agency designated by the concerned State Commission for accreditation of eligible entities for grant of Certificates;



- s) 'State Commission' means the State Commission referred to in sub-section (64) of Section 2 of the Act;
- t) 'State Grid Code' means the State Grid Code specified by the State Commission under clause (h) of sub-section (1) of Section 86 of the Act;
- u) 'Trading Licence Regulations, 2020' means the Central Electricity Regulatory Commission (Procedure, Terms and Conditions for grant of trading licence and other related matters) Regulations, 2020, as amended from time to time and any re-enactment thereof; and
- v) 'Year' means a financial year.

(2) Words and expressions used in these regulations and not defined herein but defined in the Act or any other regulations issued by the Commission, shall have the same meaning as assigned to them respectively in the Act, or such other regulations issued by the Commission.

### 3. Central Agency and its Functions

(1) The National Load Despatch Centre shall be the Central Agency for the purpose of these regulations:

Provided that the Commission may designate any other agency as the Central Agency after satisfying itself that such agency has the required capability of performing functions as provided under these regulations.

(2) The functions of the Central Agency shall be to:

- (i) undertake registration of eligible entities,
- (ii) develop a mechanism for accounting of generation and sale in respect of Certificates;
- (iii) undertake issuance of Certificates,
- (iv) maintain and settle accounts in respect of Certificates,
- (v) act as repository of transactions in Certificates,
- (vi) maintain Registry of Certificates,
- (vii) perform such other functions incidental to sub-clauses (i) to (vi) of this clause, and
- (viii) undertake any other function that may be assigned by the Commission.

### 4. Eligibility for Issuance of Certificates

(1) Following entities shall be eligible for issuance of Certificates:

- (a) Renewable energy generating stations,
- (b) Captive generating stations based on renewable energy sources,
- (c) Distribution licensees, and
- (d) Open access consumers

(2) A renewable energy generating station shall be eligible for issuance of Certificates, if it meets the following conditions:

(a) the tariff of such renewable energy generating station, for part or full capacity, has not been either determined or adopted under section 62 or section 63 of the Act respectively, or the electricity generated is not sold directly or through an electricity trader or in the Power Exchange, for RPO compliance by an obligated entity;

(b) such renewable energy generating station has not availed any (i) waiver of or concessional transmission charges or (ii) waiver of or concessional wheeling charges.

(3) A captive generating station based on renewable energy sources and meeting the conditions as specified under clause (2) of this Regulation in respect of renewable energy generating station shall be eligible for issuance of Certificates:

Provided that the Certificates issued to such captive generating station to the extent of self-consumption, shall not be eligible for sale.

(4) An obligated entity being a distribution licensee or an open access consumer, which purchases electricity from renewable energy sources in excess of the renewable purchase obligation as determined by the concerned State Commission shall be eligible for issuance of Certificates to the extent of purchase of such excess electricity from renewable energy sources.



**5. The Processes**

The process involves (i) accreditation to the eligible entities for Certificates and (ii) registration of the eligible entities for Certificates and (iii) issuance, exchange and redemption of Certificates, as specified in these regulations.

**6. Grant of Accreditation for Certificates**

(1) Accreditation to the eligible entities connected to intra-State transmission system shall be granted by the State Agency:

Provided that the eligible entities granted accreditation prior to the date of coming into force of these regulations shall be deemed to have been granted accreditation under these regulations till validity of their respective accreditations.

(2) Accreditation to the eligible entities connected to the inter-State transmission system shall be granted by the RLDC of the region in which such eligible entities are located, in accordance with the Procedure for Accreditation to be issued by the Central Agency as part of the Detailed Procedure:

Provided that the eligible entities granted accreditations prior to the date of coming into force of these regulations shall be deemed to have been granted accreditations under these regulations and their accreditations shall remain valid till the date of validity of their respective accreditations.

(3) The eligible entities that have been granted accreditations, referred to in clause (2) of this Regulation, which have undergone a change in name or change in legal status after the grant of accreditation, shall inform, along with relevant documents from the appropriate authority such as Registrar of Companies or National Company Law Tribunal or any other Court, to the concerned RLDC which shall, upon verification of documents, update such change in its records within 30 days from the date of such information and inform the same to the Central Agency.

(4) Notwithstanding the provisions contained in clauses (1) and (2) of this Regulation, a distribution licensee or an open access consumer satisfying the eligibility conditions specified in clause (4) of Regulation 4 of these regulations, shall be deemed to have been accredited for grant of registration under these regulations.

**7. Revocation of Accreditation**

The concerned RLDC, after making an enquiry and giving notice may revoke, recording reasons for such revocation, accreditation granted to an eligible entity referred to in clause (2) of Regulation 6 of these regulations in case the eligible entity breaches any of the terms and conditions of its accreditation, the breach of which is expressly declared by such accreditation to render it liable for revocation.

**8. Grant of Registration for Certificates**

(1) An eligible entity which has been granted accreditation or deemed to have been granted accreditation under these regulations, shall be eligible for grant of registration by the Central Agency in accordance with the Procedure for Registration for Certificate to be issued by the Central Agency as part of the Detailed Procedure:

Provided that the entities granted registration under the REC Regulations, 2010 shall be deemed to have been granted registration under these regulations.

(2) The registration granted in terms of these regulations shall be valid for twenty five years from the date of registration:

Provided that the registration granted under the REC Regulations, 2010 and deemed to have been granted registration under these regulations shall be valid for a period of twenty five years from the date of deemed registration.

(3) The entities having been granted registration which have undergone change in name or change in legal status after the grant of registration, shall inform, along with relevant documents from the appropriate authority such as Registrar of Companies or National Company Law Tribunal or any other Court, to the Central Agency which shall, upon verification of documents update such change in its records within 30 days from the date of such application.

**9. Revocation of Registration**

The Central Agency, after making an enquiry and giving notice may revoke, recording reasons for such revocation, registration granted to an eligible entity referred to in clause (1) of Regulation 8 of these regulations in case the eligible entity breaches any of the terms and conditions of its registration, the breach of which is expressly declared by such registration to render it liable for revocation.

**10. Issuance of Certificates**

(1) An eligible entity which has been granted registration or deemed to have been granted registration may apply for issuance of Certificates, to the Central Agency in accordance with the Procedure of Issuance of Certificate to be issued by the Central Agency as part of the Detailed Procedure.



(2) Application for issuance of Certificates shall be made by an eligible entity being a renewable energy generating station or a captive generating station based on renewable energy sources, to the Central Agency within six months from the corresponding generation by the eligible entity:

Provided that no Certificate shall be issued in case the application is made beyond the period of six months from the corresponding generation.

(3) Application for issuance of Certificates shall be made by an eligible entity being a distribution licensee or an open access consumer within three months from the end of a financial year, along with a copy of certification from the concerned State Commission about purchase of electricity from renewable energy sources in excess of the renewable purchase obligations as determined by the concerned State Commission:

Provided that no Certificate shall be issued in case the application is made beyond the period of three months from the end of the financial year.

(4) The Central Agency shall, within fifteen days from the date of receipt of complete application for issuance of Certificates from an eligible entity, issue Certificates or reject the application recording the reasons for such rejection and intimate the same to the concerned entity.

(5) The Certificates shall be issued to the eligible entity being a renewable energy generating station or a captive generating station based on renewable energy sources, on the basis of the electricity generated and injected into the grid or deemed to be injected in case of self-consumption by the eligible captive generating station based on renewable energy sources and duly accounted in the Energy Accounting System:

(i) as per the Grid Code or the State Grid Code, as the case may be, or

(ii) based on written communication of distribution licensee to the concerned State Load Despatch Centre or Regional Load Despatch Centre with regard to the energy input by the renewable energy generating station and captive generating station based on renewable energy sources which are not covered under the existing scheduling and despatch procedures.

(6) The entities granted registration or deemed to have been granted registration under these regulations shall be eligible for issuance of Certificates for the validity period of their registration.

#### 11. Exchange and Redemption of Certificates

(1) The Central Agency shall maintain a Registry of Certificates.

(2) The Certificates shall be exchanged through power exchanges or through electricity traders in such periodicity as may be stipulated by the Central Agency in the Detailed Procedure.

(3) The Power Exchange(s) shall seek approval of the Commission, as may be required under the Central Electricity Regulatory Commission (Power Market) Regulations, 2021, to the respective Bylaws and Rules for exchange of Certificates in the Power Exchange(s).

(4) Exchange of Certificates through electricity traders shall be subject to the following:

(a) The eligible entities shall inform, in advance, to the Central Agency about the number of Certificates intended to be sold through electricity traders;

(b) The Central Agency shall block such number of Certificates in the Registry as informed by the eligible entities in terms of sub-clause (a) of this clause;

(c) The Certificates blocked under sub-clause (b) of this clause shall not be allowed to be exchanged through Power Exchange(s);

(d) The electricity traders shall intimate to the Central Agency consequent upon sale of the Certificates blocked under sub-clause (b) of this clause;

(e) The trading margin for exchange of Certificates through electricity traders shall be governed by the Trading Licence Regulations, 2020, treating one Certificate representing one Megawatt hour of electricity.

(5) The Certificates once exchanged through Power Exchange(s) or through electricity traders and used for compliance of RPO by the obligated entities, shall stand redeemed.

(6) Upon redemption, the Central Agency shall extinguish the said Certificates from the Registry and update its records.

(7) The Certificates issued to captive generating stations based on renewable energy sources to the extent of self-consumption shall stand redeemed on compliance of RPO:



Provided that the State Agency shall inform the Central Agency about such redemption of Certificates, upon which the Central Agency shall extinguish such Certificates and update its records.

**12. Denomination of Certificate**

(1) Each Certificate issued under these regulations shall represent one Megawatt hour of electricity generated from renewable energy sources and injected or deemed to be injected (in case of self-consumption by eligible captive generating station based on renewable energy sources) into the grid:

Provided that Certificate Multiplier may be determined by the Commission as per clause (2) of this Regulation:

Provided further that Certificates shall be issued in multiple of the assigned Certificate Multiplier as per clause (2) of this Regulation for one Megawatt hour of electricity generated and injected or deemed to be injected into the grid.

The Certificate Multiplier for the period of three years from the date of effect of these regulations or such other period as may be decided by the Commission, as determined in **Appendix-1** shall be as under:

Renewable Energy Technologies	Certificate Multiplier
On-shore Wind and Solar	1
Hydro	1.5
Municipal Solid Waste (MSW) and non-fossil fuel-based cogeneration	2
Biomass and Biofuel	2.5

Provided that the Certificate Multiplier for other renewable energy technologies, not covered in the above table, shall be notified by the Commission on a case-to-case basis based on the principles stipulated in Appendix-1:

Provided further that the Commission may, from time to time, based on review of the maturity level and cost of various renewable energy technologies, revise the Certificate Multiplier.

(3) Applicable Certificate multiplier as per clause (2) of this Regulation shall be assigned to the renewable energy generating stations and captive generating stations based on renewable energy sources, commissioned after the date of coming into force of these regulations.

(4) The Certificate Multiplier once assigned to a renewable energy generating station, shall remain valid for a period of fifteen years from the date of commissioning of such renewable energy generating station or captive generating station based on renewable energy sources:

Provided that for the period of validity of their Registration beyond fifteen years from the date of commissioning of such renewable energy generating station or captive generating station based on renewable energy sources, such renewable energy generating station or captive generating station based on renewable energy sources shall be issued one Certificate for one Megawatt hour of electricity generated and injected or deemed to be injected into the grid.

**13. Pricing of Certificates**

(1) The price of Certificates shall be as discovered in the Power Exchange(s) or as mutually agreed between eligible entities and the electricity traders:

Provided that the Power Exchange(s) and the electricity traders shall report all transactions with details including but not limited to volume, price, buyers and sellers to the Central Agency on a monthly basis.

(2) The Commission may by an order give such directions to the Power Exchange(s) or the electricity traders or the Nodal Agency as may be considered necessary, on being satisfied that any of the following circumstances exist or are likely to occur:

- (a) Abnormal increase or decrease in prices of Certificates;
- (b) Sudden volatility in the prices of Certificates;
- (c) Sudden high or low transaction volumes of Certificates on a Power Exchange.

**14. Validity of Certificates**

(1) The Certificates issued shall remain valid until they are redeemed:

Provided that where an eligible entity has obtained accreditation or registration on the basis of false information or by suppressing material information and the accreditation or registration of such entity is revoked at a later date, the



Certificates already issued to such entity, but not redeemed, shall stand extinguished from the date of issue of such Certificates and in respect of Certificates already redeemed, such entity shall deposit in the Central Agency, the amount realized from sale of such Certificates along with the interest at the rate of two hundred (200) basis points above the State Bank of India Marginal Cost of Funds based Lending Rate (MCLR) of one year tenor.

#### 15. Fees and Charges

The Commission may, based on the proposal from the Central Agency, determine the fees and charges payable by the eligible entities for accreditation, registration, issuance of Certificates and other matters connected therewith.

#### 16. Detailed Procedure

- (1) The Central Agency shall issue the Detailed Procedure after stakeholders' consultation within a period of 3 months of notification of these regulations and submit the same for information to the Commission.
- (2) The Detailed Procedure shall contain procedures including, but not limited to:
  - (a) Procedure for accounting of generation in respect of eligible entities as referred in clause (2) of Regulation 3 of these regulations;
  - (b) Procedure for Accreditation as referred in clause (2) of Regulation 6 of these regulations;
  - (c) Procedure for Registration for Certificate as referred to in clause (1) of Regulation 8 of these regulations;
  - (d) Procedure for Issuance for Certificate as referred to in clause (1) of Regulation 10 of these regulations;
  - (e) Periodicity for exchange of Certificate through power exchange or through electricity traders as referred to in clause (2) of Regulation 11 of these regulations;
  - (f) other related and incidental matters.

#### 17. Power to give directions

The Commission may, from time to time, issue such practice directions and orders as considered appropriate for the implementation of these regulations.

#### 18. Power to Relax

The Commission may by general or special order, for reasons to be recorded in writing, and after giving an opportunity of hearing to the parties likely to be affected, may relax any of the provisions of these regulations on its own motion or on an application made before it by interested person(s).

#### 19. Repeal and Savings

- (1) Save as otherwise provided in these regulations, the REC Regulations, 2010 and all subsequent amendments thereto and Procedures thereof shall stand repealed from the date of coming into force of these regulations.
- (2) Notwithstanding such repeal:
  - (a) anything done or any action taken or purported to have been done or taken or any accreditation or registration or permission granted or any document or instrument executed or any direction given under the repealed regulations shall, in so far as it is not inconsistent with the provisions of these regulations, be deemed to have been done or taken under the corresponding provisions of these regulations;
  - (b) the Certificates issued under the REC Regulations, 2010 (except the Non-Solar Certificates issued prior to 1.4.2017) and not redeemed prior to the date of coming into force of these regulations shall remain valid until they are redeemed and shall be eligible for exchange as per these regulations;
  - (c) the exchange of the Non-Solar Certificates issued prior to 1.4.2017 shall continue to be governed by the Commission's letter dated 28.5.2018 read with corrigendum dated 4.6.2018 in Petition No.14/SM/2017 till they are redeemed as per their validity under the REC Regulations 2010, subject to any further directions of the Hon'ble Supreme Court in Civil Appeal No.4801 of 2018.
  - (d) any order or direction issued or approval granted, or any appointment made in pursuance of the repealed regulations shall, if in force at the commencement of these regulations, continue to be in force, and shall have effect as if made, directed or issued under or in pursuance of these regulations, unless otherwise specifically required under these regulations.

HARPREET SINGH PRUTHI, Secy.

[ADVT.-III/4/Exty./92/2022-23]



Appendix-1

Principles for Determination of Certificate Multiplier

- A) Certificate Multiplier has been determined based on the tariff range of various renewable energy sources, by taking into account the:
- Tariffs of renewable energy projects discovered through bidding process under Section 63 of the Act;
  - Tariff Orders issued by the Commission for projects based on various Renewable Energy Sources;
  - Tariff Orders issued by State Electricity Regulatory Commissions for Renewable Energy Projects;
  - Renewable Energy Project Specific Tariffs determined by the Appropriate Commission, if any.
- B) Based on the above principles, the levelized tariff for renewable energy technologies estimated and Certificate Multiplier assigned to renewable energy technologies are as follows:

Renewable Energy Technologies based on	Tariff Range in Rs/kWh	Certificate Multiplier
On-shore Wind and Solar	<=4	1
Hydro	4-6	1.5
Municipal Solid Waste (MSW) and non-fossil fuel-based cogeneration	6-8	2
Biomass and Biofuel	8-10	2.5



**Annexure P-15****CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI****Petition No. 146/MP/2021****Coram:****Shri P. K. Pujari, Chairperson  
Shri I. S. Jha, Member  
Shri Arun Goyal, Member  
Shri P. K. Singh, Member****Date of Order: 17<sup>th</sup> of October, 2021****IN THE MATTER OF:**

Petition under Section 66 of The Electricity Act, 2003 read with the Regulation 7 of the Central Electricity Regulatory Commission (Power Market) Regulations, 2010 for approval of introduction of the Green Day Ahead Contract in Day Ahead Market segment at Indian Energy Exchange Limited.

**And in the matter of**

**Indian Energy Exchange Limited,**  
Plot No. C-001/A/1,  
9th Floor, Max Towers,  
Sector 16 B, Noida, Gautam Buddha Nagar,  
Uttar Pradesh – 201301

**....Petitioner****Versus**

**National Load Despatch Centre (NLDC),**  
Power System Operation Corporation Limited,  
B-9 (1st Floor), Qutab Institutional Area, Katwaria Sarai,  
New Delhi 110016

**...Respondent**



**Parties Present:**

Shri Jogendra Behera, IEX  
Shri Gaurav Maheshwari, IEX  
Shri Subhendu Mukherjee, POSOCO  
Shri Alok Kumar Mishra, POSOCO

**ORDER**

The Petitioner, Indian Energy Exchange Ltd. (IEX) has sought approval of the Commission to introduce Green Day Ahead Contract (GDAC) in Day Ahead Market (DAM) on its platform to provide avenues to existing and prospective Renewable Energy (RE) generators for sale of RE through the Power Exchange and to provide more options to the Obligated Entities to fulfill their Renewable Purchase Obligations (RPO).

2. The Petitioner has made the following prayers:

*"1) Accord approval for introduction of proposed Green Day Ahead Contract (GDAC) on IEX platform.*

*2) Accord approval for proposed amendments in the Business Rules of IEX for introduction of Green Day Ahead Contract (GDAC).*

*3) Pass such further order or orders as may be considered necessary in the facts and circumstances of the case."*

**Submissions of the Petitioner**

3. The Petitioner has sought approval of the Commission to introduce Green Day Ahead Contract in Day Ahead Market on its platform for providing exclusive trading in



renewable energy (RE). The proposal is based on the Ministry of Power (MoP) letter dated 24.03.2021 on "Development of Integrated Day Ahead Market (DAM) in Power Exchange with separate price formation for RE Power and Conventional Power –Reg.", which inter alia suggested a framework for integrating the trading of RE power with conventional power in day ahead market with separate price formation for RE and conventional power. The salient features of the MoP proposal in the said letter dated 24.03.2021 are as under:

- (i) Power Exchange to have Integrated Market in Day Ahead Market (DAM) with separate price formation for RE and Conventional Power.
- (ii) Integrated DAM to have a single RE market for all types of Renewable Energy i.e., solar, non-solar, hydro.
- (iii) Participants can submit their bids in two parts, i.e. the quantity they would be willing to buy or sell, as renewable power or conventional power.
- (iv) Participants of RE segment would have the option to transfer their unselected bids to the conventional segment of the Day Ahead Market (DAM).
- (v) The entire set of bids can be cleared one after another. First renewable bids could be matched with renewable offers, taking into consideration the availability of transmission for the quantities selected. After the cleared renewable bids are scheduled, the conventional segment would be cleared



considering the availability of transmission, net of what has been allocated under the RE segment.

(vi) Buyers of RE market will get solar and non-solar RPO credit on the basis of proportion of the solar and non-solar bids of the sellers cleared in the total volume of the RE market.

(vii) RE sellers to get RECs against their quantum selected in the Integrated DAM.

(viii) The price determination process could be a two-step process and other processes like bidding, settlement, scheduling may remain combined for both. However, clear identification of type of transaction (renewable/ conventional) should not be lost sight of.

(ix) For balancing purpose, RE generators to be allowed to buy from the Real Time Market and waive Inter-State Transmission Charge for Green Day Ahead transactions as per GOI policy as enablers.

4. The Petitioner has proposed the following framework of Green Day Ahead Contract (GDAC) at its power exchange:

(i) In addition to the existing Day Ahead Contract (DAC) in Day Ahead Market (DAM), an additional contract viz., Green Day Ahead Contract (GDAC) shall be available for allowing exclusive trade in Renewable Energy.



- (ii) The participants will submit their bids in two parts, i.e., quantity and price at which they would be willing to buy or sell in GDAC (RE segment) and DAC (Conventional Power segment) based on their eligibility criteria.
- (iii) Participants will have the option to choose if they would like to transfer the uncleared quantity in GDAC to DAC and can also price it differently.
- (iv) Market Clearing or Price Discovery to take place in a sequential manner i.e., first GDAC will be cleared followed by DAC and also sequential requisition will be made to NLDC for allocation of transmission corridor for the two contracts.
- (v) For the purpose of RPO credit to buyers, detailed statement will be issued to buyers specifying the total quantity and proportion (solar/ non-solar/ hydro) in which RE has been purchased by the buyer in GDAC.
- (vi) Similarly, for the purpose of REC issuance to RE sellers cleared in DAC, detailed statement will be issued to sellers specifying the total quantity and type of RE (solar/ non-solar/ hydro) sold by the seller in DAC.
- (vii) Price determination will be a separate process whereas other processes like bidding, settlement, scheduling will remain combined for both the contracts with clear identification of renewable/ conventional transactions.
- (viii) Eligibility for participation in GDAC:



- 1) Sellers: Renewable Energy generators having NOC issued by Load Despatch Center specifying maximum quantity and type of RE i.e., solar/ non-solar/ hydro shall be eligible to trade in 'Green Day Ahead Contract'.
- 2) Buyers: All the entities which are eligible to procure power through Open Access shall be eligible to participate in GDAC as buyers.
- 3) Entities will be eligible to participate in GDAC based on the same NOC issued for DAM/ Intra-Day market by Load Despatch Centre.
- 4) Eligibility of RE sellers shall be ascertained at the time of registration with the Power Exchange based on NOC/ Standing clearance issued by RLDC/ SLDC, as applicable.

(ix) Other Contract details of GDAC:

All other contract specifications are similar to the ones existing for DAC in DAM as briefly provided below:

- 1) Risk Management: As per existing practice of Day Ahead Market.
- 2) Matching mechanism: Double-sided closed bid auction.
- 3) Price Discovery methodology: Uniform market clearing price for all buyers and sellers who are cleared.
- 4) Auction Timing: 10:00 AM to 12:00 PM of previous day (D-1)
- 5) Scheduling: As per procedure of scheduling of collective transactions.

No revision of schedule will be permissible.



- 6) Delivery: Next day (T+1) from 0000 hrs to 2400 hrs in 96 separate 15 minute time blocks.
- 7) Delivery Point: At Regional Periphery.
- 8) Transmission Congestion management: As per the existing practice of market splitting in Day Ahead Market.
- 9) Deviation Settlement Mechanism: As per applicable Regulations notified by the Appropriate Commission.

(x) Proposed timelines: Since GDAC is a new contract and considering basic framework of the proposed GDAC mentioned above, the following indicative timelines for GDAC and DAC is proposed:

Sr. No.	ACTIVITIES	TIMELINE
1.	Bid - Call session Green Day Ahead Contract (GDAC) & Day Ahead Contract (DAC)	10.00 AM -12.00 PM
2.	Determination of Market Clearing Price (MCP) / Market Clearing Volume (MCV) of GDAC and the Unconstrained	By 12.30 PM
3	Publishing of Provisional Obligation GDAC	By 12.45 PM
4.	Request of Available Transmission Capacity (ATC) to NLDC for GDAC, Request for confirmation from bank on availability of funds for GDAC	By 12.45 PM
5.	NLDC Exception for scheduling for GDAC, Receipt of confirmation from	By 01.15 PM



	bank on availability of funds for GDAC	
6.	Determination of Area Clearing Price (ACP)/Area Clearing Volume(ACV) of GDAC	By 01.45 PM
7.	Publishing of obligation GDAC	By 02.00 PM
8.	Submission of Application for scheduling of GDAC to NLDC	By 02.30 PM
9.	Carry forward of unselected Bids of GDAC to DAC & Determination of MCP/MCV of DAC	By 02.30 PM
10.	Publishing of Provisional Obligation DAC	By 03.00 PM
11.	Request of ATC to NLDC for DAC, Request for confirmation from bank on availability of funds for GDAC	By 03.00 PM
12.	NLDC Exception for scheduling for DAC, Receipt of confirmation from bank on availability of funds for DAC	By 03.30 PM
13.	Determination of ACP/ACV of DAC	By 04.00 PM
14.	Publishing of final obligation GDAC+DAC	By 04.15 PM
15.	Submission of Application for scheduling to NLDC for DAC	By 04.15 PM
16.	NLDC conveys acceptance of scheduling of GDAC and DAC	By 05.15 PM

The proposed timelines and steps are indicative and flexible to revision based on the feedback of NLDC and directions of the Commission.



5. The Petitioner submitted the following benefits of the proposed Green Day Ahead Contract (GDAC):

- (i) RE sellers and buyers will get additional avenues to sell/ buy renewable power.
- (ii) Multiple buyers and sellers participating in GDAC based on the principle of collective transactions will lead to efficient price discovery. This will also provide appropriate pricing signals to RE.
- (iii) GDAC will enable the obligated entities to procure renewable power at competitive prices on a day ahead basis and help meet their RPO.
- (iv) RE buyers/ sellers can fall back upon DAC to fulfill their requirements in case the bids are not selected in GDAC.
- (v) Promote the trade of RE through the market having inherent benefits viz. enhanced competition, efficient price discovery, flexibility to participate, payment security mechanism, mitigate the risk of buyers and sellers in entering long term PPAs etc.
- (vi) All of the above will lead to overall promotion of the RE sector and help in achieving RE capacity addition targets set by the Government of India.



6. The Petitioner further submitted that since revisions are not allowed for participants in the Day Ahead Market to enable RE sellers to manage their variations, the RE sellers may be allowed to buy from the Real Time Market (RTM). This has also been proposed in the MoP letter as enabler for the Green Market in the Exchange.

7. During the hearing, the representative of Petitioner submitted that certain changes may be required in the Central Electricity Regulatory Commission (Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation) Regulations, 2010 (in short, "the REC Regulations") and the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 (in short, "the Sharing Regulations"). He, however, added that the amendments to the above Regulations are not a necessary pre-condition for introducing GDAC and that the same can be introduced within the existing regulatory framework in a restricted manner as being followed in the case of Green Term Ahead Market (GTAM). It was also submitted that apart from separate price formation, all other aspects such as bidding, scheduling and settlements, etc. can take place in a combined manner, which would not require any change in the existing procedures/ regulatory framework.

8. In the light of the above-mentioned submissions by the Petitioner, the Commission admitted the petition and directed the Petitioner to give wide publicity to its proposal by uploading the same on its website for inviting comments from the



stakeholders and general public and file an affidavit incorporating the comments received from the stakeholders and the response of the Petitioner thereon.

**Stakeholders' Comments and Petitioner's Response**

9. In pursuance of the Commission's directions, the Petitioner hosted the proposal of GDAC on its website vide public notice dated 29.07.2021. In response, the Petitioner received comments from 4 stakeholders as mentioned below:

- 1) Prayas (Energy Group)
- 2) CLP Wind Farms India Private Limited
- 3) NTPC Limited
- 4) MSEDCL

10. The Petitioner submitted that the stakeholders have given positive feedback on the concept and proposal of GDAC and supported the proposal for introduction of GDAC at the power exchange platform. Most of the stakeholders have affirmed that introduction of such a contract would provide an alternate avenue for the buyers and the sellers to transact in renewable energy which will eventually promote renewable energy in the country. The important issues raised by the stakeholders, along with Petitioner's response thereon, are summarised below:

- 1) **Need for certification process for sellers participating in GDAC:** It has been suggested by one of the stakeholders that as the MoP paper has envisaged certification for participation of sellers in GDAC, the process of certification



should also be provided in the CERC (Power Market) Regulations, 2021 (in short, "the Power Market Regulations") and Business Rules of both the Power Exchanges.

Response of the Petitioner: In the present petition, it has been proposed that a seller, whether an RE generator or a Discom, can sell power in GDAC after obtaining NOC/Standing Clearance from the concerned RLDC/SLDC. The NOC/Standing Clearance should *inter alia* specify the source of RE generation viz. solar, wind, hydro etc. required for recognition of the type of RPO compliance of the Obligated Entities. This practice is already being followed in GTAM based on the directions of the Commission vide Order dated 25/MP/2019. In view of the above, there is no requirement of certification process or any amendment in the Power Market Regulations or Business Rules of IEX.

2) **Re-opening of trading window for DAC after clearance of GDAC:** It has been suggested by some of the stakeholders that the sellers should be given an opportunity to revise their bids for DAC based on their clearance in GDAC. For this purpose, an additional window for revising bids in DAC should be provided post-clearance of GDAC.

Response of the Petitioner: The current proposal of having combined bidding for DAC and GDAC is based on the MoP proposal for integrated DAM. MoP proposal has envisaged that while the price determination could be a two-step process, other processes like bidding, settlement, scheduling may remain





combined. In accordance with the MoP detailed note, it has been proposed in the present petition that the market participants will submit their bids in two parts i.e., for DAC and GDAC segment with the participants having the option to transfer their unselected quantity in GDAC to DAC with a different price quote. This will provide flexibility to the participants to manage their bids across DAC and GDAC segments.

Further, given that both GDAC and DAC being collective transactions with uniform auction price mechanism, the participants are expected to submit their best buy or sell offers which may not change with the outcome of GDAC clearance. Besides, allowing revisions after GDAC will make the process cumbersome and operationally challenging and prone to market manipulation. The stakeholders' suggestion for revision in the bids after GDAC clearance may not be considered.

3) **RPO fulfillment through GDAC:** It has been suggested by some of the stakeholders that the MoP proposal to consider proportionate RPO compliance based on the proportion of the solar and non-solar bids of the seller's cleared volume in each time block will be non-conducive for buyers and hence the Discoms and other Obligated Entities should be allowed to adjust purchase using GDAC to meet their solar or non-solar obligations as they deem fit.





Response of the Petitioner: The Petitioner concurs with the views of the stakeholders that flexibility should be provided to the Obligated Entities to utilize the RE purchase from GDAC against their solar or non-solar RPO depending on their requirement. Fungibility of RPOs will provide flexibility to the Obligated Entities to meet their RPO. This will also enhance liquidity in the market and promote newer RE technologies.

- 4) **Consideration of hydropower participation in GDAC:** It has been suggested by one of the stakeholders that as MoP vide OM dated 08.03.2019 has introduced an additional obligation in terms of Hydro Purchase Obligation (HPO); the same may also be incorporated in the proposed GDAC.

Response of the Petitioner: As suggested by stakeholder, the Commission may consider allowing participation of eligible hydro power plants (COD after 08.03.2019) in GDAC for meeting Hydro Purchase Obligation (HPO) of buyers in alignment with the MoP OM dated 29.01.2021. HPO may be considered in a proportionate manner similar to the way it has been considered for solar and non-solar RPO in the MoP proposal.

- 5) **Waiver of ISTS Charges for GDAC Transactions:** It has been suggested by some of the stakeholders that ISTS waiver may be provided to GDAC transactions in accordance with MoP's Order which would promote RE development and broaden and deepen the market operations.

Response of the Petitioner: As suggested by the stakeholders, the Commission is requested for amendment in the Sharing Regulations to enable waiver of ISTS charges in GDAC as the same has now been allowed by Ministry of Power vide Order dated 21.06.2021. However, at the same time, such waiver is not a pre-requisite for launch of the proposed GDAC.

- 6) **RE Sellers be allowed to buy from RTM to manage variations:** It has been suggested by some of the stakeholders that while RE sellers be allowed to buy power from RTM to manage their variations, their purchase from RTM should not be used to meet RPO compliance of the Obligated Entities.

Response of the Petitioner: As suggested by stakeholders, the energy procured from RTM being conventional in nature should not be considered as green power and counted towards RPO compliance of the Obligated Entities. The procurement of energy by the RE generator from RTM will reduce the deviations of the generator. However, the balancing of the deemed RPO compliance may be carried out as per the existing 'RE DSM pool-based mechanism' provided under provisions of the Central Electricity Regulatory Commission (Deviation Settlement Regulations and Related Matters) Regulations, 2014 (in short, "the DSM Regulations") for Regional Entities and respective SERCs F&S Regulations for intra-State entities. As per this mechanism, any shortfall in the RE generation on a pool basis will be balanced through purchase of equivalent RECs.



Alternately, RE generators procuring power from RTM may be asked to buy equivalent number of RECs to balance the deemed RPO compliances.

7) **Issuance of RECs for RE power sold under DAC:** It has been highlighted by some of the stakeholders that since in the existing framework RE generator do not have the option to sell power under both REC and non-REC mode, current procedures may be amended to allow flexibility to RE generators to sell under both GDAC and DAC during same day/term.

Response of the Petitioner: The Petitioner concurs with the views of the stakeholders that the present REC framework needs to be amended to enable RE Generators to sell power in both REC and non-REC mode. However, it is not a pre-requisite for the launch of the proposed GDAC. Till the time such amendments are carried out by the Commission, the participation in GDAC shall be restricted to non-REC RE generators and sale of power by such RE Generator in DAC (unselected bids) would not be eligible for issuance of RECs. A similar approach is already being followed in the case of GTAM.

8) **Revision in Schedule:** It has been suggested by some of the stakeholders that revisions in the schedule should be allowed keeping in view the infirm nature of RE.

Response of the Petitioner: The proposed GDAC will be based on collective transactions and as per the Central Electricity Regulatory Commission (Open Access in inter-State Transmission) Regulations, 2008 (in short, "the Open Access Regulations"), such transactions cannot be revised. In collective transactions, as there is no one to one matching of seller and buyer, revisions of such transactions are neither feasible nor desirable. The market participants should rather consider other alternatives viz. Real Time Market, Intra-day Market etc. available in the Exchange platform to manage their intermittency.

- 9) **Sequential operation of GDAC and DAC:** It has been suggested by some of the stakeholders that there should be sequential operation of contracts i.e. first GDAC should be finalized and then DAC should be operated.

Response of the Petitioner: The current petition proposed two different segments i.e., GDAC for trading of RE and DAC for conventional energy. However, as envisaged in the MoP paper, it has been proposed that the market will function in an integrated manner with combined bidding for both the segments. As regards the suggestion to run the market in a sequential manner, this may not be required as both GDAC and DAC being collective transactions with uniform auction price mechanism, the Discoms are expected to submit their best buy or sell offers regardless of the outcome of GDAC clearance.



10) **Variations by RE generators:** To manage the variations, RE sellers should be allowed to buy from RTM. However, there may be possibility that RE generators forecast their generation on higher side and to meet the variation, power is purchased in RTM which is conventional one. Hence, it is suggested that, to manage the variations, RE seller should manage their variation by purchasing power from GTAM or introduce new product as RE RTM in line with RTM. Further, any burden due to variations with respect to power schedule in Day ahead market and actual injection should be on account of seller.

Response of the Petitioner: The RE sellers may also be allowed to purchase from GTAM for managing their variations. However, regarding the suggestion of having a separate green RTM for managing deviations of GDAC, the same may be considered by the Commission in future. As regards the financial burden of variations, the entity causing deviations should bear the related cost.

11) **Market Coupling:** The concept of market coupling ensures the same price throughout the nation. However, with market coupling, competition within the exchanges for competitive price discovery and development of different products for buyers will come to an end. Further, the exchanges offering lower trading margin will have the cheaper landed cost of energy (as the clearing price is same). Hence, in case the Commission considers introduction of the market coupling mechanism, it is necessary to fix the minimum and maximum transaction fee to be claimed by power exchanges.

Response of the Petitioner: The Petitioner agrees with the views of the stakeholder that competition within the power exchanges for getting cheaper competitive rates and development of different products for the buyers will come to an end with market coupling. As regards the suggestion for fixing the minimum and maximum transaction fee of the power exchanges, the Commission has already capped it in the Power Market Regulations.

#### **NLDC/POSOCO's Comments and the Petitioner's Response**

11. In pursuance of the Commission's directions, POSOCO submitted its comments on the proposal to the Petitioner. The important observations made by POSOCO along with Petitioner's response thereon are summarised below:

- 1) **Clearing and Curtailment Priority:** Suitable directions may be issued for clearing of integrated DAM comprising of GDAM and DAM. POSOCO has proposed that while clearing and also during congestion, GDAM should be given priority over DAM transactions. POSOCO has also requested for suitable amendment in the Open Access Regulations to provide inter-se curtailment priority within the collective transactions during real time curtailment. Till such amendment is notified, DAM transaction may be curtailed followed by GDAC and Integrated DAM may be curtailed followed by RTM.

Response of the Petitioner: The Petitioner agrees with the proposal of POSOCO.



- 2) **Waiver of ISTS Charges:** POSOCO has requested to amend the Sharing Regulations to provide waiver of ISTS Charges in GDAC. Further, it has been proposed that till such amendment takes place, ISTS charges shall be applicable on GDAC.

Response of the Petitioner: The Commission may consider amending the Sharing Regulations to enable waiver of ISTS charges in GDAC as the same has now been allowed by MoP vide OM dated 21.06.2021. In case the waiver of ISTS charges is implemented after introduction of GDAC, the issue of retrospective settlement of waiver may arise. Therefore, the Commission may consider invoking the 'Power to Remove Difficulty' under Regulation 28 of the Sharing Regulations to enable waiver of ISTS charges for GDAC. However, waiver of ISTS charges is not a pre-requisite for introduction of the proposed GDAC in DAM.

- 3) **REC Issuance:** POSOCO has submitted that when an RE generator will be selling through different modes with some of these modes being not eligible for RECs, it would be difficult to consider the energy injection for issuance of RECs.

Response of the Petitioner: The Petitioner concurs with the views of the POSOCO that in the existing regulatory framework, there are operational





challenges associated with allowing RE sellers to sell their power both through REC and non-REC mode. The Commission may consider bringing necessary amendments in the REC Regulations and Procedure for implementation of issuance of RECs to RE generators participating both in GDAC and DAC transactions. RECs may be considered to be issued based on 'schedule' rather than on metered injection with the mechanism in place to account for any differences arising due to actual injection. However, amendment in the REC Regulations is not a prerequisite for the introduction of the proposed GDAC. However, till such amendment is carried out, in GDAC, only non-REC generators be allowed to participate as is being followed in the case of GTAM.

- 4) **Portfolio RE sale by Discom in GDAC:** POSOCO has proposed not to allow portfolio RE sale by Discom in GDAC as this may lead to mixing of green and conventional/ brown power.

Response of the Petitioner: If the Discoms were to be restricted to sell RE power, one of the key objectives of enabling the RE-rich States to sell their surplus power to RE deficit states through the market mechanism will go unfulfilled. The benefit of the green market to the RE-rich States can be gauged from the fact that in GTAM, majority of the sell volume (more than 90%) are from the Discoms of States like Karnataka, Telangana etc. In the present petition, it has been proposed that the Discoms will be able to participate in GDAC after submitting NOC/ Standing Clearance which would provide the source of RE i.e., solar or

non-solar. Beyond this, SLDC is required to ascertain the availability of RE generation and undertake the deviation settlement as per respective SERC Regulations and Orders. A similar approach is being followed for GTAM and no issues have arisen during the last 1 year. In view of the above, the Discom portfolio sale should not be restricted in the interest of the market. Rather if deemed necessary, endeavour may be made towards strengthening the accounting/ deviation settlement mechanism at the State level.

5) **Rectification with respect to the Sharing Regulations:** POSOCO has indicated that the references made to the Sharing Regulations 2010 in the petition be rectified as the Sharing Regulations 2020.

Response of the Petitioner: The Petitioner will rectify the same at the time of finalization of the proposed contract.

6) **Timelines for GDAC:** POSOCO has suggested that the timelines with respect to GDAC should be decided mutually between the Exchange and the NLDC.

Response of the Petitioner: The Petitioner agrees with the proposal of POSOCO.

7) **Rectification in Contract Specifications:** POSOCO has indicated inconsistency between paragraph 9.4 which provides for scheduling of less than



10 MW and the minimum trade volume as 0.1 MW specified in Contract Specifications.

Response of the Petitioner: Though there is no inconsistency as 0.1 MW is less than 10 MW, for the sake clarity, the same will be rectified.

8) **Clearing of GDAC & DAC in single iteration:** POSOCO has proposed that NLDC will clear both GDAC and DAC transactions in a single iteration. However, Power Exchange can run the market clearing engine separately for GDAC and subsequently for DAC.

Response of the Petitioner: The Petitioner agrees with the proposal of POSOCO.

9) **Procedure for integrated DAM:** POSOCO has requested for suitable directions for specifying the procedure for integrated DAM.

Response of the Petitioner: The Petitioner concurs with the POSOCO's suggestion that a procedure should be in place for operation of GDAC. The Petitioner suggested that the same may be incorporated by amending the existing Procedure for scheduling of collective transactions.

**Analysis and Decision**

12. The Petitioner has proposed to introduce the Green Day Ahead Contract (GDAC) in Day Ahead Market (DAM) on its platform for providing exclusive trading in renewable energy (RE). The Petitioner has proposed this contract based on the Ministry of Power (MoP) letter dated 24.03.2021 on "Development of Integrated Day Ahead Market (DAM) in Power Exchange with separate price formation for RE Power and Conventional Power –Reg.", which inter alia suggested a framework for integrating the trading of RE power with conventional power in day ahead market with separate price formation for RE and conventional power.

13. In accordance with the directions of the Commission, the Petitioner has conducted stakeholder consultation and submitted its point-wise reply to the comments/suggestions given by the stakeholders. The Petitioner has also submitted its response on POSOCO's suggestions. It is observed that majority of the stakeholders including POSOCO have welcomed the proposal for introduction of GDAC in the exchange platform though some of them have made specific suggestions regarding RPO fungibility, inclusion of hydro power, inter-se priority for clearing and curtailment between market products, issuance of RECs etc.

14. We have considered the submissions of the Petitioner, and the comments/suggestions given by different stakeholders along with the responses thereupon by the Petitioner. Prima facie, we are of the view that the introduction of GDAC in the power exchange will provide an additional avenue for short-term trading of RE. Sellers of RE





can use this for sale of renewable energy whereas the obligated entities can procure green power to meet their RPO requirement. Initially, there may be issues related to liquidity in the market. However, with the availability of the trading platform, it may attract participation from the buyers and the sellers.

15. Considering the above, we are of the view that the proposal of the Petitioner to introduce GDAC on its power exchange platform merits consideration. The Commission notes that the Petitioner has agreed to introduce GDAC within the existing regulatory framework without insisting on amendments to regulations. The different aspects of the proposed contract have been dealt with and the decisions of the Commission are given in the succeeding paragraphs keeping in view the submissions made by the Petitioner and comments/ suggestions given by the stakeholders.

#### **Bidding, Market clearing and Scheduling**

16. The Petitioner has proposed that there shall be a single window for bidding of the existing Day Ahead Contract (DAC) and Green Day Ahead Contract (GDAC) in Day Ahead Market (DAM) with the option to transfer unselected quantity in GDAC to DAC and to also price it differently for DAC. The Petitioner has also submitted that the Market Clearing and Price Discovery will take place in a sequential manner. In other words, first GDAC will be cleared followed by DAC and sequential requisition will be made to NLDC for allocation of transmission corridor for the two contracts. However, while dealing with stakeholders' suggestions, the Petitioner has concurred with the combined requisition to NLDC for allocation of transmission corridor for the two contracts.





17. We observe that the Petitioner has proposed to first clear GDAC and then clear DAC. This sequence has also been agreed by POSOCO and the stakeholders. Further, some of the stakeholders have suggested separate window for bidding GDAC and DAC or reopening of the window of bidding for DAC after clearing of GDAC. We agree with the submission of the Petitioner that in double-sided closed bid auction, the participants are supposed to place their best bids and offers and with the flexibility to specify different prices for DAC for the uncleared quantity of GDAC, there is no requirement to have separate window for the two contracts. Therefore, there shall be a single window for bidding as per the existing timeline of 10 am to 12 noon. Market Clearing shall take place in a sequential manner i.e., first GDAC will be cleared followed by DAC considering the uncleared bids of GDAC, if any. Further, as suggested by POSOCO, there shall be combined requisition for GDAC and DAC by the Power Exchanges to NLDC for allocation of transmission corridor. NLDC shall allocate transmission corridor based on the prevailing practice for collective transactions. The scheduling of the transactions of GDAC and DAC shall be done separately based on the procedure of collective transactions. NLDC/RLDC/SLDC shall ensure that GDAC and DAC transactions are reflected as separate schedules.

#### **Procedure for scheduling of collective transactions**

18. The Petitioner has submitted an indicative timeline for the activities related to GDAC and DAC within the Power Exchange and for communication between NLDC and



Power Exchange. POSOCO has submitted that the timelines may be mutually decided between the Power Exchanges and NLDC.

19. We observe that timelines for collective transactions have been specified in the procedure for scheduling of collective transactions. The timeline for auction window for GDAC and DAC is the same and also combined requisition is required to be made from Power Exchanges to NLDC. Subject to the above, POSOCO and the Petitioner may mutually formalise the communication protocol between them.

20. Further, it is observed that comments have been received suggesting relevant modifications in procedure and formats for GDAC with respect to Scheduling, Real Time Congestion Management etc. POSOCO has suggested that in case of real time transmission constraint, DAC transaction may be curtailed followed by GDAC and Integrated DAM may be curtailed followed by RTM. We note that the process of curtailment has been specified in the Indian Electricity Grid Code (IEGC). If the suggestion of POSOCO were to be accepted, this would involve amendment to IEGC, which cannot be done through the present petition. As such, in the event of real time transmission constraint, curtailment of transmission shall be done in accordance with the provisions of IEGC, as amended from time to time.

#### **RPO/HPO fulfillment through GDAC**

21. The Petitioner has submitted that for the purpose of RPO credit to buyer, detailed statement will be issued to buyers specifying the total quantity and proportion (solar/

non-solar/ hydro) in which RE has been purchased by the buyer in GDAC. We observed that the Petitioner has proposed to ascertain type of RE source at the time of registration and through NOC issued by SLDC/RLDC. Some of the stakeholders have raised the issue that due to proportionate method for claiming RPO, the buyers may end up buying power from an RE source for which it has no requirement and, therefore, buyers may be given flexibility to choose the type of RPO they wish to fulfill from the power procured from GDAC. In other words, RPO fungibility may be provided with respect to power procured through GDAC.

22. We are of the view that RPO fungibility is an issue that needs wider consultation and cannot be addressed through the present petition. We agree with the proposal of the Petitioner that the buyers may claim respective RPO based on the statement issued by the Power Exchanges, in pursuance of the source of generation as indicated in NOC/ Standing Clearance issued by SLDC/RLDC. Further, as stipulated in the MoP proposal, the buyers of RE market will get solar and non-solar RPO credit on the basis of the proportion of the solar and non-solar bids of the sellers cleared in the total volume.

### **Eligibility for Participation in GDAC**

23. The Petitioner has submitted that the Renewable Energy generators having NOC/ Standing Clearance issued by Load Despatch Center specifying maximum quantity and type of RE i.e., solar/ non-solar/ hydro shall be eligible to trade in 'Green Day Ahead Contract' and all the entities which are eligible to procure power through Open Access shall be eligible to participate in GDAC as buyers. Eligibility of RE sellers



shall be ascertained at the time of registration with the Exchange based on NOC/Standing clearance issued by RLDC/SLDC, as applicable.

24. We agree with the proposal of the Petitioner and direct RLDC/SLDC that while issuing NOC/Standing Clearance for collective transactions to RE generator, the type of RE i.e. solar/ non-solar/ hydro should be mentioned.

#### **Portfolio RE sale by Discom in GDAC**

25. POSOCO has suggested not to allow portfolio RE sale by Discom in GDAC as this may lead to mixing of green and conventional/ brown power. Per contra, the Petitioner submitted that the sellers participating in the GDAC will have to produce NOC from RLDC/SLDC indicating the source of generation which would establish that the power to be sold is RE and that it will go towards the fulfillment of RPO compliance of the buyer.

26. We observe that this issue has already been dealt by the Commission in order dated 17.05.2020 in Petition No. 25/MP/2019 while approving the proposal of the Petitioner to introduce GTAM. Relevant extract of the order is reproduced hereunder:

#### ***"Portfolio Sale by RE Rich State:***

*36. POSOCO has expressed concern that in case of portfolio sale by a RE-rich State, the power sold is from a mix of generators and it is not possible to identify and tag this power as green power. Hence, such sale of power cannot be used for fulfillment of RPO by the buyer. The Petitioner, in its reply, has submitted that the sellers participating in the G-TAM Contracts will have to produce NOC from RLDC/SLDC indicating the source of generation which would establish that the*

*power to be sold is truly RE and that it will go towards the fulfillment of RPO compliance of the buyer.*

*37. We observe that POSOCO in its reply has submitted that the details of source, quantum etc. are already being mentioned in the NOCs issued to RE generators by the SLDCs/RLDCs. Accordingly, any seller transacting through a portfolio shall ensure that the source of generation (solar or non-solar) is indicated in the NOC clearly for being able to participate in solar or non-Solar segment of GTAM."*

27. In line with the above-quoted order, any Discom transacting through a portfolio under GDAC shall ensure that the source of generation (solar or non-solar) is indicated in the NOC/ Standing Clearance.

#### **Issuance of RECs for RE power sold under DAC**

28. The Petitioner has submitted that the present REC framework needs to be amended to enable all RE generators i.e. those which are registered under REC mechanism as well as those which are not, to sell power under GDAC. However, the Petitioner has further submitted that it is not a pre-requisite for the launch of the proposed GDAC and stated that till the time such amendments are carried out, participation in GDAC shall be restricted to RE generators that are not registered under REC mechanism and sale of power by such RE Generator in DAC (unselected bids) would not be eligible for issuance of RECs. A similar approach is already being followed in the case of GTAM. POSOCO and some stakeholders have also raised the same issue.



29. In line with GTAM, participation in GDAC shall be restricted to only those RE generators that are not registered under REC mechanism and sale of power by such RE generator in DAC (unselected bids) would not be eligible for issuance of RECs.

#### **Waiver of ISTS Charges in GDAC**

30. POSOCO and other stakeholders have requested to amend the Sharing Regulations to provide for waiver of ISTS charges in GDAC in pursuance with the Ministry of Power order dated 21.06.2021. Further, it has been proposed that till such amendment takes place, ISTS charges shall be applicable in GDAC. We note the submission of the Petitioner that amendment to any of the regulations including the Sharing Regulations is not a pre-condition to the introduction of GDAC. As such, the waiver of ISTS charges and losses shall be governed as per the provision of the Sharing Regulations.

#### **Management of variations by RE Generators**

31. Some of the stakeholders have suggested that the RE sellers should be allowed to buy from RTM to manage variations. However, their purchase from RTM should not be used to meet RPO compliance of the Obligated Entities. The Petitioner has submitted that the energy procured from RTM being conventional in nature, should not be considered as green power and counted towards the RPO compliance of the Obligated Entities. However, the balancing of the deemed RPO compliance may be done as per the existing 'RE DSM pool-based mechanism' provided under the DSM





Regulations for Regional Entities and the F&S Regulations of the respective SERCs for intra-State entities. As per this mechanism, any shortfall in the RE generation on a pool basis will be balanced through purchase of equivalent RECs. Alternately, RE generators procuring power from RTM may be asked to buy equivalent number of RECs to balance the deemed RPO compliances. Some of the stakeholders have submitted that RE generators, in order to meet the shortfall, may buy from GTAM.

32. The Commission is of the view that the existing framework for collective transactions does not allow revision in schedule except in case of forced outages. Regulation 6(3) of the Power Market Regulations provides that the Commission may notify any other event in which a generator may buy from the market to fulfill its contractual obligations. Regulation 6(3) of CERC Power Market Regulations is extracted below:

*“(3) In the event of a forced outage of a generating station or unit thereof, **or any other event as may be notified by the Commission**, wherein the obligation of the generating station to supply electricity continues under an existing contract, such generating station may fulfil its obligation under the said contract by entering into a contract(s) covered under clause (1) or (2) or (3) of Regulation 5 of these regulations.”*

33. According to the above-mentioned regulation, separate notification may be issued by the Commission to deal with the situation wherein the obligation of the generating station to supply electricity continues under an existing contract. Accordingly, the proposal seeking flexibility to RE generators to buy from RTM to meet supply obligation under GDAC is beyond the scope of the present petition.





34. In the light of the analysis and decision on the various issues arising out of the proposal for introduction of GDAC Contracts at IEX in the Integrated Day Ahead Market (DAM), the Commission approves the proposal of the Petitioner to introduce GDAC in restricted manner subject to compliance of the directions given in this Order.

35. The Petitioner is further directed to incorporate appropriate provisions in its Bye laws, Rules and Business Rules with respect to introduction of GDAC and submit to the Commission for records within 2 (two) weeks from the date of this order.

36. Petition No. 146/MP/2021 is disposed of in terms of the above.

**Sd/-  
(P.K. Singh)  
Member**

**Sd/-  
(Arun Goyal)  
Member**

**Sd/-  
(I.S. Jha)  
Member**

**Sd/-  
(P. K. Pujari)  
Chairperson**





19/2/2019-BPD  
Ministry of New & Renewable Energy

Block No. 14, CGO Complex,  
Lodi Road, New Delhi- 110003  
Dated: 26 September 2019

**NOTIFICATION**

**Subject: Clarification regarding power generated from co-firing of biomass in thermal power plants as renewable energy**

In continuation to "Policy for Biomass utilisation for Power Generation through co-firing in Pulverised Coal fired Boilers" notified by the Ministry of Power on 17 November 2017 ([www.cea.nic.in/reports/others/thermal/tetd/policy\\_biomass\\_utilization.pdf](http://www.cea.nic.in/reports/others/thermal/tetd/policy_biomass_utilization.pdf)), and an advisory for utilizing biomass in coal based thermal power plants by the Central Electricity Authority (CEA) on 24 November 2017 ([www.cea.nic.in/reports/others/thermal/tetd/Biomass%20Utilization%20Advisory.pdf](http://www.cea.nic.in/reports/others/thermal/tetd/Biomass%20Utilization%20Advisory.pdf)), it is clarified that power generated from co-firing of biomass in the thermal power plants is renewable energy and is eligible for meeting non-solar Renewable Purchase Obligation (RPO).

2. The Central Electricity Regulatory Commission (CERC) has been requested to formulate and notify a procedure/methodology for quantifying the energy produced from biomass in biomass co-fired thermal power plants in a reliable and accurate manner. It has further been suggested that the procedure/methodology so determined may have built-in transparency and accountability, including putting an obligation on thermal power generators to publish the quantum of biomass used and energy generated from biomass co-firing in the public domain. Further, procedure/methodology notified by CERC would form the basis for respective State Electricity Regulatory Commissions (SERCs) and other relevant agencies for computing the energy produced from biomass in biomass co-fired thermal power plants, and also for determination of tariff, wherever applicable.

*Dipesh Pherwani*  
(Dipesh Pherwani)  
Scientist-B

To

1. Secretary, Ministry of Power.
2. Chairperson, CERC / all SERCs
3. Chairperson, Central Electricity Authority

Copy to Director (NIC), MNRE for uploading the notification on the Ministry's website





**Annexure P-17****CENTRAL ELECTRICITY REGULATORY COMMISSION  
( NEW DELHI )****Suo Motu Petition No. 12/SM/2019**

Coram:  
Shri P.K.Pujari, Chairperson  
Shri I.S.Jha, Member

Date of Hearing : 17.12.2019

Date of Order : 18.02.2020

**ORDER****In the matter of****Methodology for Estimation of Electricity Generated from Biomass in Biomass Co-fired Thermal Power Plants.**

The Central Electricity Regulatory Commission (hereinafter referred to as 'the Commission') has recognized the use of biomass in biomass co-fired coal based thermal power plants under sub-clause (k) of clause (2) of the Regulation 19 and clause (4) of Regulation 43 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019 (hereinafter referred to as the 2019 Tariff Regulations). These Regulations notified on 7<sup>th</sup> March, 2019, introduced the regulatory framework for allowing use of biomass in coal based thermal power plants.

2. The Commission initiated the process of specifying methodology for estimation of electricity generated from biomass in biomass co-fired coal based thermal power plants and accordingly, proposed a draft methodology in this regard. While proposing this methodology, the Commission had considered the following references.



- a) Reference of Ministry of Power, Government of India, No. 11/86/2017-  
Th11 dated 17<sup>th</sup> Nov'2017 with regard to the "Policy for Biomass Utilization  
for Power Generation through Co-firing in Pulverized Coal Fired Boilers".
- b) Advisory dated 24.11.2017 of Central Electricity Authority (CEA) to  
thermal power plants for utilizing biomass in coal based thermal power  
plants.
- c) Clarification of Ministry of New and Renewable Energy ("the MNRE"),  
Government of India issued vide reference dated 26.9.2019 stating that  
the power generated from co-firing of biomass in coal based thermal  
power plants is renewable energy and is eligible for meeting non-solar  
Renewable Purchase Obligation (RPO).

3. Salient aspects of the proposed methodology were as under.

- a) Proposed methodology can be applied to biomass co-fired coal based  
thermal plants whose tariff is determined by "Appropriate Commission"  
under Section 62 as well as thermal plants whose tariff is adopted by the  
"Appropriate Commission" under section 63 of the Electricity Act, 2003;
- b) Energy generated from biomass can be worked out based on the actual  
consumption of biomass and coal rather than on normative operational  
parameters of Station Heat Rate and Auxiliary Power Consumption;
- c) Principle of proportion can be the basis to work out the energy generated  
from biomass. The energy output is estimated in proportion to the heat  
input from biomass out of total heat input from biomass and coal;





- d) Heat input can be worked out based on consumption and quality (GCV) of the coal and biomass;
- e) Consumption of coal and biomass can be worked out based on opening balance, receipt and closing balance of coal and biomass.

4. The proposed methodology was put in public domain and comments/suggestions of various stakeholders were invited vide order dated 26.11.2019 in this Suo Motu petition. Subsequently, public hearing on the draft methodology was held on 17.12.2019 for soliciting views of stakeholders.

#### **Submission of the Stakeholders during Public Hearing**

5. The Captive Power Producers Association has requested that the proposed methodology should also be made applicable to captive power plants. They have further submitted that for co-generation power plant, there is a need for a methodology factoring in use of steam for purposes other than generation of electricity. The Association has submitted two alternative methods for consideration of the Commission.

6. Representative of NTPC Ltd submitted that in the proposed methodology, electricity generated from biomass has been proposed to be estimated based on electricity generated at the Generator Terminal (GT). The energy meter installed at Generator Terminal is normally not used for billing purpose and hence, estimates based on Generator Terminal may not be acceptable to distribution licensees.

7. The comments/suggestions/objections of the stakeholders on the proposed methodology have been examined by the Commission.



### Applicability of the Methodology

8. As per Para 7 of the order dated 26.11.2019 in this Suo-Moto Petition, the applicability of the methodology was proposed as under:

“7. The suggested methodology to estimate the energy generated from co-firing of biomass has been framed on the actual consumption of biomass and coal rather than on normative operational parameters of Station Heat Rate and Auxiliary Power Consumption. Such a methodology, which does not use normative operational parameters, can be applied both to thermal plants whose tariff is determined by “Appropriate Commission” under Section 62 as well as thermal plants whose tariff is adopted by the “Appropriate Commission” under section 63 of the Electricity Act, 2003.”

9. The Commission had proposed to restrict the application of the methodology only to thermal plants under section 62 or section 63 of the Electricity Act, 2003 since the Commission regulates tariff of centrally owned generating stations and the generating stations having composite scheme for sale or purchase of electricity in more than one state under Section 79(1)(a) and 79(1)(b) of the Act. The methodology was not proposed to cover captive or cogeneration plants. The Captive Power Producers Association has submitted that since captive power plants and co-generation power plants are also eligible under MNRE letter dated 26.9.2019 for the purpose of renewable purchase obligation, the methodology should cover captive power plants and co-generation power plants.

10. We have perused the references of MNRE dated 26.9.2019. The MNRE has clarified that the power generated from co-firing of biomass in coal based thermal power plants is renewable energy and is eligible for meeting non-solar Renewable Purchase Obligations (RPOs).





11. We observe that biomass can also be used in thermal captive power plants similar to thermal generation station. We, therefore, are of the view that the methodology shall also be applicable to the captive power plant using co-firing of biomass. The methodology specified in this order will therefore, be applicable to the captive power plant also that co-fires biomass.

12. While in case of captive power plant, the entire heat generated from coal and biomass is used to generate power, in case of co-generation plant, only part of the heat is used to generate power. But, the underlying principle remains applicable i.e. the proportion of heat input from biomass to total heat input for power generation. Accordingly, the methodology specified in this order shall also be applicable for co-generation power plant.

#### **Gross Calorific Value (GCV) measurement & Fuel Stock**

13. The Captive Power Producers Association has submitted that GCV measurement point and methodology may be indicated so as to avoid any disputes on measurement of values. In this regard, it is observed that the GCV measurement point is already specified under the 2019 Tariff Regulations. The relevant extract is reproduced below, which shall be adopted by the captive power plants and co-generation power plants.

“(31) ‘GCV as Received’ means the GCV of coal as measured at the unloading point of the thermal generating station through collection, preparation and testing of samples from the loaded wagons, trucks, ropeways, Merry-Go-Round (MGR), belt conveyors and ships in accordance with the IS 436 (Part-1/ Section 1)- 1964:

Provided that the measurement of coal shall be carried out through sampling by third party to be appointed by the generating companies in accordance with the guidelines, if any, issued by Central Government:







Provided further that samples of coal shall be collected either manually or through hydraulic augur or through any other method considered suitable keeping in view the safety of personnel and equipment:

Provided also that the generating companies may adopt any advance technology for collection, preparation and testing of samples for measurement of GCV in a fair and transparent manner”.

14. The format specified by the Commission in the 2019 Tariff Regulations captures the requirement of data applicable to the thermal power plants. For captive power plants and co-generation power plants, appropriate format may be developed by the respective State Electricity Regulatory Commission or certifying agency of the State.

#### **Special Energy Meter**

15. NTPC Ltd has submitted that measurement at the Special Energy Meter (SEM) installed by them at Generator Terminal (GT) may not be acceptable to the system operator and distribution licensees. In this regard, it is observed that the Auxiliary Energy Consumption (AEC) is worked out on the basis of SEM on Generator Terminal and these are similar to SEMs installed by CTU. Therefore, we do not foresee any difficulty in using SEMs installed on Generator Terminal by the generators. However, the Regional Power Committee, in constitution with respective Regional Load Dispatch Centre or State Load Dispatch Centre as the case may be, shall ensure that the SEMs installed by the generator should be got calibrated from time to time for energy accounting. The Captive Power Plant and Co-generation Power Plant shall ensure appropriate metering arrangement at generator terminal.







16. The methodology for estimating the energy generated from bio-mass in biomass co-fired coal based thermal power plants, including captive power plants and co-generation plants has been specified in Annexure I and is a part of this order.

**Sd/-**  
**(I. S. Jha)**  
**Member**

**Sd/-**  
**(P. K. Pujari)**  
**Chairperson**







**Methodology for estimation of electricity generated from biomass in biomass co-fired coal based thermal power plants, including captive and co-generation power plants co-firing bio-mass.**

The methodology specified hereunder is to be followed by ISGS, RPCs for estimating electricity generated from biomass in biomass co-firing coal based thermal power plants, including captive and co-generation power plants co-firing bio-mass.

**Step-1:**

2. The electricity generated from biomass shall be estimated at Generator Terminal on monthly basis in accordance with the following formulae:

$$Eb(G) = [(Qb \times Gb) / ((Qc \times Gc) + (Qb \times Gb))] \times E(GT)$$

Where,

$Eb(G)$  = Electrical energy generated by bio-mass at Generator terminal during the month (kWh);

$Qb$  = Quantity of bio-mass consumed during the month (kg)

$Gb$  = Weighted average Gross Calorific Value (GCV) of bio-mass consumed during month (kCal/kg)

$E(GT)$  = Gross electrical energy generated at Generator Terminal during the month (kWh)

$Qc$  = Quantity of coal burnt during the month (kg)

$Gc$  = Weighted average GCV of coal burnt during the month (kCal/kg)

3. The product  $(Qb \times Gb)$  represents heat (in Kcal) input through bio-mass during the month and shall be estimated on monthly basis by applying following formulae:



$$\begin{aligned}
 Q_b \times G_b \text{ (kCal)} &= \{ \text{opening balance of bio-mass (kg)} \times \text{weighted average GCV of opening balance of bio-mass (kCal/kg)} \} \\
 &+ \{ \text{quantity of bio-mass received during the month (kg)} \times \text{weighted average GCV of bio-mass received during the month (kcal/kg)} \} \\
 &- \{ \text{closing stock of bio-mass (kg)} \times \text{weighted average GCV of the closing balance of bio-mass (kCal/kg)} \}
 \end{aligned}$$

4. The product ( $Q_c \times G_c$ ) represents heat (in Kcal) input through coal during the month (kcal) and shall be estimated on monthly basis by applying the following formulae:

$$\begin{aligned}
 Q_c \times G_c \text{ (kCal)} &= \{ \text{opening balance of coal (kg)} \times \text{weighed average GCV of opening balance of coal (kCal/kg)} \} \\
 &+ \{ \text{quantity of coal received during the month (kg)} \times \text{weighted average GCV of coal received during the month (kCal/kg)} \} \\
 &- \{ \text{closing stock of coal (kg)} \times \text{weighted average GCV of the closing balance of coal (kCal/kg)} \}
 \end{aligned}$$

**Step-2:**

5. The ex-bus electrical energy generated by using bio-mass shall be estimated on monthly basis by applying following formulae:

$$E_b \text{ (ex-bus)} = E_b(G) \{ 1 - [(E(GT) - ESO) / E(GT)] \}$$

Where,

$E_b \text{ (ex-bus)}$  = Electrical energy generated by bio-mass ex-bus during the month (kWh);

$E_b(G)$  = Electrical energy generated by bio-mass at Generator terminal during the month arrived at Step-1(kWh)





E(GT) = Total electrical energy generated at generator terminal  
during the month (kWh) ;

ESO = Total Energy Sent Out (ex-bus) during the month (kWh);

6. The generating company shall provide information to the beneficiaries and publish them in the following manner:

- a) The generating company shall maintain separate fuel accounts for coal and bio-mass, with opening balance, fuel received during the month and closing balance in kg. The generating company shall also maintain separate GCV (in kCal/kg) accounts for coal and bio-mass, with weighted average GCV of the opening balance, weighted average GCV of the fuel received during the month and weighted average GCV of the closing balance at the end of the month;
- b) These monthly accounts of fuel and GCV, duly signed by the authorised official of the generating company shall be published on its website along with the bills towards purchase of coal and bio-mass.
- c) These monthly fuel and GCV accounts shall be made available to authorized representative/s of beneficiaries and RLDC/SLDC on demand. Any authorised representative of beneficiaries shall be allowed to witness the GCV testing of bio-mass.
- d) Generating company shall keep beneficiaries informed about the co-firing of bio-mass with coal. Authorised representatives of the beneficiaries shall be allowed inspection during the period when bio-mass is being co-fired.



- e) The generating company shall publish the quantum of bio-mass fired and the energy generated from bio-mass based on the formulae specified above on its website.









## Annexure P-18

Date: 2<sup>nd</sup> February 2021

To

The Director,  
Gujarat Energy Development Agency  
4th floor, Block No. 11 & 12  
Udyog Bhavan, Sector -11,  
Gandhinagar-382 017

Kind Attention : Shri Bijal Shah, IAS

**Sub: Proposed Methodology for Estimation of Electricity Generated from Biomass in Biomass Co-fired Thermal Power Plants.**

Dear Sir,

Reliance Industries Limited (RIL) is having its refinery and petrochemical units situated in Gujarat. For its petrochemical plants located in Dahej Manufacturing Division (DMD) and Hazira Manufacturing Division (HMD), RIL is having coal based Captive power Plants.

In order to promote co-firing of biomass in thermal power plants, Ministry of New and Renewable Energy (MNRE), Government of India, vide its notification dated 26.9.2019 has clarified that the power generated from co-firing of biomass in thermal power plants is renewable energy and is eligible for meeting non-solar Renewable Purchase Obligation (RPO) and has requested Hon'ble Central Electricity Regulatory Commission (CERC) to formulate and notify the procedure for methodology for quantifying the energy produced from biomass in biomass co-fired thermal power plants in a reliable and accurate manner. Accordingly, CERC has notified the methodology for estimation of electricity generated from Biomass in Biomass co-fired thermal power plants on 18.02.2020, copy of which is attached herewith.

Based on above, we are planning to use biomass co-firing at our DMD and HMD CPP. We propose to meet our non-solar RPO from consumption of biomass in biomass co-firing based on the methodology as approved by CERC. Please find attached herewith the documents and sample working along with the data, which

"VRAJ", Near Suvidha Shopping Center, Paldi, Ahmedabad - 380 007. Phone : +91-79-66779100, Fax : +91-79-40094910

Registered Office : 3rd Floor, Maker Chambers - IV, 222 Nariman Point, Mumbai - 400 021. India  
CIN: L17110MH1973PLC019786 • Website: www.ril.com







will be used to arrive at power generated by use of biomass.

Request you to approve the proposal so as to enable us to start the use of biomass at our CPPs at DMD and HMD.

We shall provide any further details / clarifications required, if any.

Thanking you,

Your Sincerely,  
For Reliance Industries Ltd.

A handwritten signature in black ink, appearing to be 'DB Shah', written over a circular stamp.

DB Shah  
Sr Vice President

Cfwc: The Chairman, GEDA, Sh I M Bhavsar,..... for information please

Encls.:

1. MNRE Notification Dated 26<sup>th</sup> September 2019
2. CERC Order Dated 18.02.2020.
3. A brief note on our plant.
4. CCPP SHP steam distribution PFD.
5. Proposed Format for submission of RPO compliance.





# **भारत का राजपत्र** **The Gazette of India**



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Annexure P-19

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EXTRAORDINARY  
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विद्युत मंत्रालय

संकल्प

नई दिल्ली, 28 जनवरी, 2016

टैरिफ नीति

सं. 23/2/2005-आर एंड आर (खंड-IX).-1.0 प्रस्तावना

1.1 विद्युत अधिनियम, 2003 की धारा 3 का अनुपालन करते हुए, केंद्र सरकार ने दिनांक 6 जनवरी, 2006 को टैरिफ नीति अधिसूचित की। टैरिफ नीति में और संशोधन 31 मार्च, 2008, 20 जनवरी, 2011 और 08 जुलाई, 2011 को अधिसूचित किए गए थे। विद्युत अधिनियम, 2003 की धारा 3(3) के अंतर्गत प्रदत्त शक्तियों का प्रयोग करते हुए केंद्र सरकार एतद्वारा भारत के राजपत्र में इस संकल्प के प्रकाशन की तारीख से प्रभावी किए जाने हेतु संशोधित टैरिफ नीति अधिसूचित करती है।

06 जनवरी, 2006 को अधिसूचित टैरिफ नीति के प्रावधानों के अंतर्गत तथा इसमें किए गए संशोधनों के अंतर्गत किसी भी किए गए कार्य अथवा की गई कार्रवाई अथवा तथाकथित किए गए अथवा किए जाने वाले कार्य के होते हुए भी, जहां तक कि इस नीति से असंगत नहीं है, उन्हें इस संशोधित नीति के प्रावधानों के अंतर्गत किया गया अथवा किया जाने वाला माना जाएगा।

1.2 राष्ट्रीय विद्युत नीति में नयी उत्पादन क्षमता की अभिवृद्धि एवं प्रतिवर्ष विद्युत की प्रतिव्यक्ति उपलब्धता बढ़ाने का लक्ष्य निश्चित किया है एवं न केवल ऊर्जा और व्यस्ततामकालीन कमी को दूर करने के लिए, बल्कि केंद्रीय विद्युत प्राधिकरण द्वारा निर्दिष्ट स्थिति में निरंतर रखे जाने भी है। विद्युत क्षेत्र को आगामी पांच वर्षों में सभी घरों को सस्ती बिजली की उपलब्धता को सुगम बनाने हेतु चुनौती को भी पूरा करना है।

1.3 केंद्र और राज्य सरकार, बजटीय संसाधनों से अपेक्षित धनराशि जुट्टिया कराने में असमर्थ हैं अतः विद्युत क्षेत्र में निवेश को आकर्षित करने के लिए निवेश पर उपयुक्त फिटनें जुट्टिया कराना अनिवार्य है। देश के आर्थिक विकास में तेजी लाने और लोगों के जीवन स्तर में सुधार लाने का लक्ष्य प्राप्त करने हेतु

(1)

440 GI/2016



उपभोक्ताओं की विभिन्न श्रेणियों को उचित दर पर बिजली की उपलब्धता को सुनिश्चित कराना भी समान रूप से आवश्यक है।

- 1.4 क्षेत्र में पर्याप्त निवेशों को आकर्षित करने की जरूरत तथा उपभोक्ताओं हेतु औचित्यपूर्ण उपयोगकर्त्ता शुल्क (यूजर चार्ज) के बीच संतुलन को सुनिश्चित करना विनियामक प्रक्रिया के लिए गंभीर चुनौती है। विद्युत क्षेत्र का त्वरित विकास और आवश्यक निवेशों को आकर्षित करने की इसकी क्षमता के साथ-साथ पूरे देश में नियामक दृष्टिकोण का विस्तार करना अपेक्षित है। राज्यों की अधिक संख्या और विविधताओं पर विचार करते हुए दृष्टिकोण में निरंतरता अत्यंत आवश्यक है।

## 2.0 विधायी स्थिति

- 2.1 विद्युत अधिनियम, 2003 की धारा 3(1) के जरिए केन्द्र सरकार को टैरिफ नीति निरूपण का अधिकार दिया गया है। अधिनियम की धारा 3 (3) के जरिए केन्द्र सरकार को समय-समय पर टैरिफ नीति की समीक्षा अथवा संशोधित करने का अधिकार दिया गया है।
- 2.2 केंद्रीय विद्युत विनियामक आयोग (सीईआरसी) और राज्य विद्युत विनियामक आयोग (एसईआरसी) विनियम निरूपण के साथ-साथ अपने कार्य निष्पादन में टैरिफ नीति से निर्देशित होंगे।
- 2.3 विनियामक आयोग, उत्पादन कंपनियों और पारेषण लाइसेंस धारकों के लिए टैरिफ के निर्धारण हेतु केन्द्रीय आयोग द्वारा विनिर्दिष्ट सिद्धांतों और कार्य प्रणालियों से निर्देशित होंगे।
- 2.4 केन्द्र सरकार द्वारा अधिनियम के प्रावधान के अंतर्गत विनियामक मंच का गठन किया गया है, जो अन्य बातों के साथ-साथ विशेषकर वितरण के क्षेत्र में नीतिगत निरंतरता बनाए रखने में सहयोग करेगा।

## 3.0 नीति का विकास

टैरिफ नीति को राज्य सरकारों, केन्द्रीय विद्युत प्राधिकरण (सीईए), केन्द्रीय विद्युत विनियामक आयोग और विभिन्न पणधारियों (स्टेक होल्डरों) के साथ परामर्श करके तैयार किया गया है।

## 4.0 नीति के उद्देश्य

टैरिफ नीति के उद्देश्य निम्नानुसार हैं :

- (क) उपभोक्ताओं को उचित एवं प्रतिस्पर्द्धी दरों पर विद्युत की उपलब्धता सुनिश्चित करना;
- (ख) क्षेत्र की वित्तीय व्यवहार्यता सुनिश्चित करना और निवेश को आकर्षित करना;
- (ग) विनियामक क्षेत्राधिकार में पारदर्शिता, निरंतरता और पूर्वानुमेयता को बढ़ावा देना और विनियामक जोखिमों को कम करना;
- (घ) प्रचालन में प्रतिस्पर्द्धा, दक्षता का संवर्द्धन करना और आपूर्ति की गुणवत्ता में सुधार करना;
- (ङ) नवीकरणीय स्रोतों से विद्युत उत्पादन को प्रोत्साहित करना;
- (च) पर्याप्त व्यस्ततमकालीन रिजर्व, विश्वसनीय ग्रिड प्रचालन तथा विभिन्न नवीकरणीय ऊर्जा स्रोतों को एकीकरण प्रदान करने के लिए पम्पड स्टोरेज परियोजनाओं (पीएसपी) सहित जल विद्युत उत्पादन को बढ़ाना;
- (छ) बेहतर उपभोक्ता सेवाओं के लिए एक गतिशील और सुदृढ़ विद्युत अवसंरचना विकसित करना;
- (ज) उपभोक्ताओं की सभी श्रेणियों को पर्याप्त और निर्बाध विद्युत की आपूर्ति सुविधाजनक बनाना;
- (झ) उपभोक्ताओं को विद्युत आपूर्ति की विश्वसनीयता के लिए अग्रिम रूप से उत्पादन, पारेषण और वितरण में संचय सहित पर्याप्त क्षमता निर्माण सुनिश्चित करना।



## 5.0 टैरिफ के प्रति सामान्य दृष्टिकोण

5.1 विद्युत उद्योग के विभिन्न खंडों में प्रतिस्पर्धा का समावेश करना, विद्युत अधिनियम, 2003 की मुख्य विशेषताओं में से एक है। प्रतिस्पर्धा से पूंजी लागत में कमी तथा प्रचालन में दक्षता के जरिए उपभोक्ताओं को पर्याप्त लाभ होगा। इससे प्रतिस्पर्धात्मक रूप से मूल्य निर्धारण की सुविधा उपलब्ध होगी। केन्द्र सरकार ने वितरण लाइसेंसधारकों द्वारा विद्युत उपलब्ध कराने हेतु बोली प्रक्रिया पर आधारित टैरिफ के विस्तृत निर्देश पहले ही जारी कर दिए हैं।

5.2 वितरण लाइसेंस धारकों द्वारा विद्युत की सभी भावी आवश्यकताओं को प्रतिस्पर्धात्मक रूप से प्राप्त किया जाता रहेगा सिवाय मौजूदा परियोजनाओं का विस्तार करने के मामले में, अथवा जहां पर चिन्हित किए गए विकासकर्ता के रूप में राज्य सरकार द्वारा नियंत्रणाधीन अथवा स्वामित्व वाली कंपनी हो और जहां पर विनियामकों को मानकों पर आधारित टैरिफ निर्धारण का सहारा लेना पड़ता हो बशर्ते कि इस प्रयोजनार्थ निजी विकासकर्ताओं द्वारा विद्युत उत्पादन क्षमता का विस्तार किया जाना एकबारगी अभिवृद्धि तक सीमित होगी जो कि विद्यमान क्षमता के 100% से अधिक नहीं होगी।

बशर्ते कि उपयुक्त आयोग, जैसा कि विद्युत अधिनियम, 2003 में परिभाषित है कि ऐसी विस्तार परियोजनाओं के मामले में, मौजूदा परियोजना की अवसंरचना और नई प्रौद्योगिकी की दक्षता साझा करने का लाभ टैरिफ के माध्यम से उपभोक्ताओं तक पहुँचाने को सुनिश्चित करेगा।

बशर्ते कि इसके अतिरिक्त राज्य सरकार राज्य में निवेश को बढ़ावा देने के लिए नीति अधिसूचित कर सकती है जिसके अंतर्गत उत्पादन संयंत्रों की स्थापना की अनुमति देते हुए जिसमें नवीकरणीय ऊर्जा स्रोत शामिल हैं, से उस राज्य के वितरण लाइसेंसियों द्वारा अधिकतम 35% संस्थापित क्षमता का प्रापण किया जा सकता है और जिसके लिए विद्युत अधिनियम, 2003 की धारा 62 के अंतर्गत टैरिफ निर्धारित किया जा सकता है।

बशर्ते कि नीति के पैरा 5.11 (ज) में शामिल किसी भी प्रावधान के होते हुए भी, ऐसी 35% संस्थापित क्षमता के टैरिफ को एसईआरसी द्वारा निर्धारित किया जाएगा।

तथापि, राष्ट्रीय विद्युत नीति के पैरा 5.7.1 के अंतर्गत अनुमत दीर्घकालिक पीपीए से अलग 15% विद्युत, राज्य के वितरण लाइसेंसी द्वारा प्रापण की जाने वाली 35% विद्युत में शामिल नहीं की जाएगी।

5.3 केंद्र सरकार द्वारा नियंत्रणाधीन अथवा इसके स्वामित्व वाली सभी नई विद्युत उत्पादन एवं पारेषण परियोजनाओं के टैरिफ का निर्धारण 6 जनवरी, 2006 को अधिसूचित टैरिफ नीति के अनुसार प्रतिस्पर्धात्मक बोली के आधार पर किया जाता रहेगा, जब तक कि अन्यथा केंद्र सरकार द्वारा मामला-दर-मामला आधार पर विनिर्दिष्ट न किए जाए।

इसके अतिरिक्त, अंतरा-राज्य पारेषण परियोजनाएं एक थ्रेशहोल्ड सीमा, जिसका निर्धारण एसईआरसी द्वारा किया जाएगा, से ज्यादा लागत वाली परियोजनाएं राज्य सरकार द्वारा प्रतिस्पर्धात्मक बोली प्रक्रिया के माध्यम से विकसित की जाएंगी।

5.4 केंद्रीय विद्युत विनियामक आयोग, केंद्रीय विद्युत प्राधिकरण तथा अन्य पणधारकों से परामर्श करके, छः माह के अंदर, कोल वाशरी रिजेक्ट्स का प्रयोग कर रही परियोजनाओं से विद्युत उत्पादन के टैरिफ के निर्धारण हेतु विनियमों को तैयार करेगा। इन विनियमों का राज्य विद्युत विनियामक आयोगों द्वारा भी पालन किया जाएगा।

बशर्ते, केंद्रीय/राज्य पीएसयू, सरकारी कंपनी और सरकारी कंपनी से भिन्न कंपनी, जिसमें सरकारी कंपनी से भिन्न कंपनी की प्रत्यक्ष रूप से अथवा इसकी किसी भी सहायक कंपनी या संबद्ध कंपनी के माध्यम से शेयरधारिता प्रदत्त शेयर पूंजी के 26% से ज्यादा नहीं होगी, वाले संयुक्त उपक्रम द्वारा कोल वाशरी





रिजेक्ट्स आधारित परियोजनाओं से विद्युत का प्रापण अधिनियम की धारा 62 के अंतर्गत किया जा सकता है।

- 5.5 पम्पड स्टोरेज प्लांट (पीएसपी) सहित जल विद्युत परियोजना के विकासकर्ता को दीर्घकालीन विद्युत क्रय करारों (पीपीए) के माध्यम से बेची जाने वाली विद्युत के लिए सेवा विनियमों की कार्यनिष्पादन आधारित लागत के आधार पर उपयुक्त आयोग द्वारा टैरिफ निर्धारित कराने का विकल्प होगा, यदि निम्नलिखित शर्तों को पूरा कर लिया जाता है:

(क) उपयुक्त आयोग संतुष्ट है कि एक पारदर्शी द्विस्तरीय प्रक्रिया अपनाने के पश्चात संबंधित राज्य सरकार द्वारा परियोजना स्थल का आबंटन किया गया है। प्रथम चरण वित्तीय क्षमता, समान आकार की अवसरचनात्मक परियोजनाओं को विकसित करने का विगत अनुभव, परियोजनाओं को समय पर तथा अनुमानित लागत, में तैयार करने का विगत ट्रैक रिकार्ड, टर्न-ओवर तथा कार्यनिष्पादन गारंटी को पूरा करने की योग्यता इत्यादि के मानकों के आधार पर पूर्व-अर्हता के लिए होना चाहिए। दूसरे चरण में, केवल एक सकल मात्रानिर्धारक पैरामीटर जैसा कि केंद्र सरकार द्वारा यथा अधिसूचित निःशुल्क विद्युत की प्रतिशतता से अधिक निःशुल्क विद्युत, राज्य सरकार को प्रदान की गई इक्विटी भागीदारी अथवा केंद्र सरकार द्वारा समय-समय पर अधिसूचित किए जाने वाले अन्य पैरामीटर के आधार पर बोलियां आमंत्रित की जाए।

(ख) के.वि.प्रा. की स्वीकृति (यदि अधिनियम की धारा 8 के तहत अपेक्षित हो) वित्तीय समापन, कार्य सौंपने और वितरण लाइसेंसधारियों के साथ नीचे (ग) में निर्धारित क्षमता को दीर्घकालीन पीपीए (35 वर्षों अथवा इससे अधिक अवधि के) करने के कार्य 15.08.2022 तक पूरे कर लिए जाएं।

(ग) कुल विक्रय योग्य डिजाइन ऊर्जा का 60% या इससे ज्यादा, दीर्घावधि पीपीए के लिए निश्चित है और शेष मर्चेट विक्रय हेतु अनुमत है।

बशर्ते कि, वितरण लाइसेंसी उपयुक्त आयोग के अनुमोदन से अध्यधीन मौजूदा निबंधन एवं शर्तों पर दीर्घकालीन पीपीए की अवधि 35 वर्षों से अगले 15 वर्षों के लिए बढ़ा सकता है।

बशर्ते कि इस खंड में निहित प्रावधान पम्पड स्टोरेज प्लांट (पीएसपी) के लिए लागू नहीं होंगे।

(घ) परियोजना की सभी यूनिटों को शुरू करने के लिए समयावधि उपयुक्त आयोग द्वारा आरंभिक सूची के अनुमोदन की तारीख से 4 वर्ष निर्धारित होगी। तथापि उपयुक्त आयोग कारणों का लिखित में अभिलेखन करने के पश्चात् 100 मेगावाट क्षमता से अधिक की (जलाशय तथा रन-ऑफ-रिवर परियोजनाओं) जल विद्युत परियोजनाओं के लिए लंबी समयावधि निर्धारित कर सकेगा। चालू करने के निर्धारित समय की प्राप्ति हेतु दंड सहित सहमत समय सीमाओं का निर्धारण केंद्रीय विद्युत प्राधिकरण के परामर्श से उपयुक्त आयोग द्वारा निश्चित किया जाएगा। उपयुक्त आयोग, निर्माण के दौरान ब्याज (आईडीसी) तथा वित्त पोषण लागत (एफसी) को सीईए के अनुमोदन से, विलंब की अवधि, जो कि विकासकर्ता के कारण नहीं हुआ, तक ही पास-थ्रू कर सकेगा।

(ङ) उपकरण की आपूर्ति एवं परियोजना के निर्माण के लिए ठेका सौंपने का कार्य या तो टर्नकी के माध्यम से अथवा सुपरिभाषित पैकेजों के माध्यम से अंतर्राष्ट्रीय प्रतिस्पर्द्धी बोली के आधार पर किया जाता है।

- 5.6 ऊपर पैरा 5.5 में किसी भी बात के होते हुए भी 100 मेगावाट से ज्यादा की डिजाइन क्षमता वाली जल विद्युत परियोजनाओं, जिनके लिए स्थल को या तो पारदर्शी प्रक्रिया का पालन करते हुए तथा मानदंड के पूर्व-निर्धारित समुच्चय के आधार पर पहले अवाई किया जा चुका है, के विकासकर्ता के पास, अधिनियम की धारा 62 के अंतर्गत, लागत आधिक्य के आधार पर दीर्घकालीन पीपीए के माध्यम से बेची जाने वाली विद्युत के लिए उपयुक्त आयोग द्वारा टैरिफ निर्धारित करवाए जाने का विकल्प होगा।



- 5.7 पैरा 5.5 एवं 5.6 के अंदर शामिल परियोजनाओं के मामलों में उपयुक्त आयोग निम्नलिखित को सुनिश्चित करते हुए टैरिफ निर्धारित करेगा-
- (i) परियोजना स्थल आबंटित करने (अधिसूचित निःशुल्क विद्युत के अलावा) के लिए परियोजना विकासकर्ता द्वारा वहन किए गए अथवा वहन किए जाने के लिए प्रतिबद्ध कोई व्यय न तो परियोजना लागत में शामिल किया जाएगा और न ही इस प्रकार का कोई व्यय टैरिफ में शामिल किया जाएगा।
  - (ii) परियोजना लागत में परियोजना की अनुमोदित आर एंड आर योजना की लागत शामिल होगी जो निम्नलिखित के अनुसार होगी:
    - (क) वर्तमान में मान्य राष्ट्रीय पुनर्वास एवं पुनर्स्थापन नीति;
    - (ख) आर एंड आर पैकेज जैसा कि परिशिष्ट के रूप में संलग्न है।
  - (iii) वार्षिक निर्धारित प्रभार कुल विक्रय योग्य, डिजाइन ऊर्जा के संबंध में दीर्घावधि पीपीए के आधार पर टाई-अप की गई विक्रय योग्य डिजाइन ऊर्जा के लिए आनुपातिक रूप से ली जाएगी जिसे कुल विक्रय योग्य डिजाइन ऊर्जा के निम्नलिखित को घटाकर प्राप्त किया जाएगा।
    - (क) मेजबान राज्य तथा राइपेरियन राज्य के लिए समय-समय पर केंद्र सरकार द्वारा अधिसूचित अनुसार निःशुल्क विद्युत तथा राज्य सरकार द्वारा गठित स्थानीय क्षेत्र विकास निधि के लिए अंशदान हेतु प्रतिशतता। इस निःशुल्क विद्युत को राज्य सरकार के निर्णय के अनुसार वितरित किया जाए।
    - (ख) आरंभन की तारीख से 10 वर्ष की अवधि के लिए नामोदिष्ट पुनर्स्थापन क्षेत्र/परियोजना क्षेत्रों में वितरण लाइसेंसी के माध्यम से राज्य सरकार द्वारा अधिसूचित प्रत्येक परियोजना प्रभावित परिवार को प्रत्येक माह 100 यूनिट बिजली के बराबर ऊर्जा निःशुल्क प्रदान की जाएगी।
- 5.8 उपयुक्त आयोग, प्रारंभिक वर्षों में, टैरिफ भार को कम करने के क्रम में दीर्घकालीन वित्तीय लिखतों का प्रयोग करने के लिए जल विद्युत परियोजनाओं (एचईपी) के विकासकर्ताओं को प्रोत्साहित करने हेतु उपयुक्त विनियामक संरचना की व्यवस्था करेगा।
- 5.9 प्रतिस्पर्धा का वास्तविक लाभ उपयुक्त बाजार परिस्थितियां उत्पन्न होने पर ही उपलब्ध होगा। विद्युत आपूर्ति की कमी को नियंत्रित करने की जरूरत होगी। विभिन्न निष्पादनकर्ता प्रतिस्पर्धा के जरिए सेवा की गुणवत्ता में वृद्धि करेंगे। विद्युत उद्योग को उस स्थिति में लाने हेतु सभी प्रयास किए जाने की जरूरत होगी जिसमें उपभोक्ताओं के समग्र हितों की रक्षा हो। पारेषण और वितरण अर्थात् वायर के व्यवसाय को प्राकृतिक एकाधिकार की विशेषताओं के कारण अंतर्राष्ट्रीय रूप से मान्यता प्राप्त है, जिसमें लागत की संवीक्षा के आधार पर रेगुलेटेड रिटर्न में जटिलताएं अंतर्निहित हैं।
- 5.10 उपभोक्ता का हित विद्युत उत्पादन, पारेषण एवं वितरण जैसी संपूर्ण मूल्य श्रृंखला की व्यवहार्यता तथा सततता को सुनिश्चित करने और ठीक इसी समय उपभोक्ताओं को उचित मूल्य पर विद्युत आपूर्ति किए जाने को सुगम बनाने से सर्वोत्तम रूप से पूरा होता है। इन उद्देश्यों को हासिल करने के लिए उपयुक्त सरकार द्वारा समय-समय पर वित्तीय टर्न-अराउंड/पुनःसंरचना योजनाएं अनुमोदित की जाती हैं। उपयुक्त सरकार तथा उपयुक्त आयोग ऐसी योजनाएं कार्यान्वित करते समय सभी विवेकपूर्ण लागतों की वसूली के संदर्भ में, उत्पादन, पारेषण एवं वितरण की व्यवहार्यता सुनिश्चित करेंगे।
- 5.11 उत्पादन, पारेषण तथा वितरण के सामान्य पहलुओं के संदर्भ में सेवा नियमन की निष्पादन आधारित लागत हेतु टैरिफ नीति निम्नांकित फ्रेमवर्क प्रस्तुत करती है। पैरा 6.1 और पैरा 7.1(6) में संदर्भित प्रतिस्पर्धात्मक बोली वाली परियोजनाओं के लिए ये फ्रेमवर्क लागू नहीं होंगे। क्षेत्रगत पहलुओं पर उत्तरवर्ती खंडों में विचार किया गया है।





**(क) निवेश पर रिटर्न**

रिटर्न की दर को तय करते समय उपभोक्ताओं के हितों और निवेश की जरूरत के मध्य संतुलन की जरूरत है। रिटर्न द्वारा निवेश को आकर्षित करने के लिए यदि विद्युत क्षेत्र को वरीयता प्राप्त न हो तो भी उसे अन्य क्षेत्रों के बराबर रखा जाए ताकि विद्युत क्षेत्र पर्याप्त क्षमता का सृजन करने में समर्थ हो सके। रिटर्न दर ऐसी होनी चाहिए जिसमें सेक्टर का विकास करने में उचित सरप्लस उत्पादन की गुंजाइश हो।

केन्द्रीय आयोग समग्र जोखिम और पूंजी की प्रचालित लागत को ध्यान में रखते हुए उत्पादन तथा पारेषण परियोजनाओं के लिए इक्विटी पर रिटर्न दर को समय-समय पर अधिसूचित करेगा, जिसका एसईआरसी द्वारा भी अनुसरण किया जाएगा। पारेषण के लिए सीईआरसी द्वारा अधिसूचित रिटर्न दर को एसईआरसी द्वारा वितरण के लिए उपयुक्त संशोधन के साथ अपनाया जा सकता है, ऐसा करते समय जोखिमों को भी ध्यान में रखा जाएगा। इस मामले में समान दृष्टिकोण हेतु विनियामक मंच के माध्यम से आम सहमति बनाना वांछनीय होगा।

परियोजना की सम्पूर्ण पूंजीगत लागत की अनुमति प्रदान करते समय यथोचित आयोग यह सुनिश्चित करेगा कि ये युक्तिसंगत हैं और इस लक्ष्य को प्राप्त करने के लिए विनियामक आयोगों द्वारा पूंजीगत लागत संबंधी अपेक्षित बचमाकों को तैयार किया जाना चाहिए। केन्द्रीय आयोग इक्विटी पर रिटर्न अथवा पूंजी पर रिटर्न, जो भी उपभोक्ताओं के हित में उचित समझा जाए, दृष्टिकोण अपना सकता है।

राज्य आयोग उपयुक्त समय पर वितरण व्यवसाय में रिटर्न के लिए "वितरण और आपूर्ति मार्जिन" पर विचार कर सकता है। राज्य आयोग विस्तृत अध्ययन के आधार पर मूल्य कैप विनियम पर भी विचार कर सकता है। विनियामक मंच को इस संबंध में एक व्यापक दृष्टिकोण विकसित करना चाहिए। ऐसा प्रस्ताव तैयार करते समय विचार-विमर्श में अन्य बातों के साथ साथ कुल तकनीकी एवं वाणिज्यिक हानियों में कमी करना, कार्य निष्पादन मानकों में सुधार करना और आपूर्ति लागत में कमी करना जैसे मुद्दों को शामिल किया जायेगा।

**(ख) इक्विटी मानदंड**

परियोजनाओं की पूंजीगत लागत की वित्त-व्यवस्था के लिए 70:30 का ऋण:इक्विटी अनुपात अपनाया जाना चाहिए। प्रवर्तक, इक्विटी निवेशों की उच्चतर मात्रा प्राप्त करने के लिए स्वतंत्र होंगे। इक्विटी इस मानदंड से अधिक होने पर, इसे ब्याज की औसत भारित दर पर और ब्याज दरों की उपयुक्तता सुनिश्चित करने के पश्चात परियोजना के दीर्घावधिक ऋण घटक की औसत भारित टैरर के लिए और की गई ऋण पुनर्संरचना, यदि कोई हो, के प्रभाव को ध्यान में रखते हुए अग्रिम ऋण माना जाए। यदि इक्विटी, नियामक स्तर से कम हो तो टैरिफ परिकलन में इक्विटी पर रिटर्न के निर्धारण के लिए वास्तविक इक्विटी को प्रयोग में लाया जाएगा।

**(ग) मूल्यहास**

केन्द्रीय आयोग, उत्पादन और पारेषण परिसम्पत्तियों के हास दरों को अधिसूचित कर सकता है। अधिसूचित की गई ऐसी हास दरें विनियामक मंच द्वारा किए गए उचित संशोधन के साथ वितरण परिसंपत्तियों के लिए भी लागू की जाएगी।

बशर्ते कि, उपयुक्त आयोग परियोजना के उपयोगी कार्यकाल के दौरान लागू किए जाने वाले मूल्यहास की दर की ऊपरी सीमा टैरिफ निर्धारण के उद्देश्य से निर्दिष्ट करेगा और विकासकर्ता के पास, टैरिफ का अनुमोदन मांगते समय, उक्त सीमा के अधीन मूल्यहास की निम्न दर दर्शाने का विकल्प होगा।

मूल्यहास की अधिसूचित दरें टैरिफों और लेखांकन के प्रयोजन हेतु भी लागू होंगी।

मूल्यहास के विरुद्ध किसी अग्रिम की जरूरत नहीं होनी चाहिए।



परिसंपत्तियों के पूर्ण मूल्यहास के पश्चात् कम किए गए टैरिफ का लाभ उपभोक्ताओं को मिलते रहना चाहिए।

उपर्युक्त के होते हुए भी, जिस उत्पादन कंपनी के उन संयंत्रों जिनका पीपीए समाप्त हो चुका हो, या उन संयंत्रों जिनका उपयोगी जीवनकाल पूरा हो चुका है, की विद्युत को उन नवीकरणीय उत्पादन संयंत्रों की विद्युत के साथ मिलाया जा सकता है जो बोली की प्रक्रिया के माध्यम से स्थापित किए जाने हैं अथवा जिन संयंत्रों की स्थापना के लिए उपस्कर का प्रापण प्रतिस्पर्धात्मक बोली के माध्यम से किया जाता है। ऐसे मामलों में, ऐसे संयंत्रों की विद्युत की उपयुक्त सरकार द्वारा निर्धारित किए जाने वाले सिद्धांतों पर नवीकरणीय ऊर्जा उत्पादक संयंत्रों से विद्युत खरीद रहे लाभग्राहियों को पुनःआबंटित किया जा सकता है। आबद्धकर निकाय जो अंततः ऐसी विद्युत खरीदते हैं, वे नवीकरणीय ऊर्जा उत्पादक संयंत्रों से खरीदी गई विद्युत की मात्रा को, अपने नवीकरणीय क्रय दायित्व मानेंगे।

ऐसे पारंपरिक तथा नवीकरणीय उत्पादक संयंत्रों का अनुसूचीकरण एवं प्रेषण पृथक रूप से किया जाएगा।

#### (घ) ऋण की लागत

टैरिफ घटाने के मद्देनज़र ऋण की अवधि समेत उसकी संरचना को प्रोत्साहित किया जाना चाहिए। ऋण की अनुवर्ती पुनर्संरचना के कारण लागतों में बचत को विनियामक आयोगों द्वारा उपभोक्ताओं के हितों का ध्यान रखते हुए प्रोत्साहित किया जाना चाहिए।

#### (ङ.) विदेशी विनिमय जोखिम प्रबंधन की लागत:

विदेशी विनिमय की भिन्नता संबंधी जोखिम पास थू नहीं होंगे। तथापि, विदेशी मुद्राओं में प्राप्त ऋणों के संबंध में विदेशी विनिमय भिन्नताओं को रोकने के लिए यथाचित लागतों की अनुमति होनी चाहिए। यह प्रावधान केवल उन परियोजनाओं के लिए होना चाहिए जहाँ कि टैरिफ का निर्धारण प्रतिस्पर्धात्मक बोली के आधार पर नहीं किया गया है।

#### (च) प्रचालन मानदंड

उपभोक्ताओं के साथ दक्षतापूर्वक प्रचालनों का लाभ शेयर करने हेतु प्रोत्साहन और अप्रोत्साहन को ध्यान में रखते हुए उपयुक्त निष्पादन मानदंड विकसित किए जाने की जरूरत होगी। पैरा 5.11(ज)(2) में उल्लिखित मामलों को छोड़कर टैरिफ में प्रचालन पैरामीटर को केवल "नियामक स्तर" पर होना चाहिए और "नियामक और वास्तविकता के स्तर से कम" का नहीं होना चाहिए। प्रचालन संबंधी बेहतर निष्पादन के लिए इसे प्रोत्साहित किया जाना जरूरी है। मानदंड विगत निष्पादन से जुड़े हुए उत्तरोत्तर दक्षताओं को प्रतिबिंबित करते हुए, ईंधन, बेहतर उपकरणों का संग्रहण, प्रचालनों की प्रकृति, उपभोक्ताओं आदि को दी जाने वाली सेवा के स्तर पर भी प्रौद्योगिकी नवीनता लिए हुए होने चाहिए। सतत् एवं प्रमाणित अक्षमता को नियंत्रित एवं दंडित किया जाना चाहिए।

केन्द्रीय आयोग, केन्द्रीय विद्युत प्राधिकरण के परामर्श से उत्पादन और पारेषण हेतु समय-समय पर प्रचालनगत मानदंडों को अधिसूचित करेगा। राज्य विद्युत विनियामक आयोग (एसईआरसी) इन मानदंडों को अपनाएगा। उन मामलों में, जहाँ पर पिछले कई वर्षों से मानदंड अत्यंत कम होने की स्थिति में राज्य विद्युत विनियामक आयोग, उचित रूप से आसान मानदंड निर्धारित कर सकते हैं और केन्द्रीय आयोग द्वारा अधिसूचित किए गए मानदंडों को प्राप्त करने के लिए समय रहते ही तरीका बदल सकते हैं, अथवा इस संबंध में प्राधिकरण द्वारा विनिर्दिष्ट मानकों के अनुरूप उन्हें चरणबद्ध ढंग से हटा सकते हैं।

वितरण नेटवर्क हेतु प्रचालन मानदंडों को संबंधित राज्य विद्युत विनियामक आयोग द्वारा अधिसूचित किया जाएगा। एकरूपता के लिए, विनियामक मंच राज्य विनिर्दिष्ट विशिष्टताओं को ध्यान में रखते हुए मॉडल दिशा-निर्देश तैयार करें।

#### (छ) नवीकरण और आधुनिकीकरण

उच्चतर दक्षता स्तरों के लिए उत्पादन संयंत्रों (पवन ऊर्जा उत्पादन संयंत्रों के पुनःशक्तिकरण सहित) के लिए नवीकरण और आधुनिकीकरण को प्रोत्साहित किए जाने की जरूरत है, चाहे इन्होंने अपना उपयोगी कार्यकाल पूरा न



भी किया हो। इसमें आवधिक मरम्मत शामिल नहीं है। बहुवर्षीय टैरिफ (एमवाईटी) फ्रेमवर्क का निर्धारण किया जाए, जिसमें नवीकरण और आधुनिकीकरण के लिए आवश्यक पूंजीगत निवेश शामिल हों, साथ ही जिसमें यथोचित आयोग द्वारा निर्धारित किए जाने वाले विशेष व संशोधित निष्पादन मानकों के संबंध में यूटिलिटीयों एवं लाभार्थियों के बीच दक्षता सुधार के लाभों का आदान-प्रदान करने संबंधी प्रोत्साहन ढांचा भी शामिल हो। पूर्व निर्धारित दक्षता लाभों के लिए अपेक्षित पूंजी लागत और उच्चस्तरीय निष्पादन को बनाए रखने के लिए जरूरी है कि उपयुक्त आयोग इसका मूल्यांकन करे।

#### (ज) बहुवर्षीय टैरिफ

1) अधिनियम की धारा 61 के अनुसार टैरिफ निर्धारण के लिए निबंधन एवं शर्तों के लिए उपयुक्त आयोग अन्य बातों के साथ-साथ बहुवर्षीय टैरिफ (एमवाईटी) सिद्धान्तों से निर्देशित होगा। फ्रेमवर्क में 5 वर्ष की नियंत्रण अवधि होनी चाहिए। आंकड़ों संबंधी अनिश्चितता व अन्य व्यावहारिक कारणों से विनियामक आयोग द्वारा जरूरी माने जाने पर पारेषण व वितरण के लिए आरंभिक तौर पर तीन वर्ष की नियंत्रण अवधि भी हो सकती है। विश्वसनीय आंकड़ों के अभाव वाले मामलों में उपयुक्त आयोग प्रथम नियंत्रण अवधि के लिए एमवाईटी में अनुमान प्रस्तुत कर सकता है तथा और अधिक विश्वसनीय आंकड़े प्राप्त होने पर नियंत्रण अवधि नये सिरे से शुरू हो सकती है।

2) ऐसे मामले जहां पर प्रचालन पिछले कई वर्षों से मानदंड से काफी कम है वहां पर राजस्व जरूरत निर्धारित करने संबंधी व्यवस्था अपेक्षित स्तर की बजाय " लचीले " स्तर की होनी चाहिए। अपेक्षित निष्पादन मानक प्राप्त करने के लिए उपयुक्त बेंचमार्किंग अध्ययन आयोजित किए जायें। न्यूनतम सेवा संबंधी मानकों को पूरा करने के लिए आवश्यक पूंजीगत व्यय के निमित्त प्रत्येक यूटिलिटी के लिए पृथक से अध्ययनों की जरूरत होगी।

3) एक बार नियंत्रण अवधि की शुरुआत में राजस्व जरूरत तय हो जाने के पश्चात् विनियामक आयोग को निवेश लागत घटकों के बजाय उत्पादन विनियमन पर ध्यान देना चाहिए। नियंत्रण अवधि की समाप्ति पर निष्पादन की व्यापक समीक्षा की जाए ।

4) विगत लागतों के बोझ से भावी उपभोक्ताओं को बचाने के लिए नियंत्रित न की जा सकने वाली लागतों को तेजी से वसूल किया जाना चाहिए। नियंत्रित न की जा सकने वाली लागतों (सीमित नहीं) में ये शामिल हैं- ईंधन लागत, मुद्रास्फीति के कारण लागत, कर एवं उपकर, विपरीत प्राकृतिक घटनाओं के मामले समेत विद्युत क्रय यूनिट लागतों में भिन्नता।

5) विनियामक आयोग सूचना देने के बारे में स्पष्ट दिशा-निर्देश व नियम बनाएं। अधिनियम की धारा 62(2) उपयुक्त आयोग को यह अधिकार प्रदान करती है कि वह टैरिफ निर्धारण के लिए उत्पादन, पारेषण व वितरण के बारे में विनिर्दिष्ट पृथक ब्योरो को दर्शाने के लिए लाइसेंसधारकों से कहे।

#### (झ) क्लीन डेवलेपमेंट मैकेनिज्म (सीडीएम) के अंतर्गत लाभ

ऐसी सभी विद्युत परियोजनाओं (उत्पादन पारेषण व वितरण) जो संबंधित बेस लाईन की तुलना में ग्रीनहाउस गैस (जीएचजी) का अपेक्षाकृत कम उत्सर्जन करती है, के लिए टैरिफ निर्धारित करते समय क्लीन डेवलेपमेंट मैकेनिज्म (सीडीएम) से प्राप्त लाभों को भी इस प्रकार ध्यान में रखा जाना चाहिए ताकि परियोजना विकासकों को पर्याप्त प्रोत्साहन प्रदान किया जा सके।

#### (ञ) कंपोजिट स्कीम

अधिनियम की धारा 79 (1) की उपधारा (ख) में व्यवस्था की गई है कि केंद्रीय आयोग उत्पादन कंपनी के टैरिफ को नियंत्रित करेगा, यदि वह उत्पादन कंपनी एक से अधिक राज्यों में विद्युत के उत्पादन एवं विक्रय हेतु एक कंपोजिट स्कीम में शामिल होती है अथवा अन्यथा उसके पास एक कंपोजिट स्कीम हो।

स्पष्टीकरण: अधिनियम की धारा 79(1) के अंतर्गत विनिर्दिष्ट कंपोजिट स्कीम का अर्थ होगा - जिस राज्य में ऐसी परियोजना स्थित है, उससे बाहर वितरण लाइसेंसी को परियोजना की न्यूनतम 10% क्षमता के विक्रय के लिए



परियोजना के वाणिज्यिक प्रचालन की तिथि (परियोजना की अंतिम इकाई की सीओडी परियोजना के वाणिज्यिक प्रचालन की तिथि मानी जाएगी) से पहले दीर्घकालीन अथवा मध्यमकालीन पीपीए पर हस्ताक्षर करने वाली उत्पादन कंपनी द्वारा विद्युत का उत्पादन एवं विक्रय एक से ज्यादा राज्य में करने वाली स्कीम।

5.12 जैसा कि विदित है कि राज्य सरकारों के पास विद्युत क्रय और उपभोग पर शुल्क, कर और उपकर लगाने के अधिकार होते हैं, ये संसाधनों का इष्टतम उपयोग एवं प्रतिस्पर्धा को प्रभावपूर्ण ढंग से विकृत कर सकता है, विशेष रूप से जब इन करों का उपयोग चयनित आधार पर और असमान रूप से किया जाए।

कुछ मामलों में विद्युत खपत संबंधी शुल्कों आदि को उत्पादन (यथा कैप्टिव उत्पादन) आदि से जोड़ा जाता है और लगाए गए शुल्कों का स्तर ग्रिड से विद्युत लेने वाले उसी श्रेणी के उपभोक्ताओं पर लगाए जा रहे शुल्क की तुलना में काफी अधिक होता है। इस प्रकार का भेदभाव पक्षपातपूर्ण और अनुपयुक्त है। कैप्टिव उत्पादन को पूर्ण स्वतंत्रता देने का प्रयोजन यह है कि उद्योग विश्वसनीय, गुणवत्तापरक और किफायती विद्युत प्राप्त कर सकें। विशेषतया उपभोक्ता समूह द्वारा स्थापित किए जा सकने वाले कैप्टिव विद्युत संयंत्रों संबंधी प्रावधानों को इस लक्ष्य को ध्यान में रखकर मान्यता दी गई है कि देश भर में लघु एवं मध्यम उद्योगों के विस्तार से तीव्र आर्थिक विकास को गति मिलेगी और बड़े पैमाने पर रोजगार के अवसर पैदा होंगे।

उपभोक्ताओं को उचित और प्रतिस्पर्धात्मक कीमतों पर विद्युत उपलब्ध कराने संबंधी लक्ष्य की प्राप्ति हेतु जरूरी है कि ऐसे शुल्कों को उचित स्तर पर रखा जाए।

5.13 अधिनियम में, एक मेगावाट या इससे अधिक के उपभोक्ताओं के लिए समयबद्ध ढंग से खुली पहुँच प्रारंभ करने की व्यवस्था है। विनियामक आयोग अधिनियम के प्रावधानों के अनुसार, उपभोक्ताओं की विभिन्न श्रेणियों के लिए खुली पहुँच प्रारंभ करेंगे।

## 6.0 उत्पादन

मांग में अनुमानित वृद्धि को पूरा करने के लिए उत्पादन क्षमता क्षेत्र का त्वरित विकास आवश्यक है। विद्युत बाजारों की दक्ष कार्यप्रणाली के लिए पर्याप्त उत्पादन भी जरूरी है। साथ ही, उपभोक्ता हितों की रक्षा के लिए नई क्षमता अभिवृद्धि पर अत्यन्त किफायती दरों पर विद्युत का वितरण सुनिश्चित किया जाए। इन उद्देश्यों की पूर्ति हेतु यह नीति निम्नांकित उपाय निर्धारित करती है।

### 6.1 विद्युत की प्राप्ति

जैसा कि पैरा 5.1 में निर्धारित है, भावी जरूरतों की दृष्टि से विद्युत अर्जन, केंद्र सरकार द्वारा समय-समय पर जारी दिशा-निर्देशों के आलोक में पारदर्शी प्रतिस्पर्धात्मक बोली प्रक्रिया के जरिए होना चाहिए। इन दिशानिर्देशों में आधारभूत भार जरूरत और व्यस्ततमकालीन भार जरूरतों के लिए पृथक से विद्युत अर्जन व्यवस्था है। इससे इस प्रकार की ऐसी जरूरतों को पूरा करने के लिए उत्पादन क्षमता बढ़ोतरी में मदद मिलेगी।

तथापि, दिनांक 19 जनवरी, 2005 के दिशानिर्देशों के अनुसार कुछ प्रतिस्पर्धात्मक बोली परियोजनाओं में कोल इंडिया लिमिटेड (सीआईएल) से कोयले की अपेक्षित मात्रा प्राप्त करने में कठिनाइयाँ आई हैं। आश्वासन पत्र/एफएसए में दर्शाई गई मात्रा की तुलना में सीआईएल द्वारा आपूर्ति किए गए घरेलू कोयले की कम मात्रा की स्थिति में, कमी को पूरा करने के लिए अधिप्राप्त आयातित/बाजार आधारित ई-नीलामी वाले कोयले की लागत पर दिनांक 31.7.2013 के कार्यालय ज्ञापन संख्या एफयू-12/2011-आईपीसी (वाल्क्यूम-III) में विद्युत मंत्रालय द्वारा जारी की गई परामर्शिका के अनुसार मामला दर मामला आधार पर उपयुक्त आयोग द्वारा पास-थ्रू बनाए जाने पर विचार किया जाएगा।

### 6.2 टैरिफ ढांचा और संबद्ध मामले

(1) मैरिट आर्डर डिस्पैच को सरल बनाने के लिए सभी दीर्घावधिक और मध्यावधिक अनुबंधों के लिए द्वि-भागीय टैरिफ ढांचा अपनाया जाना चाहिए। राष्ट्रीय विद्युत नीति के अनुसार उपलब्धता आधारित टैरिफ (एबीटी) को राज्य स्तर पर भी आरंभ किया जाना है। इस ढांचे का उत्पादन स्टेशनों (एसईआरसी द्वारा यथा निर्धारित क्षमताओं



वाले ग्रिड से जुड़े कैप्टिव संयंत्रों समेत) तक विस्तार किया जाएगा। उपयुक्त आयोग बेहतर भार प्रबंधन के लिए व्यवस्ततम व गैर-व्यस्ततमकालीन घंटों के लिए निर्धारित प्रभार की पृथक दरें दो वर्षों की अवधि के भीतर करेगा।

विद्युत स्टेशनों से हर समय उपलब्ध रहने और प्रेषण हेतु तैयार रहने की अपेक्षा की जाती है। विद्युत क्रय करार (पीपीए) में वर्णित किसी प्रावधान के होते हुए भी, विद्युत अधिनियम, 2003 की धारा 62 के अंतर्गत विनियमित टैरिफ के आधार पर उत्पादन स्टेशनों की गैर मांग वाली उत्पादन क्षमता के बेहतर उपयोग को सुनिश्चित करने के लिए प्राप्तकर्ता द्वारा विद्युत की मांग न किए जाने की स्थिति में, दिन के 00:00 घंटों से कम से कम 24 घंटे पहले और उसकी मात्रा के बारे में सूचना देगा ताकि उत्पादन केंद्र, इस संबंध में केंद्र सरकार द्वारा निर्धारित नीति के अनुरूप इसे बाजार में बेच सकें। विकासकर्ता और पीपीए पर हस्ताक्षर करने वाले प्राप्तकर्ता, यदि पीपीए में पहले से ही व्यवस्था नहीं की गई है तो आपस में की गई सहमति के आधार पर बाजार में, इस प्रकार की मांग न की गई विद्युत के विक्रय, यदि कोई है, से प्राप्त होने वाले लाभों में 50:50 के अनुपात की हिस्सेदारी करेंगे। इस प्रकार के लाभ की गणना ऐसी विद्युत और ईंधन प्रभार के बिक्री मूल्य के बीच अंतर के रूप में की जाएगी। तथापि, यह सुनिश्चित किया जाए कि ऐसी मर्चेट बिक्री के परिणामस्वरूप मूल लाभार्थी (लाभार्थियों को) उच्चतम औसत ऊर्जा के रूप में जिसमें मर्चेट बिक्री को छोड़कर भुगतान योग्य ऊर्जा प्रभार शामिल है, पर प्रतिकूल प्रभाव न पड़े। अधिनियम की धारा 63 के अंतर्गत परियोजनाओं के लिए ऐसी बिक्री की प्रणाली को उपयुक्त आयोग द्वारा प्रापक तथा उत्पादक के बीच परस्पर रूप से सहमत शर्तों पर निर्धारित किया जाएगा, अथवा जब तक कि यदि पहले से ही पीपीए में विनिर्दिष्ट न हो।

(2) विद्युत खरीद समझौते में उत्पादन कंपनियों के लिए पर्याप्त एवं बैंक ग्राह्य भुगतान सुरक्षा प्रबंध सुनिश्चित किया जाना चाहिए। लैटर ऑफ क्रेडिट, एस्करो ऑफ कैश फ्लों आदि जैसी उपलब्ध भुगतान सुरक्षा तंत्र के बावजूद भी पीपीए के अनुसार सहमत टैरिफ के भुगतान की लगातार डिफॉल्ट के मामले में उत्पादन कंपनियां दूसरे क्रेताओं को ऐसी विद्युत बिक्री कर सकती है।

(3) कोयला आधारित उत्पादन केंद्रों के मामले में कोल वाशरीज, कोयला हितकारी प्रणाली, शुष्क राख लदान एवं निपटान प्रणाली स्थापना की उपयुक्त लागत भी परियोजना लागत में शामिल होगी।

(4) बोलियां अवाई किए जाने के बाद यदि केंद्र सरकार, राज्य सरकारों/संघ राज्य क्षेत्रों अथवा अन्य किसी सरकारी तंत्र द्वारा लगाए गए घरेलू शुल्कों, लेवीज, उपकरों और करों जिनसे लागत में तदनुसार परिवर्तन होते हैं, तो इसे "विधि में परिवर्तन" के रूप में माना जाएगा जब तक कि पीपीए में अन्यथा प्रावधान न हो, इसे उपयुक्त आयोग के अनुमोदन के अध्यक्षीन पास-थू के रूप में अनुमति दी जाए।

(5) नगर पालिका/स्थानीय निकायों/समान संगठन के 50 किलोमीटर के दायरे के भीतर आने वाले विद्यमान संयंत्रों सहित ताप विद्युत संयंत्र (संयंत्रों), इन निकायों के सीवेज ट्रीटमेंट प्लांट के निकटता के क्रम में उत्पादित शोधित सीवेज जल का अनिवार्यतः प्रयोग करेंगे और इस कारण संबद्ध लागत की टैरिफ में पास-थू की अनुमति होगी। सीवेज ट्रीटमेंट प्लांट द्वारा आपूर्ति की कमी की स्थिति में ऐसे थर्मल संयंत्र अपनी आवश्यकताओं को पूरा करने के लिए पानी के बैकअप स्रोत को भी सुनिश्चित करेंगे। इस कारण संबद्ध लागत, स्थिर लागत में शामिल होगी ताकि ऐसे ताप विद्युत संयंत्र का मैरिट ऑर्डर बाधित न हो। सीवेज ट्रीटमेंट प्लांट को विद्युत संयंत्र के विकासकर्ता के परामर्श से ही बंद किया जाएगा।

### 6.3 कैप्टिव उत्पादन को उपयोग में लाना

कैप्टिव उत्पादन प्रतिस्पर्द्धी विद्युत उपलब्ध कराने के लिए एक महत्वपूर्ण साधन है। उपयुक्त आयोग को ऐसा वातावरण तैयार करना चाहिए जो कैप्टिव विद्युत संयंत्रों को ग्रिड के साथ जोड़ने में प्रोत्साहन प्रदान करे।

ऐसे कैप्टिव संयंत्र, अधिशेष विद्युत की आपूर्ति उत्पादन कंपनियों पर लागू होने वाले उसी विनियम के अध्यक्षीन ग्रिड के जरिए कर सकते हैं। इस नीति के पैरा 5.2 के दूसरे परंतुक को ध्यान में रखते हुए अधिनियम की धारा 63 के अंतर्गत केंद्र सरकार द्वारा जारी किए गए दिशानिर्देशों का अनुपालन करते हुए वितरण लाइसेंसियों द्वारा कैप्टिव संयंत्रों से सुनिश्चित आपूर्ति खरीदी जा सकती है।





व्यस्ततम और गैर-व्यस्ततमकीन आपूर्ति के लिए पृथक-पृथक कीमत तय की जानी चाहिए और टैरिफ में वास्तविक स्तर पर उत्पादन की परिवर्तनीय लागत और क्षमता प्रभावों हेतु उचित मुआवजा शामिल किया जाना चाहिए।

संबंधित राज्य आयोग प्रभावों को उचित एवं सही ठहराते हुए कार्यान्वयन के लिए वहीलिंग प्रभार और अन्य सेवा शर्तें जोड़ना निर्धारित करे।

ग्रिड से संबद्ध कैप्टिव संयंत्र सहमत टैरिफ के आधार पर उपलब्ध पारेषण सुविधाओं के माध्यम से ग्रिड से संबद्ध नॉन-कैप्टिव प्रयोगकर्ताओं को भी विद्युत आपूर्ति कर सकते हैं। विद्युत का ऐसा क्रय खुली पहुंच के लिए संगत नियमों के अधीन होगा जिसमें विद्युत नियमावली, 2005 के नियम 3 के संबद्ध प्रावधानों का अनुपालन शामिल है।

#### 6.4 नवीकरणीय ऊर्जा स्रोतों से सह-उत्पादन सहित ऊर्जा उत्पादन के नवीकरणीय स्रोत:

(1) अधिनियम की धारा 86(1)(ड) के प्रावधानों के अनुसरण में, उपयुक्त आयोग नवीकरणीय ऊर्जा स्रोतों से ऊर्जा की खरीद के लिए किसी वितरण लाइसेंसी के क्षेत्र में विद्युत की कुल खपत की न्यूनतम प्रतिशतता इस प्रकार के संसाधनों की उपलब्धता और रिटेल टैरिफ पर इसके प्रभाव को ध्यान में रखते हुए निर्धारित करेगा। नवीकरणीय ऊर्जा की खरीद की लागत एसईआरसी द्वारा प्रशुल्क निर्धारण के समय ध्यान में रखी जाएगी। नवीकरणीय क्रय बाध्यता (आरपीओ) की दीर्घावधि ग्रोथ ट्रेजेक्टरी विद्युत मंत्रालय द्वारा एमएनआरई के परामर्श से निर्धारित की जाएगी।

बशर्ते कि नवीकरणीय स्रोतों के इतर स्रोतों से सह-उत्पादन को आरपीओ की प्रयोज्यता से बाहर नहीं रखा जाएगा।

(i) इस प्रकार लागू किए गए प्रतिशत के भीतर राज्य विद्युत विनियामक आयोग इस नीति में अधिसूचना की तारीख से सौर ऊर्जा के क्रय के लिए भी न्यूनतम प्रतिशत रखेगा जो मार्च, 2022 तक अथवा जैसा केंद्र सरकार द्वारा समय-समय पर अधिसूचित अनुसार, जल विद्युत को छोड़कर, कुल ऊर्जा खपत के 8% तक पहुँचेगा।

(ii) वितरण लाइसेंसी, अधिनियम की धारा 62 के अंतर्गत उपयुक्त आयोग द्वारा निर्धारित टैरिफ पर अपने स्रोतों सहित सभी स्रोतों से विद्युत के प्रापण के अनुपात में राज्य में सभी "बेस्ट टू एनर्जी प्लांट्स" से उत्पादित 100 प्रतिशत विद्युत का प्रापण अनिवार्य रूप से करेंगे।

(iii) वांछनीय है कि ऊर्जा के नवीकरणीय संसाधनों से ऊर्जा का क्रय विभिन्न राज्यों में कमोवेश इसी अनुपात में हो। देश के केवल कुछ भागों में इन स्रोतों की व्यापक उपलब्धता के वर्तमान परिदृश्य में इस लक्ष्य की प्राप्ति हेतु नवीकरणीय ऊर्जा प्रमाण-पत्रों (आरईसी) जैसी उपयुक्त प्रणाली को प्रोन्नत किए जाने की आवश्यकता होगी। इस प्रकार की प्रणाली के जरिए नवीकरणीय ऊर्जा आधारित उत्पादन कम्पनियां परम्परागत विद्युत हेतु निर्धारित दरों पर स्थानीय वितरण लाइसेंसी को विद्युत का विक्रय कर सकती हैं और अन्य वितरण कम्पनियों तथा आबद्धकर निकायों को प्रमाण-पत्रों का विक्रय करके शेष लागत की वसूली कर सकती हैं ताकि परवर्ती कंपनियां नवीकरणीय विद्युत क्रय दायित्वों को पूरा कर सकें। आरईसी प्रणाली में सौर विनिर्दिष्ट आरईसी भी होना चाहिए।

(iv) उपयुक्त आयोग, पृथक प्रौद्योगिकी आधारित आरईसी और 'आरईसी मल्टीप्लायर' (अर्थात् ऐसी उभरती हुई प्रौद्योगिकियों में इस स्तर के उत्पादन को उच्चतर अथवा निम्नतर आरईसी प्रदान करके) निर्धारित करके ऐसी अन्य उभरती हुई नवीकरणीय ऊर्जा प्रौद्योगिकियों को बढ़ावा देने के लिए उपयुक्त विनियामक ढांचा प्रदान कर सकता है। इसी प्रकार, समय के साथ नवीकरणीय ऊर्जा प्रौद्योगिकियों के मूल्यों में परिवर्तन को ध्यान में रखते हुए, आरईसी मल्टीप्लायर आधारित विंटेज (अर्थात् संयंत्र के चालू करने के वर्ष के आधार पर उत्पादन के उस स्तर के लिए आरईसी की उच्चतर अथवा निम्नतर संख्या प्रदान करके) निर्धारित कर सकता है।

(2) टैरिफ कम रखने के लिए राज्य प्रतिस्पर्धी बोली के माध्यम से बेस्ट टू एनर्जी संयंत्रों को छोड़कर, नवीकरणीय ऊर्जा स्रोतों से विद्युत का प्रापण करने का प्रयास करेंगे। वितरण लाइसेंसियों द्वारा, अधिसूचित क्षमता से ज्यादा क्षमता वाली परियोजनाओं से नवीकरणीय ऊर्जा स्रोतों से विद्युत का प्रापण केंद्र सरकार द्वारा अधिसूचित की जाने वाली तिथि से, प्रतिस्पर्धात्मक बोली प्रक्रिया के माध्यम से किया जाएगा।



तथापि, ऐसी अधिसूचना तक, नवीकरणीय ऊर्जा स्रोत परियोजनाओं से विद्युत का ऐसा कोई प्रापण विद्युत अधिनियम, 2003 की धारा 62 के अंतर्गत किया जाएगा। ऐसे स्रोतों से टैरिफ निर्धारित करते समय उपयुक्त आयोग यह सुनिश्चित करने के लिए सौर विकिरण और पवन की तीव्रता, जो एक क्षेत्र से दूसरे क्षेत्र में भिन्न हो सकती है, को ध्यान में रखेगा ताकि लाभ उपभोक्ताओं तक पहुँच सके।

(3) केंद्रीय आयोग को अनिरंतर विद्युत, विशेषकर नवीकरणीय ऊर्जा स्रोतों के मूल्य निर्धारण हेतु दिशानिर्देश निर्धारित करना चाहिए जहां पर विद्युत का प्रापण प्रतिस्पर्द्धी बोली के माध्यम से नहीं है। सीईआरसी द्वारा अनुबंधित टैरिफ उस श्रेणी के लिए ऊपरी सीमा के रूप में कार्य करेगा।

(4) वितरण कंपनियों को नवीकरणीय ऊर्जा स्रोतों से विद्युत के प्रापण के लिए प्रोत्साहित करने हेतु केन्द्र सरकार, समय-समय पर जनहित में बैक-लोडेड तरीके अथवा किसी अन्य तरीके से उत्तरोत्तर रूप से टैरिफ बढ़ाए जाने की अनुमति देकर, नवीकरणीय ऊर्जा के लिए पीपीए की अवधि के दौरान ऐसे उत्पादन संयंत्रों की आयु चक्र में उपयुक्त बोली आधारित टैरिफ ढांचा अधिसूचित कर सकती है। तदनु रूप, ऐसी बोली आधारित नवीकरणीय ऊर्जा का प्रापक, इस प्रकार से निर्धारित टैरिफ के भुगतान के लिए दायित्वों का अनुपालन करेगा।

(5) नवीकरणीय ऊर्जा स्रोतों को बढ़ावा देने के लिए, किसी भी उत्पादन कंपनी को, जो एक विनिर्दिष्ट तिथि के बाद कोयला/लिग्नाइट आधारित ताप विद्युत आधारित उत्पादन केन्द्र स्थापित करने का प्रस्ताव करती है, ऐसी नवीकरणीय ऊर्जा उत्पादन क्षमता स्थापित करना अथवा ऐसी क्षमता के बराबर नवीकरणीय ऊर्जा का प्रापण अथवा आपूर्ति करना आवश्यक होगा जो केंद्र सरकार पणधारकों के साथ अपेक्षित परामर्श के पश्चात समय-समय पर निर्धारित करेगी। प्रत्येक उत्पादक द्वारा उत्पादित नवीकरणीय ऊर्जा को बिक्री के उद्देश्य से इसके ताप विद्युत उत्पादन के साथ मिलाया जा सकता है। यदि कोई आबद्धकर इकाई इस नवीकरणीय विद्युत का प्रापण करती है, तब एसईआरसी यह मान लेगी कि आबद्धकर निकाय द्वारा ऐसे नवीकरणीय ऊर्जा उत्पादन स्टेशनों से खरीदी गई विद्युत की मात्रा तक नवीकरणीय क्रय दायित्व (आरपीओ) को पूरा कर लिया गया है।

बशर्ते कि यदि कोई मौजूदा कोयला और लिग्नाइट आधारित ताप विद्युत उत्पादन केन्द्र मौजूदा विद्युत क्रय करारों के अंतर्गत विद्युत प्रापकों की सहमति से अतिरिक्त नवीकरणीय ऊर्जा उत्पादन क्षमता स्थापित करना चाहता है तो इस प्रकार के संयंत्र से उत्पादित विद्युत को मिलाने की अनुमति दी जाएगी और इस प्रकार की नवीकरणीय ऊर्जा के टैरिफ के पास-थू की अनुमति उपयुक्त आयोग द्वारा दी जाएगी। आबद्धकर निकाय, जो अंततः ऐसी विद्युत खरीदते हैं, अपने नवीकरणीय क्रय दायित्व में मानेंगे।

बशर्ते, ऐसे पारंपरिक तथा नवीकरणीय उत्पादक संयंत्रों का अनुसूचीकरण एवं प्रेषण पृथक रूप से किया जाएगा।

(6) ऊर्जा के नवीकरणीय स्रोतों को आगे प्रोत्साहन देने के लिए, अन्तर-राज्यीय पारेषण प्रणाली के माध्यम से बिक्री हेतु ऊर्जा के सौर और पवन स्रोतों से उत्पादित विद्युत के पारेषण पर कोई भी अन्तर-राज्यीय पारेषण प्रभार और हानियां उस अवधि तक, जो केन्द्र सरकार द्वारा अधिसूचित की जाए, नहीं लगाई जाएंगी।

(7) उपयुक्त आयोग स्थानीय प्राधिकरण, पंचायत संस्थान, प्रयोक्ता संस्थान, सहकारी सोसायटी, गैर-सरकारी संगठन, फ्रेंचाइजी अथवा नवीकरणीय ऊर्जा सेवा कंपनी सहित किसी निकाय द्वारा नवीकरणीय ऊर्जा स्रोतों, विशेष रूप से छत पर सौर प्रणाली से विद्युत के उत्पादन और बिक्री को सुगम बनाने के लिए विनियामक फ्रेमवर्क की व्यवस्था कर सकता है। उपयुक्त सरकार इस प्रयोजन के लिए पूरक नीतिगत सहायता भी उपलब्ध करा सकती है।

व्याख्या: नवीकरणीय ऊर्जा सेवा कंपनी का अभिप्राय ऐसी ऊर्जा सेवा कंपनी से है जो उपभोक्ताओं को विद्युत के रूप में नवीकरणीय ऊर्जा उपलब्ध कराती है।

## 7.0 पारेषण

देश की पारेषण प्रणाली में क्षेत्रीय नेटवर्क, अंतःक्षेत्रीय कनेक्शन, जो पांच क्षेत्रों और राज्य नेटवर्कों को विद्युत पहुँचाते हैं, शामिल हैं। राज्य नेटवर्कों का विकास एक समान नहीं रहा है और इन नेटवर्कों की क्षमता में विस्तार की जरूरत



है। ये नेटवर्क अंतःराज्यीय विद्युत प्रवाह और क्षेत्रीय व राष्ट्रीय प्रवाह में भी महत्वपूर्ण भूमिका निभायेंगे। जहां तक पारेषण का संबंध है, टैरिफ नीति निम्नलिखित उद्देश्यों की पूर्ति करेगी-

1. विश्वसनीयता के लिए पर्याप्त मार्जिन के साथ उत्पादन से पूर्व पारेषण नेटवर्क का इष्टतम विकास सुनिश्चित करना और देश में उत्पादन एवं पारेषण परिसंपत्तियों का दक्षतापूर्वक उपयोग संवर्द्धित करना।
2. पारेषण क्षेत्र में अपेक्षित निवेश आकर्षित करना और पर्याप्त रिटर्न उपलब्ध कराना।

#### 7.1 पारेषण कीमत निर्धारण

(1) राज्य के भीतर हस्तांतरण और मध्यवर्ती राज्य में विद्युत पारेषण, जो ऐसे अंतःराज्य पारेषण के आनुषांगिक हो, को मिलाकर अंतःराज्य पारेषण के लिए उपयुक्त पारेषण टैरिफ ढांचा कार्यान्वित किया गया है ताकि समूचे देश में सभी परिसंपत्तियों के प्रभावी उपयोग को प्रोत्साहित किया जा सके और अपेक्षित नई पारेषण क्षमताओं का तीव्र विकास किया जा सके।

(2) राष्ट्रीय विद्युत नीति के अनुसार कार्यान्वयनाधीन राष्ट्रीय टैरिफ ढांचा दूरी, दिशा और विद्युत प्रवाह परिमाण के प्रति संवेदनशील होना चाहिए। इसे सीईए के परामर्श को ध्यान में रखते हुए सीईआरसी द्वारा विकसित किया गया है। पारेषण प्रभारों को समय-समय पर संशोधित किए गए ऐसे टैरिफ तंत्र के अनुसार साझा किया जाएगा।

(3) इस ढांचे के अंतर्गत पारेषण प्रभार मेगावाट प्रति सर्किल किलोमीटर आधार, जोनल पोस्टल स्टैम्प आधार अथवा व्यावहारिकता आधार पर निर्धारित किया जा सकता है। इसका प्रयोजन यही है कि पारेषण प्रणाली प्रयोक्ताओं के बीच पारेषण लागत का बंटवारा पारेषण प्रणाली उपयोग के आधार पर हो सके। सभी द्वारा उपयोग किए जाने के बाद 'उपयोगिता' घटक द्वारा विश्वसनीयता का यथासमय लाभ लिया जाना चाहिए। न्यूनतम और अधिकता पारेषण दरों के बीच अंतर इस प्रकार होना चाहिए कि वह नियोजित विकास/पारेषण प्रणाली के विस्तार को प्रभावित न करे बल्कि गैर-इष्टतम पारेषण निवेश को हतोत्साहित करे।

(4) एनईपी द्वारा निर्धारित दृष्टिकोण को ध्यान में रखते हुए नेटवर्क विस्तार के लिए लाभार्थियों के साथ पूर्व करार पूर्ण शर्त नहीं होनी चाहिए। सीटीयू/एसटीयू को नेटवर्क का विस्तार स्टैकहोल्डरों के साथ परामर्श करके और राष्ट्रीय विद्युत योजना के अनुसार आवश्यकता का पता लगाने के पश्चात और उचित नियामक अनुमोदनों के पश्चात् कार्य आरंभ करने के बाद करना चाहिए। ग्रिड के सुचारु प्रचालन के लिए, पारेषण प्रणाली को उत्पादन से पहले विकसित करने के लिए प्रयास किए जाने चाहिए।

(5) केन्द्रीय आयोग ने पूंजी एवं प्रचालन संबंधी लागत के लिए मानदंड विनिर्दिष्ट किए हैं तथा अंतर-राज्यीय पारेषण लाइसेंसियों के लिए कार्य निष्पादन मानक निर्धारित किए हैं। टैरिफ निर्धारण और कार्य निष्पादन के मानकों का अनुपालन समय-समय पर यथासंशोधित इन मानदंडों के अनुसार किया जाएगा।

(6) सीटीयू/एसटीयू सहित पारेषण विकासकर्ता द्वारा निवेश केंद्र सरकार द्वारा समय-समय पर जारी किए गए दिशा-निर्देशों के अनुसार प्रतिस्पर्द्धी बोली के जरिए आमंत्रित किया जाएगा।

(7) सभी भावी अंतर-राज्यीय पारेषण परियोजनाएं, सामान्यतः प्रतिस्पर्द्धी बोली प्रक्रिया के माध्यम से विकसित की जाएगी, तथापि, केंद्र सरकार (क) नीतिगत महत्व, तकनीकी उन्नयन इत्यादि विशेष श्रेणी की परियोजनाओं अथवा (ख) मामला दर मामला आधार पर अत्यावश्यक स्थिति का प्रबंध करने के लिए किए जाने वाले आवश्यक कार्य के लिए, प्रतिस्पर्द्धी बोली से छूट प्रदान कर सकती है।

(8) सीईआरसी ने अंतरराज्य पारेषण के लिए फ्रेमवर्क संबंधी विनियम विनिर्दिष्ट किया है। अंतःराज्य पारेषण के लिए एसईआरसी द्वारा वोल्टेज, दूरी, दिशा व प्रवाह परिमाण आदि जैसे कारकों पर भली भांति विचार करते हुए इसी प्रकार का दृष्टिकोण कार्यान्वित किया जाए।



(9) प्रस्तावित पारेषण टैरिफ ढांचे की जरूरतों के मुताबिक मीटरिंग को प्राथमिकता आधार पर पूरा किया जाए। मीटरिंग एबीटी जरूरतों के अनुकूल होनी चाहिए, इससे टाइम ऑफ डे (टीओडी) टैरिफ का कार्यान्वयन भी आसान होगा।

### 7.2 पारेषण हानि आबंटन

(1) पारेषण प्रणाली संबंधी संगत वोल्टेज स्तर पर दूरी एवं दिशागत संवेदनशीलता पर उपयुक्त रूप से विचार करने के पश्चात् औसत हानियों के आधार पर यथायोग्य लेन-देन प्रभारित किए जा रहे हैं। अंतरराज्यीय पारेषण के लिए सीईआरसी द्वारा इस बारे में निर्धारित कार्यप्रणाली के आधार पर एसईआरसी अंतःराज्य पारेषण के लिए इसी प्रकार का फ्रेमवर्क तैयार कर सकता है।

लॉस फ्रेमवर्क में यह सुनिश्चित किया जाना चाहिए कि हानि संबंधी मुआवजा युक्तिसंगत हो और प्रयोज्य तकनीकी हानि बेंचमार्क से संबद्ध हो। यह बेंचमार्क उपयुक्त आयोग द्वारा सीईए की सलाह पर विचार करते हुए तय किया जा सकता है।

(2) यह वांछनीय होगा कि वृद्धिशील हानियों के आधार पर हानि क्षतिपूर्ति प्रणाली की ओर अग्रसर हुआ जाए क्योंकि पारेषण क्षमताओं में वर्तमान कमियां नेटवर्क विस्तार से पूरी की जाती हैं। उपयुक्त आयोग को नेटवर्क विन्यास के लिए पारेषण हानि की अनुमत स्तर को स्थापित करने के लिए आवश्यक अध्ययनों को करना अपेक्षित है तथा पारेषण प्रणाली का संवर्द्धन करना एवं प्रणाली हानियों में कमी लाने के लिए पूंजीगत व्यय की आवश्यकता होती है। चूंकि लाइन लोडिंग के एक स्तर से अतिरिक्त प्रवाह हानियां अत्यधिक रूप से बढ़ जाती हैं, इसलिए ओवरलोडिंग की स्थिति से बचने के लिए सीटीयू/एसटीयू को पारेषण प्रणालियों के उन्नयन को सुनिश्चित करना चाहिए। उपयुक्त आयोग को पारेषण प्रणाली के उन्नयन के लिए नई परिसंपत्तियों में पर्याप्त पूंजी निवेशों को अनुमति प्रदान करनी चाहिए।

### 7.3 पारेषण में अन्य मामले

(1) सीटीयू तथा एसटीयू के लिए इन संगठनों हेतु "की परफॉर्मेंस इंडीकेटर्स" (केपीआई) के अनुसार वित्तीय प्रोत्साहन व अप्रोत्साहन लागू किए जाने चाहिए। ऐसे केपीआई में कुशल नेटवर्क निर्माण, प्रणालीगत उपलब्धता व हानि में कमी शामिल होगी।

(2) सीटीयू/एसटीयू तथा भार प्रेषण केंद्रों द्वारा भावी प्रयोक्ताओं के साथ सभी उपलब्ध सूचना, विशेषतया उपलब्ध पारेषण क्षमता व भार प्रवाह अध्ययन संबंधी सूचना को साझा किया जाना चाहिए।

(3) असाधारण परिस्थितियों, जिनमें ऊर्जा सुरक्षा, सार्वजनिक व्यवस्था अथवा प्राकृतिक आपदा सहित राज्य की सुरक्षा के लिए खतरा शामिल है, यदि केंद्र सरकार केंद्रीय उत्पादन स्टेशनों के अनावंटित हिस्से से विद्युत का आवंटन करती है अथवा अन्यथा विद्युत के ऐसे आवंटन को लघु अवधि, मध्यावधि और दीर्घकालिक पहुंच के क्रम में प्राथमिकता दी जाएगी।

### 7.4 सहायक सेवाएं

(1) केंद्रीय आयोग, प्रभारों के बंटवारे की पद्धति, विद्युत की गुणवत्ता, विश्वसनीयता और ग्रिड की सुरक्षा का रख-रखाव करने के लिए विद्युत प्रणाली अथवा ग्रिड प्रचालन के सहायक के रूप में आवश्यक सहायक सेवा हेतु मानक और ढांचे को शुरू करें।

(2) केंद्रीय आयोग सहायक सेवाओं के लिए मानक विनिर्दिष्ट करते समय केंद्रीय विद्युत प्राधिकरण, एसईआरसी/जेईआरसी, सीटीयू/एसटीयू और एनएलडीसी/आरएलडीसी/एसएलडीसी से भी परामर्श करेगा।

(3) राज्य आयोग, केंद्रीय आयोग द्वारा विनिर्दिष्ट सहायक सेवाओं के लिए मानक और ढांचा भी अपनाएगा।

### 8.0 वितरण



कुशल तरीके से तथा युक्तिसंगत दरों पर विनिर्दिष्ट मानकों के मुताबिक विश्वसनीय एवं गुणवत्ता वाली बिजली की आपूर्ति राष्ट्रीय विद्युत नीति के मुख्य उद्देश्यों में से एक उद्देश्य है। राज्य आयोग को सभी उपभोक्ताओं के लिए सेवा की गुणवत्ता, निरंतरता एवं विश्वसनीयता के संबंध में लाइसेंसियों के निष्पादन-मानक निर्धारित एवं अधिसूचित करने चाहिए। यह आवश्यक है कि विनियामक मंच सेवा मानकों संबंधी मूल ढाँचा निर्धारित करे। यथाशीघ्र सेवा के अपेक्षित स्तर तक पहुंचने के लिए लाइसेंसियों को एक उपयुक्त ट्रांजिशन फ्रेमवर्क उपलब्ध कराया जा सकता है। उक्त मानकों का पालन नहीं करने पर अधिनियम की धारा 57 के अनुसार लाइसेंसियों पर दंड लगाए जा सकते हैं।

उद्योग के वितरण क्षेत्र को कुशल एवं समृद्ध बनाने हेतु विद्युत क्षेत्र में सुधार तथा विनिर्दिष्ट मानकों के अनुसार सेवा का प्रावधान सफलता की कुंजी है। यह जरूरी है कि विनियामक आयोग वितरण लाइसेंसियों की वाणिज्यिक व्यवहार्यता की आवश्यकताओं तथा उपभोक्ता हितों के बीच संतुलन सुनिश्चित करे। हानि वाली यूटिलिटियों को लाभ वाली यूटिलिटियों, जो अपनी पूर्ण विकास क्षमता को हासिल करने के लिए भारत को सक्षम बनाने हेतु अंतरराष्ट्रीय मानकों की सेवाएं उपलब्ध कराने के लिए पूंजीगत बाजारों से आवश्यक संसाधन जुटा सकती हैं, में बदलने की आवश्यकता है। प्रचालनगत क्षमता को प्रोत्साहित किया जाए। नियामक प्राचलों के संदर्भ में दक्ष प्रचालनों के लाभ उपभोक्ताओं और लाइसेंसियों के बीच उपयुक्त ढंग से साझा किए जाएं।

उपयुक्त आयोग द्वारा वितरण लाइसेंसी के लिए प्रत्येक वर्ष भार का पूर्वानुमान लगाने और भार को पूरा करने के लिए अपनी संक्षिप्त, मध्यावधि एवं दीर्घावधि विद्युत प्रापण योजनाएं आयोग के समक्ष प्रस्तुत करना अनिवार्य किया जाना चाहिए।

राज्य विनियामक आयोग एक विशिष्ट ट्रेजेक्टरी तैयार करेगा ताकि राज्य में विद्यमान परिस्थिति पर निर्भर करते हुए वर्ष 2021-22 तक अथवा उससे पूर्व सभी वर्ग के उपभोक्ताओं को 24 घंटे पर्याप्त और निर्बाधित विद्युत की आपूर्ति सुनिश्चित की जा सके।

ऐसे क्षेत्रों में, जहां ग्रिड नहीं पहुंची है या ग्रिड में पर्याप्त विद्युत उपलब्ध नहीं है, नवीकरणीय ऊर्जा की आपूर्ति करने वाले माइक्रो-ग्रिड्स स्थापित किए जा रहे हैं। ऐसे माइक्रो-ग्रिड्स स्थापित करने में लगने वाला निवेश बहुत अधिक होता है। परियोजना के जीवन काल के पूरा होने से पहले ग्रिड का क्षेत्र में पहुंच जाना निवेश के जोखिमों में से एक है और जिससे माइक्रोग्रिड्स से विद्युत बनाना महंगा और अव्यवहार्य है। माइक्रो-ग्रिड में ऐसे जोखिम को कम करने के लिए और माइक्रो-ग्रिड्स में निवेश को प्रोत्साहित करने के लिए उपयुक्त आयोग द्वारा यथानुमोदित निवेशों की अवमूल्ययित लागतों तथा उद्योग बेंचमार्क और एक सीमा, यदि आवश्यक हो, पर विचार करते हुए अधिनियम की धारा 62 के अंतर्गत निर्धारित किए जाने वाले टैरिफ पर ऐसे माइक्रो-ग्रिड से ग्रिड में विद्युत की अनिवार्य खरीद को अधिदेशित करने के लिए उपयुक्त विनियामक संरचना बनाए जाने की आवश्यकता है। इस संबंध में उपयुक्त आयोग छः माह के भीतर आवश्यक विनियम अधिसूचित करेगा।

### 8.1 बहुवर्षीय टैरिफ (एमवाईटी) ढांचे का कार्यान्वयन

(1) एमवाईटी ढांचा यूटिलिटियों और उपभोक्ताओं का जोखिम कम करेगा, क्षमता में सुधार होगा तथा प्रणालीगत हानियों में कमी आएगी और निवेश आकर्षित करेगा। इससे विद्युत खरीद कीमतों और मुद्रास्फीति सूचकांकों के जात सूचकों में टैरिफ समायोजन को सीमित करके समग्र रूप से उपभोक्ता टैरिफ के संबंध में व्यापक अनुमान तैयार हो सकेंगे। यह ढांचा सरकारी तथा निजी दोनों यूटिलिटियों पर लागू होगा।

(2) राज्य आयोग समग्र एमवाईटी ढांचे के भाग के रूप में उपभोक्ताओं के साथ अधिक लाभ और हानियों को साझा करने का तंत्र शुरू करे। पहली नियंत्रण अवधि में यूटिलिटियों के लिए प्रोत्साहन, यूटिलिटी द्वारा वहन की जाने वाली हानियों की प्रतिशतता की अपेक्षा निर्धारित उच्च स्तर पर यूटिलिटी द्वारा रखे जा रहे अधिक लाभ की प्रतिशतता के साथ असंयमित की जाए। निष्पादन में त्वरित सुधार करने और हानियों में कमी के लिए यह जरूरी है और दीर्घकाल में टैरिफ में कमी के जरिए इससे उपभोक्ताओं के हितों की रक्षा हो सकेगी।





- (3) जैसा कि पैरा 5.11 (ज) में इंगित है। आरंभिक नियंत्रण अवधि में कार्यान्वित किया गया एमवाईटी ढांचा पूरी की जा रही मीटरिंग के परिणामस्वरूप बेसलाइनों में होने वाले परिवर्तनों का समायोजन करने के लिए पर्याप्त रूप से लचीला होना चाहिए।
- (4) यदि प्रतिस्पर्धात्मक दशाओं में आवश्यक हो तो लाइसेंसियों के पास राज्य आयोग द्वारा अनुमोदित टैरिफ से कम टैरिफ वसूलने की नम्यता हो सकती है, बशर्ते वे अधिनियम की धारा 62 के अनुसार इसके कारण अतिरिक्त राजस्व की आवश्यकता के लिए दावा न करें।
- (5) नियंत्रण अवधि के आरंभ में, जब "वास्तविक" लागत भावी अनुमानों के लिए आधार तैयार करती हो, अपेक्षित टैरिफ और इस समय लागू टैरिफों के बीच लार्ज अन्कवर्ड गैप हो सकता है। इस अंतराल को टैरिफ शुल्कों और वैकल्पिक साधनों के माध्यम से पूरा किया जाना चाहिए जिसमें अन्य बातों के साथ-साथ वित्तीय पुनर्गठन और ट्रांजिशन फाइनेंसिंग शामिल है।
- (6) वर्तमान लाइसेंसधारियों के पास उस क्षेत्र के लिए पृथक राजस्व आवश्यकताओं और टैरिफ फाइल करने का विकल्प होना चाहिए जहाँ राज्य आयोग ने राष्ट्रीय विद्युत नीति के पैरा 5.4.7 के साथ पठित अधिनियम की धारा 14 के प्रावधानों के अनुसरण में बहुवितरण लाइसेंस जारी किए हैं।
- (7) उपयुक्त आयोगों को लाइसेंसधारियों द्वारा समय पर फाइल न किए जाने की स्थिति में स्वतः आधार पर टैरिफ निर्धारण और विनियामक जांच शुरू करनी चाहिए। यह वांछनीय है कि अपेक्षित टैरिफ परिवर्तन प्रत्येक वित्तीय वर्ष के आरंभ की तारीख से प्रभावी हों और फाइलिंग में विलम्ब के कारण होने वाला कोई अंतर लाइसेंसधारियों के कारण होना चाहिए।

## 8.2 राजस्व आवश्यकताओं और लागतों हेतु ढांचा

### 8.2.1 टैरिफ निर्धारण में निम्नलिखित तथ्यों पर ध्यान दिया जाना आवश्यक है-

- (1) सभी विद्युत क्रय लागतों का वैध समझा जाना आवश्यक है जब तक कि यह प्रमाणित न हो जाए कि मेरिट आदेश सिद्धांत का उल्लंघन किया गया है अथवा अनुचित दरों पर विद्युत का क्रय किया गया है। सकल तकनीकी एवं वाणिज्यिक (एटीएंडसी) हानियों को प्रकट किए जाने की आवश्यकता है, किन्तु 24 घंटे की आपूर्ति के लिए विद्युत क्रय और आवश्यक एवं उचित ओ एंड एम तथा प्रणाली उन्नयन हेतु निवेश के लिए अपेक्षित राजस्व को अस्वीकार किए बिना। विशेष रूप से उन उपभोक्ताओं को, जो ऐसी टैरिफ का भुगतान करने के लिए तैयार हैं जो दक्ष लागतें दर्शाते हैं, को गुणवत्तापरक विद्युत की चौबीस घण्टे निर्बाध आपूर्ति पाने का अधिकार है। एम वाई टी ट्रेजेक्टरी में इंगित टी एंड डी हानियों के नियामक स्तर के अनुसार कुल फुटकर बिक्री का वास्तविक आकलन करना चाहिए ताकि उचित विद्युत खरीद अनुपात अंतर (उदाहरणार्थ, कम बारिश होने की स्थिति में ताप विद्युत उत्पादन से और अधिक ऊर्जा खरीदी जा सकती है) की शर्त पर एसईआरसी के विनियमों के अनुसार विद्युत खरीद की लागत तथा ईंधन अधिभार समायोजन को अनुमति दी जा सके।
- (2) प्राप्त किए जाने योग्य ट्रेजेक्टरी को किसी एमवाईटी ढांचे में रिटर्न से जोड़कर एटीएंडसी हानि कमी को प्रोत्साहित किया जाना चाहिए। व्यापक पारदर्शिता और उपभोक्ता समूहों का पोषण प्रभावकारी होगा। सरकारी स्वामित्व वाली यूटिलिटियों के संबंध में एटीएंडसी हानि में कमी लाने के लिए शासन प्रणाली में सुधार करना राज्य विद्युत नियामक आयोगों के लिए एक बहुत ही कठिन कार्य एवं गंभीर चुनौती होगी। पूरी लागतों को सम्मिलित करने का लक्ष्य रखने वाले विभिन्न एटीएंडसी हानि स्तरों से सम्बद्ध आगामी वर्षों में उपभोक्ता टैरिफों के विभिन्न स्तरों के साथ एमवाईटी व्यवस्था चोरी को कम करने के लिए प्रभावी कार्यवाही हेतु अपेक्षित राजनीतिक इच्छा का सृजन कर सकता है क्योंकि इसका विकल्प टैरिफ में अधिक वृद्धि होगा। विभिन्न क्षेत्रों/इलाकों के ऊर्जा लेखा परीक्षाओं की तृतीय पक्ष जांच का इस्तेमाल एटीएंडसी हानि के उच्च





स्तरों हेतु क्षेत्र/इलाकों में विशिष्ट अधिभार लगाने के लिए किया जा सकता है और इससे बेहतर शासन प्रणाली के लिए प्रभावी कार्यवाही हेतु स्थानीय सहमति का सृजन हो सकता है। राज्य विद्युत विनियामक आयोग हानियों में कमी से सम्बद्ध यूटिलिटियों के स्टाफ के लिए उपयुक्त स्थानीय क्षेत्र आधारित प्रोत्साहन एवं अप्रोत्साहन योजना को भी प्रोत्साहित कर सकते हैं।

एसईआरसी, लाइसेंसी के प्रत्येक वितरण सर्किल के संबंध में विभिन्न पैरामीटरों हेतु बेस लाईन आंकड़ों का स्वतंत्र मूल्यांकन करेगा।

एसईआरसी, लाइसेंसियों द्वारा प्रस्तुत वित्तीय और तकनीकी आंकड़ों की स्वतंत्र जांच की एक प्रणाली भी स्थापित करेगा।

चूंकि मीटरिंग वितरण नेटवर्क में उपयुक्त स्तर तक पूरी हो चुकी है इसलिए तकनीकी हानियों को पृथक करना संभव होना चाहिए। तदनुसार, एमवाईटी ढांचे के अंतर्गत तकनीकी हानि कमी को वाणिज्यिक हानि कमी से अलग समझा जाना चाहिए जिसके लिए अलग दृष्टिकोण अपेक्षित होता है।

(3) अधिनियम की धारा 65 प्रावधान करती है कि राज्य आयोग द्वारा निर्धारित किए गए टैरिफ में उपभोक्ताओं को सब्सिडी प्रदान करने के संबंध में राज्य सरकार का कोई निर्देश प्रभावी नहीं होगा यदि राज्य आयोग द्वारा निर्धारित सब्सिडी का भुगतान यूटिलिटियों को नहीं किया जाता है और राज्य आयोग द्वारा निर्धारित टैरिफ इस संबंध में आयोग द्वारा जारी किए गए आदेशों की तारीख से लागू होगा। राज्य आयोगों को यूटिलिटियों की वित्तीय व्यवहार्यता सुनिश्चित करने के लिए कानून के इस प्रावधान के अनुपालन को सुनिश्चित करना चाहिए। कानून के इस प्रावधान के कार्यान्वयन को सुनिश्चित करने के लिए, राज्य आयोग को राज्य सरकार द्वारा सब्सिडी प्रतिबद्धता पर विचार किए बिना आरंभ में टैरिफ निर्धारण करना चाहिए और उपभोक्ताओं की संबंधित श्रेणियों के लिए राज्य सरकार द्वारा सब्सिडी पर विचार करने के पश्चात् सब्सिडी प्राप्त टैरिफ का निर्धारण किया जाएगा।

(4) यूटिलिटियों द्वारा सामना किए जा रहे ट्रांजिशन मामलों जैसे कि बिलों की वसूली में प्रगामी सुधार आदि की पर्याप्त रूप से पहचान करते हुए कार्यशील पूंजी की अनुमति दी जानी चाहिए। इबंत ऋणों को विकसित नीतियों के अनुसार तथा राज्य आयोग के अनुमोदन के अध्यक्षीन माना जाना चाहिए।

(5) पिछली हानियों अथवा लाभों के पास-थ्रू की अनुमति गैर-नियंत्रणीय कारकों की सीमा तक दी जानी चाहिए। संक्रमणकालीन अवधि के दौरान नियंत्रणीय कारक एमवाईटी ढांचे के अंतर्गत निर्धारित अनुपातों में यूटिलिटियों और उपभोक्ताओं के लिए माना जाना चाहिए।

(6) आकस्मिक संचय राज्य आयोग द्वारा विनियमों के माध्यम से विनिर्दिष्ट आकस्मिक दशाओं की स्थिति में ही केवल राज्य आयोग के पूर्व अनुमोदन के साथ बनाए जाने चाहिए। विकासात्मक संचय और टैरिफ एवं लाभांश नियंत्रण संचय बनाने की वर्तमान पद्धतियों को समाप्त किया जाना चाहिए।

(7) अधिनियम की धारा 61 में यह अनिवार्य है कि उपयुक्त आयोग, टैरिफ निर्धारित करते समय, न केवल उपभोक्ताओं के हितों की रक्षा सुनिश्चित करेगा बल्कि यथोचित ढंग से विद्युत की लागत की वसूली भी सुनिश्चित करेगा। अधिनियम की धारा 62 में ईंधन मूल्य में अंतर, जो विनिर्दिष्ट किया जाए, को पूरा करने के लिए वर्ष के दौरान आवधिक टैरिफ समायोजन की व्यवस्था भी है।

इसलिए, उपयुक्त आयोग को उत्पादन कंपनी और लाइसेंसी की सभी तर्कसंगत लागतों की वसूली के लिए मासिक/त्रैमासिक आधार पर ईंधन के मूल्य, विद्युत क्रय आदि में भिन्नता के कारण उत्पन्न होने वाली लागतों की वसूली के लिए उपयुक्त मूल्य समायोजन फॉर्मूला विनिर्दिष्ट करना चाहिए।





8.2.2 विशेष वर्ष में टैरिफ प्रभाव को सीमित करने के लिए गत समय में विनियामक परिसम्पत्ति की सुविधा को कुछ विनियामक आयोगों द्वारा अपनाया गया है। यह केवल प्राकृतिक आपदा अथवा अप्रत्याशित घटनाओं के मामले में बहुत ही अपवाद के रूप में ही किया जाना चाहिए और निम्नलिखित के अध्यक्षीन होना चाहिए:

क. सामान्य परिस्थितियों में व्यापार के अंतर्गत, किसी विनियामक परिसंपत्ति के सृजन की अनुमति नहीं दी जाएगी।

ख. विनियामक परिसंपत्तियों की वहन लागत सहित बकाया विनियामक परिसम्पत्तियों की वसूली समयबद्ध होनी चाहिए और अधिकतम सात वर्षों की अवधि के भीतर होनी चाहिए। राज्य आयोग इसके लिए ट्रेजेक्टरी विनिर्दिष्ट कर सकता है।

### 8.3 टैरिफ डिजाइन: टैरिफ को सेवा लागत से जोड़ा जाना

यह व्यापक रूप से विदित है कि विद्युत का यौक्तिक एवं आर्थिक मूल्य निर्धारण ऊर्जा संरक्षण और भू-जल संसाधनों के स्थिर प्रयोग हेतु प्रमुख उपायों में से एक हो सकता है।

अधिनियम की धारा 61 (छ) की शर्तों के अनुसार उपयुक्त आयोग इस उद्देश्य से दिशानिर्देशित होगा कि टैरिफ विद्युत की आपूर्ति की दक्ष एवं विवेकशील लागत को प्रगामी रूप से प्रदर्शित करे।

राज्य सरकारें अधिनियम की धारा 65 के प्रावधानों के अनुसार उपयुक्त मानी गई सीमा तक सब्सिडी दे सकती हैं। प्रत्यक्ष सब्सिडी, सभी को टैरिफ में क्रॉस सब्सिडी के तंत्र की अपेक्षा उपभोक्ताओं की गरीब श्रेणियों को सहायता देने के लिए बेहतर तरीका है। सब्सिडियों को प्रभावी रूप से और पारदर्शक रूप में लक्षित किया जाना चाहिए। क्रॉस-सब्सिडियों के विकल्प के रूप में, राज्य सरकार के पास विद्युत शुल्क प्रणाली के माध्यम से संसाधन जुटाने और केवल जरूरतमंद उपभोक्ताओं को प्रत्यक्ष सब्सिडियों का लाभ प्रदान करने का एक विकल्प विद्यमान है, सब्सिडी का प्रभावी रूप से लक्ष्य बनाने का यह बेहतर तरीका है।

तदनुसार निम्नलिखित सिद्धांत अपनाए जाएंगे:

1. राष्ट्रीय विद्युत नीति में निर्धारित अनुसार, गरीबी रेखा से नीचे के उपभोक्ता, विनिर्दिष्ट स्तर से नीचे उपभोग करते हैं, को क्रॉस सब्सिडी के माध्यम से विशेष सहायता प्राप्त हो सकती है। उपभोक्ताओं के ऐसे नामित समूह के लिए टैरिफ, आपूर्ति की औसत लागत का कम से कम 50 प्रतिशत होगी।
2. विद्युत आपूर्ति की लागत को टैरिफ द्वारा प्रगामी रूप से प्रदर्शित करने के लक्ष्य को प्राप्त करने के लिए, उपयुक्त आयोग रोडमैप इस प्रकार अधिसूचित करेगा कि टैरिफ, आपूर्ति की औसत लागत के  $\pm 20\%$  के भीतर हो। क्रॉस सब्सिडी में क्रमिक कमी के दृष्टिकोण के आधार पर रोड मैप में मध्यवर्ती लक्ष्य भी होंगे।
3. कृषि उपयोग हेतु टैरिफ निर्धारित करते समय, स्थायी तरीके से भू-जल संसाधनों के प्रयोग की आवश्यकता के अनिवार्यता को भी आपूर्ति की औसत लागत के अतिरिक्त ध्यान में रखना होगा। कृषि उपयोग हेतु टैरिफ भू-जल की अत्यधिक हानि को रोकने के लिए भू-जल तालिका की स्थिति के आधार पर राज्य के विभिन्न भागों के लिए विभिन्न स्तरों पर निर्धारित की जा सकती है। अधिनियम की धारा 62 (3) प्रबंध करती है कि किसी क्षेत्र की भौगोलिक स्थिति टैरिफ अंतर के लिए एक मानदंड हो सकती है। उस क्षेत्र के गरीब किसानों को सहायता देने के लिए सब्सिडी के अधिकतम स्तर का विचार किया जा सकता है जहाँ भू-जल स्तरों की देखरेख और सतत भू-जल प्रयोग को सुनिश्चित करने के लिए उचित प्रतिबंधों के अधीन सिंचाई उद्देश्यों हेतु विद्युत की बड़ी मात्रा की आवश्यकता होती है।
4. उपभोक्ताओं की विभिन्न श्रेणियों के लिए सब्सिडी की सीमा विभिन्न संबंधित पहलुओं को ध्यान में रखते हुए राज्य सरकार द्वारा निर्धारित की जा सकती है। किन्तु निशुल्क विद्युत का प्रावधान वांछनीय नहीं है क्योंकि यह विद्युत के व्यर्थ उपभोग को प्रोत्साहित करता है। इसके अलावा बहुत से मामलों में जल तालिका



में कमी होती है जिससे आने वाली पीढ़ियों के लिए सिंचाई और पीने के पानी की कमी की परिहार्य समस्या पैदा होती है। इससे विद्युत की मांग में तीव्र वृद्धि होने की भी संभावना है जिससे वितरण नेटवर्क पर काफी दबाव पड़ता है और इस प्रकार विद्युत की आपूर्ति की गुणवत्ता पर प्रतिकूल प्रभाव पड़ता है। अतः यह आवश्यक है कि उचित स्तर के प्रयोक्ता प्रभार लगाए जाएं। विद्युत की सब्सिडी प्राप्त दरों को उपभोग की पूर्व-निर्धारित सीमा तक ही अनुमति दी जानी चाहिए जिसके बाद उपभोक्ताओं से सेवा की दक्ष लागत को दर्शाने वाला टैरिफ वसूल किया जाना चाहिए। यदि राज्य सरकार उपभोक्ताओं की गरीब श्रेणी को विद्युत की लागत का कुछ भाग ही प्रतिपूर्ति के रूप में देना चाहती है तो इस राशि को नकद अथवा किसी अन्य उपयुक्त तरीके से दिया जा सकता है। उपभोक्ताओं को सब्सिडी का यह अंतरण पूर्व-भुगतान मीटर के प्रयोग से भी सुगम हो सकता है।

5. कृषि/ग्रामीण उपभोक्ताओं के संबंध में आपूर्ति की मीटरिंग पंचायत संस्थानों, प्रयोगकर्ता संगठनों, सहकारी समितियों आदि की भागेदारी से फ्रैंचाइजियों के साथ वाणिज्यिक व्यवस्था के माध्यम से ग्रामीण क्षेत्रों में स्थानीय वितरण के प्रबन्धन द्वारा प्रभावी तरीके से तथा उपभोक्ता की सुविधानुसार प्राप्त की जा सकती है। सीमित प्रयोग उपभोक्ताओं, जो सब्सिडी प्राप्त विद्युत के लिए पात्र हैं, के मामलों में मीटरिंग हेतु किफायती विकल्प के रूप में स्मार्ट मीटरों को प्रोत्साहित किया जा सकता है।

#### 8.4 टैरिफ घटकों की परिभाषा और उनको लागू करना

1) अलग-अलग स्थायी और परिवर्तनीय शुल्कों तथा समय अंतराल वाले टैरिफ की विशेषता वाले द्विभागीय टैरिफों को बड़े उपभोक्ताओं (अर्थात् 1 मेगावाट से अधिक की मांग वाले उपभोक्ता) के लिए प्राथमिक रूप से एक वर्ष के भीतर शुरू किया जाएगा और बाद में सभी उपभोक्ताओं के लिए पाँच वर्षों की अवधि के भीतर अथवा इस प्रकार की अवधि जो विनिर्दिष्ट की जा सकती है, शुरू किया जाएगा। इससे व्यस्ततम मांग को पूरा करने और विभिन्न ऊर्जा संरक्षण उपायों को कार्यान्वित करने में भी मदद मिलेगी।

2) राष्ट्रीय विद्युत नीति में उल्लेख है कि उत्पादन कंपनियों के साथ हुए विद्यमान पीपीए को उत्तराधिकारी वितरण कंपनियों को उपयुक्त रूप से सौंपे जाने की आवश्यकता होगी। राज्य सरकारें वितरण कंपनियों की विभिन्न लोड प्रोफाइलों को ध्यान में रखते हुए ऐसी व्यवस्था कर सकती है ताकि उपभोक्ताओं की विभिन्न श्रेणियों के लिए राज्य में रिटेल टैरिफ एकसमान रहें। इसके पश्चात् रिटेल टैरिफ, प्रतिस्पर्द्धी लागतों पर विद्युत का प्रापण करने, चोरी को नियंत्रित करने और अन्य वितरण हानियों को कम करने में वितरण कंपनियों की सापेक्ष दक्षता को प्रदर्शित करेगा।

3) उपयुक्त आयोग विशेषरूप से उपभोक्ताओं की उन श्रेणियों, जो बड़े पैमाने पर बिना मीटर के हैं, के लिए मीटर टैरिफ आधारित मीटरिंग और बिलिंग को बढ़ावा देने के लिए प्रोत्साहन दे सकता है। मीटरिंग टैरिफ और प्रोत्साहनों का व्यापक प्रचार किया जाना चाहिए। स्मार्ट मीटरों से दूरस्थ मीटरिंग और बिलिंग, व्यस्ततम और गैर-व्यस्ततम टैरिफ का कार्यान्वयन तथा मांग प्रतिक्रिया के माध्यम से मांग पक्ष प्रबंधन में लाभ होता है। यह भविष्य में, पवन और सौर विद्युत जैसे उत्पादन की मध्यवर्ती किस्मों की वृद्धि के कारण भार-उत्पादन संतुलन के लिए आवश्यक होगा।

इसलिए, उपयुक्त आयोग निम्नलिखित के लिए स्मार्ट मीटर अधिदेशित करता है:

- (क) यथाशीघ्र किंतु 31.12.2017 से पहले 500 यूनिट अथवा इससे अधिक की मासिक खपत वाले उपभोक्ता;
- (ख) 31.12.2019 तक 200 यूनिट से अधिक की मासिक खपत वाले उपभोक्ता।

इसके अतिरिक्त, सभी प्रोस्यूरर्स को टू-वे स्मार्ट मीटर उपलब्ध कराए जाएंगे जो ग्रिड को वापस बिजली बेच सकते हैं जब उन्हें इसकी आवश्यकता है।





वितरण क्षेत्र में ऊर्जा लेखा परीक्षा को सक्षम बनाने के लिए, वितरण प्रणाली में, सभी वितरण कंपनियां 132 केवी स्तर के ट्रांसफार्मरों से 11 केवी स्तर तक के वितरण ट्रांसफार्मरों के लिए तथा इसके अतिरिक्त प्रत्येक उपभोक्ता तक संपूर्ण चैन में अपनी विद्युत प्रणाली में स्मार्ट मीटर सुनिश्चित करेगी। इसके अतिरिक्त, बिजली की चोरी रोकने के लिए, वितरण कंपनियों के पास वितरण प्रबंधन की प्रणाली और ऊर्जा लेखा परीक्षा कार्य वाली वितरण स्काडा जैसी सक्षम विशेषताएं होनी चाहिए। एसईआरसी इसे दो वर्षों के भीतर लागू करना अनिवार्य करेगा।

4) राज्य विद्युत विनियामक आयोग वितरण लाइसेंसी द्वारा वसूल किए जाने वाले कनेक्शन प्रभारों को पर्याप्त रूप से विनियमित भी कर सकती है ताकि यह सुनिश्चित किया जा सके कि दूसरा वितरण लाइसेंसी अनुचित कनेक्शन प्रभारों की मांग द्वारा चैरी पिकिंग का सहारा न ले। दूसरे लाइसेंसी का कनेक्शन शुल्क वर्तमान लाइसेंसी द्वारा देय शुल्क से अधिक नहीं होना चाहिए।

#### 8.5 खुली पहुंच के लिए क्रॉस सब्सिडी अधिभार एवं अतिरिक्त अधिभार

8.5.1 राष्ट्रीय विद्युत नीति में निर्धारित है कि क्रॉस सब्सिडी अधिभार और खुली पहुंच की अनुमति वाले उपभोक्ताओं से वसूल किया जाने वाला अतिरिक्त अधिभार इतना अधिक नहीं होना चाहिए कि वह प्रतिस्पर्धा को समाप्त कर दे जो कि उत्पादन और खुली पहुंच के माध्यम से उपभोक्ताओं को विद्युत की प्रत्यक्ष आपूर्ति के लिए विकसित की जानी है।

उपभोक्ता, जिसे खुली पहुंच की अनुमति प्राप्त है, उत्पादनकर्ता को, पारेषण लाइसेंसधारक, जिसकी पारेषण प्रणालियां प्रयोग की जाती हैं, वितरण यूटिलिटी को क्रॉस सब्सिडी अधिभार के अतिरिक्त व्हीलिंग प्रभारों का भुगतान करना होगा। अतः क्रॉस सब्सिडी अधिभार का परिकलन इस प्रकार से करने की जरूरत है कि वितरण लाइसेंसी की क्षतिपूर्ति करते समय खुली पहुंच के जरिए प्रतिस्पर्धा लाने में बाधा नहीं आए। उपभोक्ता खुली पहुंच की सुविधा तभी लेगा जब सभी प्रभारों का भुगतान करने पर भी उसे लाभ प्राप्त हो। वितरण लाइसेंसी के हित संरक्षण की स्थिति में यह जरूरी होगा कि अधिनियम के प्रावधानों, जिसमें चरणबद्ध ढंग से खुली पहुंच को शुरू करने की अपेक्षा की गई है, को उपभोक्ताओं के व्यापक हित में प्रतिस्पर्धा हेतु उपयोग में लाया जाए।

एसईआरसी, विद्युत आपूर्ति की लागत की गणना उपभोक्ताओं की उस श्रेणी के लिए, वितरण लाइसेंसी द्वारा (क) नवीकरणीय क्रय दायित्व को पूरा करने सहित विद्युत क्रय की प्रति यूनिट भारित औसत लागत (ख) एसईआरसी द्वारा अनुमति प्राप्त संबंधित वोल्टेज स्तर और वाणिज्यिक हानियों के लिए लागू पारेषण और वितरण हानियां (ग) संबंधित वोल्टेज स्तर तक पारेषण, वितरण और व्हीलिंग प्रभार, और (घ) वहन विनियामक परिसंपत्तियों की प्रति यूनिट लागत, यदि लागू हो, के योग के रूप में कर सकता है।

#### सरचार्ज फार्मूला

$$S=T-[C/(1-L/100)+D+R]$$

जहां

S सरचार्ज है

T संबंधित उपभोक्ता श्रेणी द्वारा भुगतानयोग्य टैरिफ है जिसमें नवीकरणीय क्रय दायित्व दर्शाना शामिल है।

C लाइसेंसी द्वारा विद्युत क्रय की प्रति यूनिट भारित औसत लागत है जिसमें नवीकरणीय क्रय दायित्व पूरा करना शामिल है।

D संबंधित वोल्टेज स्तर के लिए लागू पारेषण, वितरण और व्हीलिंग चार्ज का योग है।

L संबंधित वोल्टेज स्तर के लिए लागू प्रतिशत के रूप में व्यक्त पारेषण, वितरण और वाणिज्यिक हानियों का योग है।





R वहन विनियामक परिसंपत्तियों की प्रति यूनिट लागत है।

उपरोक्त फार्मूला सभी वितरण लाइसेंसियों के लिए, विशेष रूप से, जहां विद्युत की कमी है, कार्य नहीं कर सकता, राज्य विनियामक आयोग विद्युत अधिनियम के समग्र उद्देश्यों को ध्यान में रखते हुए वितरण लाइसेंसी के क्षेत्र में विद्यमान विभिन्न परिस्थितियों को ध्यान में रखते हुए इसकी समीक्षा और इसमें परिवर्तन कर सकता है।

बशर्ते कि यह सरचार्ज खुली पहुँच प्राप्त करने वाले उपभोक्ताओं की श्रेणी के लिए लागू टैरिफ के 20% से अधिक नहीं होना चाहिए।

बशर्ते कि उपयुक्त आयोग, उपयुक्त सरकार के परामर्श से रेलवे, जैसा कि भारतीय रेलवे अधिनियम, 1989 में परिभाषित है, के डीमंड लाइसेंसी होने के कारण, इसकी अपनी खपत के लिए क्रय की गई विद्युत पर किसी क्रास सब्सिडी चार्ज की वसूली से छूट प्रदान करेगा।

8.5.2 विद्युत अधिनियम, 1948 (अब निरस्त) की धारा 43(ए)(1)(सी) के अंतर्गत सक्षम सरकार की सहमति के साथ विद्युत उत्पादन कंपनियों द्वारा बेची जा रही विद्युत पर और भारतीय विद्युत अधिनियम, 1910 (अब निरस्त) की धारा 27 के अंतर्गत राज्य सरकार की अनुमति के आधार पर जब तक कि यह अनुमति वैध है, वितरण लाइसेंसी द्वारा आपूर्ति की जा रही विद्युत पर किसी प्रभार का भुगतान करना अपेक्षित नहीं होगा।

8.5.3 अधिभार, वितरण लाइसेंसी, पारेषण लाइसेंसी, एसटीयू अथवा सीटीयू, जिसकी सुविधाएं विद्युत आपूर्ति के लिए उपयोग में लाई जा रही हैं, किसी के भी द्वारा एकत्रित किया जा सकता है। सभी मामलों में किसी विशेष उपभोक्ता से एकत्रित राशियां उस वितरण लाइसेंसी को दी जानी चाहिए जिसके क्षेत्र में उपभोक्ता स्थित है। एक ही क्षेत्र में आपूर्ति कर रहे दो लाइसेंसधारियों के मामले में उस लाइसेंसधारी को एकत्रित की गई राशियाँ दी जाएंगी जिससे उपभोक्ता आपूर्ति का लाभ उठा रहा है।

8.5.4 अधिनियम की धारा 42(4) के अनुसार आपूर्ति के दायित्व हेतु अतिरिक्त अधिभार केवल तभी लागू होना चाहिए जब अंतिम रूप से यह दर्शा दिया जाए कि विद्युत क्रय प्रतिबद्धताओं की दृष्टि से लाइसेंसी का दायित्व समाप्त हो गया है या हो रहा है या ऐसी संविदा के परिणामस्वरूप निर्धारित की गई लागतों को वहन करने की अपरिहार्य देयताएं और स्थिति मौजूद हैं। नेटवर्क परिसम्पत्तियों से संबंधित स्थायी लागतों को वहीलिंग प्रभारों के माध्यम से वसूल किया जाएगा।

8.5.5 वहीलिंग प्रभार अंतःराज्यीय पारेषण प्रभारों के लिए निर्धारित किए गए उन्हीं सिद्धांतों के आधार पर निर्धारित किए जाने चाहिए और इसके अलावा इसमें संबंधित वोल्टेज स्तर का औसतन हानि क्षतिपूर्ति शामिल होगा।

8.5.6 खुली पहुँच वाले उपभोक्ता को आपूर्तिकर्ता उत्पादक द्वारा कटौती किए जाने के मामले में लाइसेंसी द्वारा उस उपभोक्ता श्रेणी को, अस्थायी कनेक्शन के लिए उपयुक्त आयोग द्वारा यथानिर्धारित टैरिफ के भुगतान पर वैकल्पिक व्यवस्था की जाए। बशर्ते कि ऐसे प्रभार उस श्रेणी के सामान्य प्रभार के 125 प्रतिशत से ज्यादा नहीं होंगे।

## 9.0 व्यापार मार्जिन

अधिनियम में यह व्यवस्था है कि उपयुक्त आयोग जरूरत होने पर व्यापार मार्जिन तय करे। बाजार को प्रतिस्पर्धात्मक बनाने के लिए बिजली क्षेत्र में व्यापार को प्रोत्साहित करने की जरूरत है, यद्यपि उपयुक्त आयोग व्यापार लेन-देन की लगातार निगरानी करे और यह सुनिश्चित करे कि बिजली के व्यापारी बिजली कमी की स्थिति में अनुचित लाभ न उठाएं। इस उद्देश्य की पूर्ति हेतु व्यापार मार्जिन का निर्धारण जरूरी है।

ज्योति अरोरा, संयुक्त सचिव



## परिशिष्ट

जल विद्युत परियोजनाओं के लिए अनुमोदित आर एंड आर प्रावधानों की मुख्य विशेषताएँ

## 1 समावेशन सीमा

किसी जल विद्युत परियोजना के विकास से, यदि एक भी परिवार प्रभावित हो तो निम्नलिखित प्रावधान लागू होंगे:

## 2 परियोजना प्रभावित परिवार (पीएएफ) की परिभाषा

परियोजना प्रभावित परिवार (पीएएफ) से वह परिवार अभिप्रेत है जिसका निवास-स्थान या अन्य संपत्ति या आजीविका का स्रोत जल विद्युत परियोजना के कार्य से प्रभावित हुआ हो और जो एलएआरआर अधिनियम की धारा-11 के अंतर्गत अधिसूचना की घोषणा की तारीख से दो वर्ष पूर्व से प्रभावित क्षेत्र में रह रहा हो। प्रभावित परिवार में अनाधिकृत निवासी (स्क्वॉटर) भी शामिल होंगे।

## 3 कृषि श्रमिक की परिभाषा

ऐसा व्यक्ति जो सामान्यतः प्रभावित क्षेत्र के घोषित होने की तारीख से दो वर्ष पूर्व से प्रभावित क्षेत्र में रह रहा हो और कृषि भूमि पर मुख्यतः शारीरिक श्रम के जरिए आजीविका चलाता हो।

## 4 गैर-कृषि श्रमिकों की परिभाषा

ऐसा व्यक्ति जो सामान्यतः प्रभावित क्षेत्र के घोषित होने की तारीख से दो वर्ष पूर्व से प्रभावित क्षेत्र में रह रहा हो और उसकी प्रभावित क्षेत्र में कोई भूमि न हो और वह अपनी आजीविका मुख्यतः शारीरिक श्रम से या ग्रामीण शिल्पकार या समुदाय सेवा प्रदाताओं के रूप में चलाता हो।

## 5 स्क्वॉटर (अनधिकृत निवासी) की परिभाषा

प्रभावित क्षेत्र में कानूनी अधिकार रहित सरकारी भूमि का कब्जादार परिवार और वह एलएआरआर अधिनियम की धारा 11 के अंतर्गत अधिसूचना की घोषणा की तारीख से 5 वर्ष पूर्व से वहाँ रह रहा हो।

## 6 पुनर्वास/पुनःस्थापन कॉलोनियाँ

इस नीति का उद्देश्य उन परियोजना प्रभावित परिवारों, जो हाइड्रो परियोजनाओं के विकास के कारण विस्थापित हो गए हों, को जहाँ तक संभव हो सके, बना बनाया मकान उपलब्ध कराना है। हालांकि जहाँ पर विकल्प दिया जाए, इसके बदले में उदार आवास निर्माण भत्ता दिया जाएगा।

## 7 प्रशिक्षण एवं क्षमता निर्माण

यह नीति परियोजना प्रभावित परिवारों तथा स्थानीय लोगों को सतत आजीविका के लिए प्रशिक्षण देने की आवश्यकता पर बल देती है। निर्माण शुरू होने से कम से कम छह महीने पूर्व परियोजना विकासकर्ताओं द्वारा स्थानीय लोगों को आवश्यक कौशल प्रदान करने के लिए आई टी आई द्वारा विशेष प्रशिक्षण कार्यक्रम शुरू किया जाएगा। इससे पीएएफ एवं परियोजना के आस-पास रह रहे अन्य लोगों की रोजगारोपयोगिता में वृद्धि होने की आशा है।

## 8 अतिरिक्त प्रावधान

इस नीति में परियोजना प्रभावित परिवारों के लिए निम्नलिखित अतिरिक्त प्रावधान परिकल्पित हैं:

- मेधावी छात्रों के लिए छात्रवृत्ति
- चिकित्सा सुविधाओं का विस्तार



- विवाह अनुदान
- जीवन-निर्वाह अनुदान
- सहकारियों एवं स्वयंसेवी समूहों के लिए आय सृजन योजनाओं को बढ़ावा देना
- बीज, कीटनाशक एवं उर्वरक सब्सिडी तथा सिंचाई सहायता

उपर्युक्त अतिरिक्त प्रावधानों के अलावा वर्तमान में लागू पुनर्वास एवं पुनःस्थापन राष्ट्रीय नीति के प्रावधान सामान्यतः प्रभावी बने रहेंगे।

## MINISTRY OF POWER

### RESOLUTION

New Delhi, the 28th January, 2016

### TARIFF POLICY

#### No. 23/2/2005-R&R (Vol-IX).—1.0 INTRODUCTION

- 1.1 In compliance with section 3 of the Electricity Act 2003, the Central Government notified the Tariff Policy on 6<sup>th</sup> January, 2006. Further amendments to the Tariff Policy were notified on 31<sup>st</sup> March, 2008, 20<sup>th</sup> January, 2011 and 8<sup>th</sup> July, 2011. In exercise of powers conferred under section 3(3) of Electricity Act, 2003, the Central Government hereby notifies the revised Tariff Policy to be effective from the date of publication of this resolution in the Gazette of India.

Notwithstanding anything done or any action taken or purported to have been done or taken under the provisions of the Tariff Policy notified on 6<sup>th</sup> January, 2006 and amendments made thereunder, shall, in so far as it is not inconsistent with this Policy, be deemed to have been done or taken under provisions of this revised policy.

- 1.2 The National Electricity Policy has set the goal of adding new generation capacity and enhancing per capita availability of electricity per year and to not only eliminate energy and peaking shortages but to also have a spinning reserve as specified by the Central Electricity Authority. Development of the power sector has also to meet the challenge of providing access for affordable electricity to all households in next five years.
- 1.3 It is therefore essential to attract adequate investments in the power sector by providing appropriate return on investment as budgetary resources of the Central and State Governments are incapable of providing the requisite funds. It is equally necessary to ensure availability of electricity to different categories of consumers at reasonable rates for achieving the objectives of rapid economic development of the country and improvement in the living standards of the people.
- 1.4 Balancing the requirement of attracting adequate investments to the sector and that of ensuring reasonability of user charges for the consumers is the critical challenge for the regulatory process. Accelerated development of the power sector and its ability to attract necessary investments calls for, inter alia, consistent regulatory approach across the country. Consistency in approach becomes all the more necessary considering the large number of States and the diversities involved.

#### 2.0 LEGAL POSITION

- 2.1 Section 3 (1) of the Electricity Act, 2003 empowers the Central Government to formulate the tariff policy. Section 3(3) of the Act enables the Central Government to review or revise the tariff policy from time to time.
- 2.2 Central Electricity Regulatory Commission (CERC) and State Electricity Regulatory Commissions (SERCs) shall be guided by the tariff policy in discharging their functions including framing the regulations.
- 2.3 Regulatory Commissions shall be guided by the principles and methodologies specified by the Central Commission for determination of tariff applicable to generating companies and transmission licensees.
- 2.4 The Forum of Regulators has been constituted by the Central Government under the provisions of the Act which would, inter alia, facilitate consistency in approach specially in the area of distribution.

#### 3.0 EVOLUTION OF THE POLICY

The tariff policy has been evolved in consultation with the State Governments, the Central Electricity Authority (CEA), the Central Electricity Regulatory Commission and various stakeholders.



#### 4.0 OBJECTIVES OF THE POLICY

The objectives of this tariff policy are to:

- (a) Ensure availability of electricity to consumers at reasonable and competitive rates;
- (b) Ensure financial viability of the sector and attract investments;
- (c) Promote transparency, consistency and predictability in regulatory approaches across jurisdictions and minimise perceptions of regulatory risks;
- (d) Promote competition, efficiency in operations and improvement in quality of supply;
- (e) Promote generation of electricity from Renewable sources;
- (f) Promote Hydroelectric Power generation including Pumped Storage Projects (PSP) to provide adequate peaking reserves, reliable grid operation and integration of variable renewable energy sources;
- (g) Evolve a dynamic and robust electricity infrastructure for better consumer services;
- (h) Facilitate supply of adequate and uninterrupted power to all categories of consumers;
- (i) Ensure creation of adequate capacity including reserves in generation, transmission and distribution in advance, for reliability of supply of electricity to consumers.

#### 5.0 GENERAL APPROACH TO TARIFF

5.1 Introducing competition in different segments of the electricity industry is one of the key features of the Electricity Act, 2003. Competition will lead to significant benefits to consumers through reduction in capital costs and also efficiency of operations. It will also facilitate the price to be determined competitively. The Central Government has already issued detailed guidelines for tariff based bidding process for procurement of electricity by distribution licensees.

5.2 All future requirement of power should continue to be procured competitively by distribution licensees except in cases of expansion of existing projects or where there is a company owned or controlled by the State Government as an identified developer and where regulators will need to resort to tariff determination based on norms provided that expansion of generating capacity by private developers for this purpose would be restricted to one time addition of not more than 100% of the existing capacity.

Provided further that the Appropriate Commission, as defined in the Electricity Act, 2003, shall ensure that in case of expansion of such projects, the benefit of sharing of infrastructure of existing project and efficiency of new technology is passed on to consumers through tariff.

Provided also that the State Government can notify a policy to encourage investment in the State by allowing setting up of generating plants, including from renewable energy sources out of which a maximum of 35% of the installed capacity can be procured by the Distribution Licensees of that State for which the tariff may be determined under Section 62 of the Electricity Act, 2003.

Provided that notwithstanding the provision contained in para 5.11(j) of the policy, the tariff for such 35% of the installed capacity shall be determined by SERC.

However, the 15% of power outside long term PPAs allowed under para 5.7.1 of National Electricity Policy shall not be included in 35% allowed to be procured by Distribution Licensees of the State.

5.3 The tariff of all new generation and transmission projects of company owned or controlled by the Central Government shall continue to be determined on the basis of competitive bidding as per the Tariff Policy notified on 6<sup>th</sup> January, 2006 unless otherwise specified by the Central Government on case to case basis.

Further, intra-state transmission projects shall be developed by State Government through competitive bidding process for projects costing above a threshold limit which shall be decided by the SERCs.

5.4 The Central Electricity Regulatory Commission in consultation with Central Electricity Authority and other stakeholders shall frame within six months, regulations for determination of tariff for generation of electricity from projects using coal washery rejects. These regulations shall also be followed by State Electricity Regulatory Commissions.

Provided that procurement of power from coal washery rejects based projects developed by Central/State PSUs, Joint Venture between Government Company and Company other than Government Company in which shareholding of company other than Government Company either directly or through any of its subsidiary company or associate company shall not be more than 26% of the paid up share capital, can be done under Section 62 of the Act.

5.5 The developer of a hydroelectric project, including Pumped Storage Plant (PSP), would have the option of getting the tariff determined by the Appropriate Commission for the power to be sold through long term Power Purchase



Agreements (PPAs) on the basis of performance based cost of service regulations if the following conditions are fulfilled:

- (a) The Appropriate Commission is satisfied that the project site has been allotted to the developer by the concerned State Government after following a transparent two stage process. The first stage should be for prequalification on the basis of criteria of financial strength, past experience of developing infrastructure projects of similar size, past track record of developing projects on time and within estimated costs, turnover and ability to meet performance guarantee etc. In the second stage, bids are to be called on the basis of only one single quantifiable parameter, such as, additional free power in excess of percentage of free power, as notified by the Central Government, equity participation offered to the State Government, or any other parameter to be notified by the Central Government from time to time.
- (b) Concurrence of CEA (if required under Section 8 of the Act), financial closure, award of work and long term Power Purchase Agreement (PPA) (of the duration of 35 years or more) of the capacity specified in (c) below with distribution licensees are completed by 15.08.2022.
- (c) Long term PPA is firmed up for 60% or more of the total saleable design energy, balance being allowed for merchant sale.

Provided that distribution licensees can extend the duration of long term PPA beyond 35 years for a further period of 15 years at the existing terms and conditions subject to the approval of Appropriate Commission.

Provided further that nothing contained in this clause shall apply to Pumped Storage Plants (PSP).

- (d) The time period for commissioning of all the units of the project shall be fixed at four years from the date of approval of the commissioning schedule by the Appropriate Commission. However, the Appropriate Commission may, after recording reasons in writing, fix longer time period for hydro electric projects (reservoir as well as run-of- river projects) of more than 100 MW capacity. Agreed timelines to achieve the fixed commissioning schedule alongwith penalty for delay shall be decided by the Appropriate Commission in consultation with the Central Electricity Authority. The Appropriate Commission shall allow pass through the Interest During Construction (IDC) and Financing Cost (FC) only upto the period of delay not attributable to the developer, as approved by the CEA.
- (e) Award of contracts for supply of equipment and construction of the project, either through a turnkey or through well defined packages, are done on the basis of international competitive bidding.

5.6 Notwithstanding anything contained in Para 5.5 above, the developers of hydro electric projects of more than 100 MW design capacity for which sites have been awarded earlier by following a transparent process and on the basis of pre-determined set of criteria would have the option of getting the tariff determined by the Appropriate Commission for the power to be sold through long term PPA on the basis of cost plus under Section 62 of the Act.

5.7 In case of projects covered under Para 5.5 and 5.6, the Appropriate Commission shall determine tariff ensuring the following:

- (i) Any expenditure incurred or committed to be incurred by the project developer for getting project site allotted (except free power as notified) would neither be included in the project cost, nor any such expenditure shall be passed through in tariff.
- (ii) The project cost shall include the cost of the approved R&R plan of the Project which shall be in conformity with the following:
  - (a) the National Rehabilitation & Resettlement Policy currently in force;
  - (b) the R&R package as enclosed at appendix.
- (iii) Annual fixed charges shall be taken pro-rata to the saleable design energy tied up on the basis of long term PPAs with respect to total saleable design energy. The total saleable design energy shall be arrived at by deducting the following from the design energy at the bus bar:
  - a) Free power as notified by the Central Government from time to time for the host State and the riparian State and percentage for contribution towards Local Area Development Fund as constituted by the State Government. This free power may be suitably staggered as decided by the State Government.
  - b) Energy corresponding to 100 units of electricity to be provided free of cost every month to every Project Affected Family notified by the State Government to be offered through the concerned distribution licensee in the designated resettlement area/projects area for a period of ten years from the date of commissioning.



5.8 The Appropriate Commission shall provide for suitable regulatory framework for incentivizing the developers of Hydro Electric Projects (HEPs) for using long-term financial instruments in order to reduce the tariff burden in the initial years.

5.9 The real benefits of competition would be available only with the emergence of appropriate market conditions. Shortages of power supply will need to be overcome. Multiple players will enhance the quality of service through competition. All efforts will need to be made to bring power industry to this situation as early as possible in the overall interests of consumers. Transmission and distribution, i.e. the wires business is internationally recognized as having the characteristics of a natural monopoly where there are inherent difficulties in going beyond regulated returns on the basis of scrutiny of costs.

5.10 Consumer interest is best served in ensuring viability and sustainability of the entire value chain viz., generation, transmission and distribution of electricity, while at the same time facilitating power supply at reasonable rate to consumers. The financial turnaround/restructuring plans are approved by the Appropriate Government from time to time to achieve this objective. The Appropriate Government as well as the Appropriate Commission while implementing such plans shall ensure viability of the generation, transmission and distribution in terms of recovery of all prudent costs.

5.11 Tariff policy lays down the following framework for performance based cost of service regulation in respect of aspects common to generation, transmission as well as distribution. These shall not apply to competitively bid projects as referred to in para 6.1 and para 7.1 (6). Sector specific aspects are dealt with in subsequent sections.

**a) Return on Investment**

Balance needs to be maintained between the interests of consumers and the need for investments while laying down rate of return. Return should attract investments at par with, if not in preference to, other sectors so that the electricity sector is able to create adequate capacity. The rate of return should be such that it allows generation of reasonable surplus for growth of the sector.

The Central Commission would notify, from time to time, the rate of return on equity for generation and transmission projects keeping in view the assessment of overall risk and the prevalent cost of capital which shall be followed by the SERCs also. The rate of return notified by CERC for transmission may be adopted by the SERCs for distribution with appropriate modification taking into view the risks involved. For uniform approach in this matter, it would be desirable to arrive at a consensus through the Forum of Regulators.

While allowing the total capital cost of the project, the Appropriate Commission would ensure that these are reasonable and to achieve this objective, requisite benchmarks on capital costs should be evolved by the Regulatory Commissions. The Central Commission may adopt either Return on Equity or Return on Capital approach whichever is considered better in the interest of the consumers.

The State Commission may consider 'distribution and supply margin' as basis for allowing returns in distribution business at an appropriate time. The State Commission may also consider price cap regulation based on comprehensive study. The Forum of Regulators should evolve a comprehensive approach in this regard. The considerations while preparing such an approach would, inter-alia, include issues such as reduction in Aggregate Technical and Commercial losses, improving the standards of performance and reduction in cost of supply.

**b) Equity Norms**

For financing of future capital cost of projects, a Debt: Equity ratio of 70:30 should be adopted. Promoters would be free to have higher quantum of equity investments. The equity in excess of this norm should be treated as loans advanced at the weighted average rate of interest and for a weighted average tenor of the long term debt component of the project after ascertaining the reasonableness of the interest rates and taking into account the effect of debt restructuring done, if any. In case of equity below the normative level, the actual equity would be used for determination of Return on Equity in tariff computations.

**c) Depreciation**

The Central Commission may notify the rates of depreciation in respect of generation and transmission assets. The depreciation rates so notified would also be applicable for distribution assets with appropriate modification as may be evolved by the Forum of Regulators.

Provided that the Appropriate Commission shall specify, for the purpose of tariff determination, a upper ceiling of the rate of depreciation to be applicable during the useful life of the project and the developer shall have the option of indicating, while seeking approval for tariff, lower rate of depreciation subject to the aforesaid ceiling.

The rates of depreciation so notified would be applicable for the purpose of tariffs as well as accounting.

There should be no need for any advance against depreciation.

Benefit of reduced tariff after the assets have been fully depreciated should remain available to the consumers.



Notwithstanding the above, power from those plants of a generating company, where either whose PPAs have expired or plants have completed their useful life, may be bundled with power from renewable generating plants to be set up through the process of bidding or for which the equipment for setting up such plant is procured through competitive bidding. In such cases, power from such plants can be reallocated to beneficiaries purchasing power from renewable energy generating plants on the principles to be decided by Appropriate Government. The Obligated Entities which finally buy such power shall account towards their renewable purchase obligation to the extent of power bought from renewable energy generating plants.

The scheduling and despatch of such conventional and renewable generating plants shall be done separately.

#### **d) Cost of Debt**

Structuring of debt, including its tenure, with a view to reducing the tariff should be encouraged. Savings in costs on account of subsequent restructuring of debt should be suitably incentivised by the Regulatory Commissions keeping in view the interests of the consumers.

#### **e) Cost of Management of Foreign Exchange Risk**

Foreign exchange variation risk shall not be a pass through. However, appropriate costs of hedging and swapping to take care of foreign exchange variations should be allowed for debt obtained in foreign currencies. This provision would be relevant only for the projects where tariff has not been determined on the basis of competitive bids.

#### **f) Operating Norms**

Suitable performance norms of operations together with incentives and disincentives would need to be evolved along with appropriate arrangement for sharing the gains of efficient operations with the consumers. Except for the cases referred to in para 5.11(h)(2), the operating parameters in tariffs should be at "normative levels" only and not at "lower of normative and actuals". This is essential to encourage better operating performance. The norms should be efficient, relatable to past performance, capable of achievement and progressively reflecting increased efficiencies and may also take into consideration the latest technological advancements, fuel, vintage of equipments, nature of operations, level of service to be provided to consumers etc. Continued and proven inefficiency must be controlled and penalized.

The Central Commission would, in consultation with the Central Electricity Authority, notify operating norms from time to time for generation and transmission. The SERC would adopt these norms. In cases where operations have been much below the norms for many previous years, the SERCs may fix relaxed norms suitably and draw a transition path over the time for achieving the norms notified by the Central Commission, or phase them out in accordance with the norms specified by the Authority in this regard.

Operating norms for distribution networks would be notified by the concerned SERCs. For uniformity, the Forum of Regulators should evolve model guidelines taking into consideration the state specific distinctive features.

#### **g) Renovation and Modernization**

Renovation and modernization of generation plants (including repowering of wind generating plants) need to be encouraged for higher efficiency levels even though they may have not completed their useful life. This shall not include periodic overhauls. A Multi-Year Tariff (MYT) framework may be prescribed which should also cover capital investments necessary for renovation and modernization and an incentive framework to share the benefits of efficiency improvement between the utilities and the beneficiaries with reference to revised and specific performance norms to be fixed by the Appropriate Commission. Appropriate capital costs required for predetermined efficiency gains and/or for sustenance of high level performance would need to be assessed by the Appropriate Commission.

#### **h) Multi Year Tariff**

- 1) Section 61 of the Act states that the Appropriate Commission for determining the terms and conditions for the determination of tariff shall be guided, inter-alia, by Multi-Year Tariff (MYT) principles. The framework should feature a five-year control period. The initial control period may, however, be of 3 year duration for transmission and distribution if deemed necessary by the Regulatory Commission on account of data uncertainties and other practical considerations. In cases of lack of reliable data, the Appropriate Commission may state assumptions in MYT for first control period and a fresh control period may be started as and when more reliable data becomes available.
- 2) In cases where operations have been much below the norms for many previous years, the initial starting point in determining the revenue requirement and the improvement trajectories should be recognized at



“relaxed” levels and not the “desired” levels. Suitable benchmarking studies may be conducted to establish the “desired” performance standards. Separate studies may be required for each utility to assess the capital expenditure necessary to meet the minimum service standards.

- 3) Once the revenue requirements are established at the beginning of the control period, the Regulatory Commission should focus on regulation of outputs and not the input cost elements. At the end of the control period, a comprehensive review of performance may be undertaken.
- 4) Uncontrollable costs should be recovered speedily to ensure that future consumers are not burdened with past costs. Uncontrollable costs would include (but not limited to) fuel costs, costs on account of inflation, taxes and cess, variations in power purchase unit costs including on account of adverse natural events.
- 5) Clear guidelines and regulations on information disclosure may be developed by the Regulatory Commissions. Section 62 (2) of the Act empowers the Appropriate Commission to require licensees to furnish separate details, as may be specified in respect of generation, transmission and distribution for determination of tariff.

**(i) Benefits under Clean Development Mechanism (CDM)**

Tariff fixation for all electricity projects (generation, transmission and distribution) that result in lower Green House Gas (GHG) emissions than the relevant base line should take into account the benefits obtained from the Clean Development Mechanism (CDM) into consideration, in a manner so as to provide adequate incentive to the project developers.

**(j) Composite Scheme**

Sub-section (b) of Section 79(1) of the Act provides that Central Commission shall regulate the tariff of generating company, if such generating company enters into or otherwise have a composite scheme for generation and sale of electricity in more than one State.

Explanation: The composite scheme as specified under section 79(1) of the Act shall mean a scheme by a generating company for generation and sale of electricity in more than one State, having signed long-term or medium-term PPA prior to the date of commercial operation of the project (the COD of the last unit of the project will be deemed to be the date of commercial operation of the project) for sale of atleast 10% of the capacity of the project to a distribution licensee outside the State in which such project is located.

5.12 While it is recognized that the State Governments have the right to impose duties, taxes, cess on sale or consumption of electricity, these could potentially distort competition and optimal use of resources especially if such levies are used selectively and on a non-uniform basis.

In some cases, the duties etc. on consumption of electricity is linked to sources of generation (like captive generation) and the level of duties levied is much higher as compared to that being levied on the same category of consumers who draw power from grid. Such a distinction is invidious and inappropriate. The sole purpose of freely allowing captive generation is to enable industries to access reliable, quality and cost effective power. Particularly, the provisions relating to captive power plants which can be set up by group of consumers has been brought in recognition of the fact that efficient expansion of small and medium industries across the country will lead to faster economic growth and creation of larger employment opportunities.

For realizing the goal of making available electricity to consumers at reasonable and competitive prices, it is necessary that such duties are kept at reasonable level.

5.13 The Act provides for introduction of open access for consumers of one megawatt and above in a time bound manner. The Regulatory Commissions shall introduce open access for different categories of consumers as per the provisions of the Act.

## **6.0 GENERATION**

Accelerated growth of the generation capacity sector is essential to meet the estimated growth in demand. Adequacy of generation is also essential for efficient functioning of power markets. At the same time, it is to be ensured that new capacity addition should deliver electricity at most efficient rates to protect the interests of consumers. This policy stipulates the following for meeting these objectives.

### **6.1 Procurement of power**

As stipulated in para 5.1, power procurement for future requirements should be through a transparent competitive bidding mechanism using the guidelines issued by the Central Government from time to time. These guidelines provide for procurement of electricity separately for base load requirements and for peak load requirements. This would facilitate setting up of generation capacities specifically for meeting such requirements.

However, some of the competitively bid projects as per the guidelines dated 19<sup>th</sup> January, 2005 have experienced difficulties in getting the required quantity of coal from Coal India Limited (CIL). In case of reduced quantity of



domestic coal supplied by CIL, vis-à-vis the assured quantity or quantity indicated in Letter of Assurance/FSA the cost of imported/market based e-auction coal procured for making up the shortfall, shall be considered for being made a pass through by Appropriate Commission on a case to case basis, as per advisory issued by Ministry of Power vide OM No. FU-12/2011-IPC (Vol-III) dated 31.7.2013.

## 6.2 Tariff structuring and associated issues

- (1) A two-part tariff structure should be adopted for all long-term and medium-term contracts to facilitate Merit Order dispatch. According to National Electricity Policy, the Availability Based Tariff (ABT) is also to be introduced at State level. This framework would be extended to generating stations (including grid connected captive plants of capacities as determined by the SERC). The Appropriate Commission shall introduce differential rates of fixed charges for peak and off peak hours for better management of load within a period of two years.

Power stations are required to be available and ready to dispatch at all times. Notwithstanding any provision contained in the Power Purchase Agreement (PPA), in order to ensure better utilization of un-requisitioned generating capacity of generating stations, based on regulated tariff under Section 62 of the Electricity Act 2003, the procurer shall communicate, at least twenty four hours before 00.00 hours of the day when the power and quantum thereof is not requisitioned by it enabling the generating stations to sell the same in the market in consonance with laid down policy of Central Government in this regard. The developer and the procurers signing the PPA would share the gains realized from sale, if any, of such un-requisitioned power in market in the ratio of 50:50, if not already provided in the PPA. Such gain will be calculated as the difference between selling price of such power and fuel charge. It should, however, be ensured that such merchant sale does not result in adverse impact on the original beneficiary(ies) including in the form of higher average energy charge vis-à-vis the energy charge payable without the merchant sale. For the projects under section 63 of the Act, the methodology for such sale may be decided by the Appropriate Commission on mutually agreed terms between procurer and generator or unless already specified in the PPA.

- (2) Power Purchase Agreement should ensure adequate and bankable payment security arrangements to the Generating companies. In case of persisting default on payment of agreed tariff as per PPA in spite of the available payment security mechanisms like letter of credit, escrow of cash flows etc. the generating companies may sell such power to other buyers.
- (3) In case of coal based generating stations, the cost of project will also include reasonable cost of setting up coal washeries, coal beneficiation system and dry ash handling & disposal system.
- (4) After the award of bids, if there is any change in domestic duties, levies, cess and taxes imposed by Central Government, State Governments/Union Territories or by any Government instrumentality leading to corresponding changes in the cost, the same may be treated as "Change in Law" and may unless provided otherwise in the PPA, be allowed as pass through subject to approval of Appropriate Commission.
- (5) The thermal power plant(s) including the existing plants located within 50 km radius of sewage treatment plant of Municipality/local bodies/similar organization shall in the order of their closeness to the sewage treatment plant, mandatorily use treated sewage water produced by these bodies and the associated cost on this account be allowed as a pass through in the tariff. Such thermal plants may also ensure back-up source of water to meet their requirement in the event of shortage of supply by the sewage treatment plant. The associated cost on this account shall be factored into the fixed cost so as not to disturb the merit order of such thermal plant. The shutdown of the sewage treatment plant will be taken in consultation with the developer of the power plant.

## 6.3 Harnessing captive generation

Captive generation is an important means to making competitive power available. Appropriate Commission should create an enabling environment that encourages captive power plants to be connected to the grid.

Such captive plants could supply surplus power through grid subject to the same regulation as applicable to generating companies. Firm supplies may be bought from captive plants by distribution licensees using the guidelines issued by the Central Government under section 63 of the Act taking into account second proviso of para 5.2 of this Policy.

The prices should be differentiated for peak and off-peak supply and the tariff should include variable cost of generation at actual levels and reasonable compensation for capacity charges.

Wheeling charges and other terms and conditions for implementation should be determined in advance by the respective State Commission, duly ensuring that the charges are reasonable and fair.

Grid connected captive plants could also supply power to non-captive users connected to the grid through available transmission facilities based on negotiated tariffs. Such sale of electricity would be subject to relevant regulations for open access including compliance of relevant provisions of rule 3 of the Electricity Rules, 2005.

## 6.4 Renewable sources of energy generation including Co-generation from renewable energy sources:



- (1) Pursuant to provisions of section 86(1)(e) of the Act, the Appropriate Commission shall fix a minimum percentage of the total consumption of electricity in the area of a distribution licensee for purchase of energy from renewable energy sources, taking into account availability of such resources and its impact on retail tariffs. Cost of purchase of renewable energy shall be taken into account while determining tariff by SERCs. Long term growth trajectory of Renewable Purchase Obligations (RPOs) will be prescribed by the Ministry of Power in consultation with MNRE.

Provided that cogeneration from sources other than renewable sources shall not be excluded from the applicability of RPOs.

- (i) Within the percentage so made applicable, to start with, the SERCs shall also reserve a minimum percentage for purchase of solar energy from the date of notification of this policy which shall be 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.
  - (ii) Distribution Licensee(s) shall compulsorily procure 100% power produced from all the Waste-to-Energy plants in the State, in the ratio of their procurement of power from all sources including their own, at the tariff determined by the Appropriate Commission under Section 62 of the Act.
  - (iii) It is desirable that purchase of energy from renewable sources of energy takes place more or less in the same proportion in different States. To achieve this objective in the current scenario of large availability of such resources only in certain parts of the country, an appropriate mechanism such as Renewable Energy Certificate (REC) would need to be promoted. Through such a mechanism, the renewable energy based generation companies can sell the electricity to local distribution licensee at the rates for conventional power and can recover the balance cost by selling certificates to other distribution companies and obligated entities enabling the latter to meet their renewable power purchase obligations. The REC mechanism should also have a solar specific REC.
  - (iv) Appropriate Commission may also provide for a suitable regulatory framework for encouraging such other emerging renewable energy technologies by prescribing separate technology based REC multiplier (i.e. granting higher or lower number of RECs to such emerging technologies for the same level of generation). Similarly, considering the change in prices of renewable energy technologies with passage of time, the Appropriate Commission may prescribe vintage based REC multiplier (i.e. granting higher or lower number of RECs for the same level of generation based on year of commissioning of plant).
- (2) States shall endeavor to procure power from renewable energy sources through competitive bidding to keep the tariff low, except from the waste to energy plants. Procurement of power by Distribution Licensee from renewable energy sources from projects above the notified capacity, shall be done through competitive bidding process, from the date to be notified by the Central Government.
- However, till such notification, any such procurement of power from renewable energy sources projects, may be done under Section 62 of the Electricity Act, 2003. While determining the tariff from such sources, the Appropriate Commission shall take into account the solar radiation and wind intensity which may differ from area to area to ensure that the benefits are passed on to the consumers.
- (3) The Central Commission should lay down guidelines for pricing intermittent power, especially from renewable energy sources, where such procurement is not through competitive bidding. The tariff stipulated by CERC shall act as a ceiling for that category.
  - (4) In order to incentivize the Distribution Companies to procure power from renewable sources of energy, the Central Government may notify, from time to time, an appropriate bid-based tariff framework for renewable energy, allowing the tariff to be increased progressively in a back-loaded or any other manner in the public interest during the period of PPA, over the life cycle of such a generating plant. Correspondingly, the procurer of such bid-based renewable energy shall comply with the obligations for payment of tariff so determined.
  - (5) In order to promote renewable energy sources, any generating company proposing to establish a coal/lignite based thermal generating station after a specified date shall be required to establish such renewable energy generating capacity or procure and supply renewable energy equivalent to such capacity, as may be prescribed by the Central Government from time to time after due consultation with stakeholders. The renewable energy produced by each generator may be bundled with its thermal generation for the purpose of sale. In case an obligated entity procures this renewable power, then the SERCs will consider the obligated entity to have met the Renewable Purchase Obligation (RPO) to the extent of power bought from such renewable energy generating stations.

Provided further that in case any existing coal and lignite based thermal power generating station, with the concurrence of power procurers under the existing Power Purchase Agreements, chooses to set up additional renewable energy generating capacity, the power from such plant shall be allowed to be bundled and tariff of such renewable energy shall be allowed to be pass through by the Appropriate Commission. The Obligated





Entities who finally buy such power shall account towards their renewable purchase obligations.

Provided also that scheduling and despatch of such conventional and renewable generating plants shall be done separately.

- (6) In order to further encourage renewable sources of energy, no inter-State transmission charges and losses may be levied till such period as may be notified by the Central Government on transmission of the electricity generated from solar and wind sources of energy through the inter-state transmission system for sale.
- (7) Appropriate Commission may provide regulatory framework to facilitate generation and sale of electricity from renewable energy sources particularly from roof-top solar system by any entity including local authority, Panchayat Institution, user institution, cooperative society, Non-Governmental Organization, franchisee or by Renewable Energy Service Company. The Appropriate Government may also provide complementary policy support for this purpose.

Explanation: "Renewable Energy Service Company" means an energy service company which provides renewable energy to the consumers in the form of electricity.

## 7.0 TRANSMISSION

The transmission system in the country consists of the regional networks, the inter-regional connections that carry electricity across the five regions and the State networks. Development of the State networks has not been uniform and capacity in such networks needs to be augmented. These networks will play an important role in intra-State power flows and also in the regional and national flows. The tariff policy, in so far as transmission is concerned, seeks to achieve the following objectives:

1. Ensuring optimal development of the transmission network ahead of generation with adequate margin for reliability and to promote efficient utilization of generation and transmission assets in the country;
2. Attracting the required investments in the transmission sector and providing adequate returns.

### 7.1 Transmission pricing

- (1) A suitable transmission tariff framework for all inter-State transmission, including transmission of electricity across the territory of an intervening State as well as conveyance within the State which is incidental to such inter-state transmission, has been implemented with the objective of promoting effective utilization of all assets across the country and accelerated development of new transmission capacities that are required.
- (2) The National Electricity Policy mandates that the national tariff framework implemented should be sensitive to distance, direction and related to quantum of power flow. This has been developed by CERC taking into consideration the advice of the CEA. Sharing of transmission charges shall be done in accordance with such tariff mechanism as amended from time to time.
- (3) Transmission charges, under this framework, can be determined on MW per circuit kilometer basis, zonal postage stamp basis, or some other pragmatic variant, the ultimate objective being to get the transmission system users to share the total transmission cost in proportion to their respective utilization of the transmission system. The 'utilization' factor should duly capture the advantage of reliability reaped by all. The spread between minimum and maximum transmission rates should be such as not to inhibit planned development/augmentation of the transmission system but should discourage non-optimal transmission investment.
- (4) In view of the approach laid down by the NEP, prior agreement with the beneficiaries would not be a precondition for network expansion. CTU/STU should undertake network expansion after identifying the requirements in consonance with the National Electricity Plan and in consultation with stakeholders and taking up the execution after due regulatory approvals. For smooth operation of the grid, efforts should be made to develop transmission system ahead of generation.
- (5) The Central Commission has specified norms for capital and operating costs and laid down Standards of Performance for inter-State transmission licensees. Tariff determination and adherence to Standards of Performance shall be carried out in accordance with these norms, as amended from time to time.
- (6) Investment by transmission developer including CTU/STUs would be invited through competitive bids in accordance with the guidelines issued by the Central Government from time to time.
- (7) While all future inter-state transmission projects shall, ordinarily, be developed through competitive bidding process, the Central Government may give exemption from competitive bidding for (a) specific category of projects of strategic importance, technical upgradation etc. or (b) works required to be done to cater to an urgent situation on a case to case basis.
- (8) CERC has specified Regulation on framework for the inter-State transmission. A similar approach should be implemented by SERCs for the intra-State transmission, duly considering factors like voltage, distance, direction and quantum of flow.



(9) Metering compatible with the requirements of the proposed transmission tariff framework should be established on priority basis. The metering should be compatible with ABT requirements, which would also facilitate implementation of Time of Day (ToD) tariffs.

#### **7.2 Transmission loss allocation**

- (1) Transactions are being charged on the basis of average losses arrived at after appropriately considering the distance and directional sensitivity, as applicable to relevant voltage level, on the transmission system. Based on the methodology laid down by the CERC in this regard for inter-state transmission, the SERCs may evolve a similar framework for intra-state transmission.

The loss framework should ensure that the loss compensation is reasonable and linked to applicable technical loss benchmarks. The benchmarks may be determined by the Appropriate Commission after considering advice of CEA.

- (2) It would be desirable to move to a system of loss compensation based on incremental losses as present deficiencies in transmission capacities are overcome through network expansion. The Appropriate Commission may require necessary studies to be conducted to establish the allowable level of system loss for the network configuration and the capital expenditure required to augment the transmission system and reduce system losses. Since additional flows above a level of line loading lead to significantly higher losses, CTU/STU should ensure upgrading of transmission systems to avoid the situations of overloading. The Appropriate Commission should permit adequate capital investments in new assets for upgrading the transmission system.

#### **7.3 Other issues in transmission**

- (1) Financial incentives and disincentives should be implemented for the CTU and the STU around the Key Performance Indicators (KPI) for these organisations. Such KPIs would include efficient network construction, system availability and loss reduction.
- (2) All available information should be shared with intending users by the CTU/STU and the load dispatch centers, particularly information on available transmission capacity and load flow studies.
- (3) In extraordinary circumstances including threat to security to the State, public order or natural calamity, if the Central Government allocates power out of the unallocated share of the Central Generating Stations or otherwise, such allocation of power will have priority over short-term, medium-term and long-term access in this order.

#### **7.4 Ancillary Services**

- (1) The Central Commission may introduce the norms and framework for ancillary services, including the method of sharing the charges, necessary to support the power system or grid operation for maintaining power quality, reliability and security of the grid.
- (2) The Central Commission shall also consult the Central Electricity Authority, SERCs/JERCs, CTUs/STUs and NLDC/RLDC/SLDCs while specifying the norms for ancillary services.
- (3) The State Commission shall also adopt the norms and framework for ancillary services as specified by the Central Commission.

#### **8.0 DISTRIBUTION**

Supply of reliable and quality power of specified standards in an efficient manner and at reasonable rates is one of the main objectives of the National Electricity Policy. The State Commission should determine and notify the standards of performance of licensees with respect to quality, continuity and reliability of service for all consumers. It is desirable that the Forum of Regulators determines the basic framework on service standards. A suitable transition framework could be provided for the licensees to reach the desired levels of service as quickly as possible. Penalties may be imposed on licensees in accordance with section 57 of the Act for failure to meet the standards.

Making the distribution segment of the industry efficient and solvent is the key to success of power sector reforms and provision of services of specified standards. Therefore, the Regulatory Commissions need to strike the right balance between the requirements of the commercial viability of distribution licensees and consumer interests. Loss making utilities need to be transformed into profitable ventures which can raise necessary resources from the capital markets to provide services of international standards to enable India to achieve its full growth potential. Efficiency in operations should be encouraged. Gains of efficient operations with reference to normative parameters should be appropriately shared between consumers and licensees.

Appropriate Commission should mandate Distribution Licensee to undertake load forecasting every year and to publish and submit to the Commission their short, medium and long-term power procurement plans to meet the load.

The State Regulatory Commission will devise a specific trajectory so that 24 hours supply of adequate and uninterrupted power can be ensured to all categories of consumers by 2021-22 or earlier depending upon the prevailing situation in the State.



Micro-grids supplying renewable energy are being set up in such areas where the grid has not reached or where adequate power is not available in the grid. Investment involved in setting up of such microgrids is substantial. One of the risks of investment is grid reaching the area before the completion of the project life and thereby making power from micro grids costly and unviable. In order to mitigate such risk and incentivize investment in microgrids, there is a need to put in place an appropriate regulatory framework to mandate compulsory purchase of power into the grid from such micro grids at a tariff to be determined under section 62 of the Act considering depreciated cost of investments and keeping in view industry benchmark and with a cap if necessary, as approved by the Appropriate Commission. The Appropriate Commission shall notify necessary regulations in this regard within six months.

### 8.1 Implementation of Multi-Year Tariff (MYT) framework

- 1) MYT framework would minimise risks for utilities and consumers, promote efficiency and appropriate reduction of system losses and attract investments. It would also bring greater predictability to consumer tariffs on the whole by restricting tariff adjustments to known indicators of power purchase prices and inflation indices. The framework should be applied for both public and private utilities.
- 2) The State Commissions should introduce mechanisms for sharing of excess profits and losses with the consumers as part of the overall MYT framework. In the first control period the incentives for the utilities may be asymmetric with the percentage of the excess profits being retained by the utility set at higher levels than the percentage of losses to be borne by the utility. This is necessary to accelerate performance improvement and reduction in losses and will be in the long term interest of consumers by way of lower tariffs.
- 3) As indicated in para 5.11(h), the MYT framework implemented in the initial control period should have adequate flexibility to accommodate changes in the baselines consequent to metering being completed.
- 4) Licensees may have the flexibility of charging lower tariffs than approved by the State Commission if competitive conditions require so without having a claim on additional revenue requirement on this account in accordance with Section 62 of the Act.
- 5) At the beginning of the control period when the "actual" costs form the basis for future projections, there may be a large uncovered gap between required tariffs and the tariffs that are presently applicable. This gap should be fully met through tariff charges and through alternative means that could inter-alia include financial restructuring and transition financing.
- 6) Incumbent licensees should have the option of filing for separate revenue requirements and tariffs for an area where the State Commission has issued multiple distribution licenses, pursuant to the provisions of Section 14 of the Act read with para 5.4.7 of the National Electricity Policy.
- 7) Appropriate Commissions should initiate tariff determination and regulatory scrutiny on a suo moto basis in case the licensee does not initiate filings in time. It is desirable that requisite tariff changes come into effect from the date of commencement of each financial year and any gap on account of delay in filing should be on account of licensee.

### 8.2 Framework for revenue requirements and costs

#### 8.2.1 The following aspects would need to be considered in determining tariffs:

- (1) All power purchase costs need to be considered legitimate unless it is established that the merit order principle has been violated or power has been purchased at unreasonable rates. The reduction of Aggregate Technical & Commercial (AT&C) losses needs to be brought about but not by denying revenues required for power purchase for 24 hours supply and necessary and reasonable O&M and investment for system up-gradation. Consumers, particularly those who are ready to pay a tariff which reflects efficient costs have the right to get uninterrupted 24 hours supply of quality power. Actual level of retail sales should be grossed up by normative level of T&D losses as indicated in MYT trajectory for allowing power purchase cost subject to justifiable power purchase mix variation (for example, more energy may be purchased from thermal generation in the event of poor rainfall) and fuel surcharge adjustment as per regulations of the SERC.
- (2) AT&C loss reduction should be incentivised by linking returns in a MYT framework to an achievable trajectory. Greater transparency and nurturing of consumer groups would be efficacious. For government owned utilities improving governance to achieve AT&C loss reduction is a more difficult and complex challenge for the SERCs. Prescription of a MYT dispensation with different levels of consumer tariffs in succeeding years linked to different AT&C loss levels aimed at covering full costs could generate the requisite political will for effective action to reduce theft as the alternative would be stiffer tariff increases. Third party verification of energy audit results for different areas/localities could be used to impose area/locality specific surcharge for greater AT&C loss levels and this in turn could generate local consensus for effective action for better governance. The SERCs may also encourage suitable local area based incentive and disincentive scheme for the staff of the utilities linked to reduction in losses.

The SERC shall undertake independent assessment of baseline data for various parameters for every distribution circle of the licensee.



The SERC shall also institute a system of independent scrutiny of financial and technical data submitted by the licensees.

As the metering is completed up to appropriate level in the distribution network, it should be possible to segregate technical losses. Accordingly technical loss reduction under MYT framework should then be treated as distinct from commercial loss reduction which requires a different approach.

- (3) Section 65 of the Act provides that no direction of the State Government regarding grant of subsidy to consumers in the tariff determined by the State Commission shall be operative if the payment on account of subsidy as decided by the State Commission is not made to the utilities and the tariff fixed by the State Commission shall be applicable from the date of issue of orders by the Commission in this regard. The State Commissions should ensure compliance of this provision of law to ensure financial viability of the utilities. To ensure implementation of the provision of the law, the State Commission should determine the tariff initially, without considering the subsidy commitment by the State Government and subsidised tariff shall be arrived at thereafter considering the subsidy by the State Government for the respective categories of consumers.
- (4) Working capital should be allowed duly recognising the transition issues faced by the utilities such as progressive improvement in recovery of bills. Bad debts should be recognised as per policies developed and subject to the approval of the State Commission.
- (5) Pass through of past losses or profits should be allowed to the extent caused by uncontrollable factors. During the transition period controllable factors should be to the account of utilities and consumers in proportions determined under the MYT framework.
- (6) The contingency reserves should be drawn upon with prior approval of the State Commission only in the event of contingency conditions specified through regulations by the State Commission. The existing practice of providing for development reserves and tariff and dividend control reserves should be discontinued.
- (7) Section 61 of the Act mandates that the Appropriate Commission, while determining tariff, shall not only ensure safeguarding of consumer's interests but also the recovery of the cost of electricity in a reasonable manner. Section 62 of the Act further provides for periodic tariff adjustment during a year to take care of the variation in fuel price, as may be specified.

Therefore, the Appropriate Commission shall specify an appropriate price adjustment formula for recovery of the costs, arising on account of the variation in the price of fuel, power purchase etc. on monthly/quarterly basis for recovery of all prudent costs of the generating company and the licensee.

8.2.2 The facility of a regulatory asset has been adopted by some Regulatory Commissions in the past to limit tariff impact in a particular year. This should be done only as a very rare exception in case of natural calamity or force majeure conditions and subject to the following:

- a. Under business as usual conditions, no creation of Regulatory Assets shall be allowed;
- b. Recovery of outstanding Regulatory Assets along with carrying cost of Regulatory Assets should be time bound and within a period not exceeding seven years. The State Commission may specify the trajectory for the same.

### 8.3 Tariff design: Linkage of tariffs to cost of service

It has been widely recognised that rational and economic pricing of electricity can be one of the major tools for energy conservation and sustainable use of ground water resources.

In terms of the Section 61(g) of the Act, the Appropriate Commission shall be guided by the objective that the tariff progressively reflects the efficient and prudent cost of supply of electricity.

The State Governments can give subsidy to the extent they consider appropriate as per the provisions of section 65 of the Act. Direct subsidy is a better way to support the poorer categories of consumers than the mechanism of cross-subsidizing the tariff across the board. Subsidies should be targeted effectively and in transparent manner. As a substitute of cross subsidies, the State Government has the option of raising resources through mechanism of electricity duty and giving direct subsidies to only needy consumers. This is a better way of targeting subsidies effectively.

Accordingly, the following principles would be adopted:

1. Consumers below poverty line who consume below a specified level, as prescribed in the National Electricity Policy may receive a special support through cross subsidy. Tariffs for such designated group of consumers will be at least 50% of the average cost of supply.
2. For achieving the objective that the tariff progressively reflects the cost of supply of electricity, the Appropriate Commission would notify a roadmap such that tariffs are brought within  $\pm 20\%$  of the average cost of supply. The road map would also have intermediate milestones, based on the approach of a gradual





reduction in cross subsidy.

3. While fixing tariff for agricultural use, the imperatives of the need of using ground water resources in a sustainable manner would also need to be kept in mind in addition to the average cost of supply. Tariff for agricultural use may be set at different levels for different parts of a state depending on the condition of the ground water table to prevent excessive depletion of ground water. Section 62 (3) of the Act provides that geographical position of any area could be one of the criteria for tariff differentiation. A higher level of subsidy could be considered to support poorer farmers of the region where adverse ground water table condition requires larger quantity of electricity for irrigation purposes subject to suitable restrictions to ensure maintenance of ground water levels and sustainable ground water usage.
4. Extent of subsidy for different categories of consumers can be decided by the State Government keeping in view various relevant aspects. But provision of free electricity is not desirable as it encourages wasteful consumption of electricity. Besides in most cases, lowering of water table in turn creating avoidable problem of water shortage for irrigation and drinking water for later generations. It is also likely to lead to rapid rise in demand of electricity putting severe strain on the distribution network thus adversely affecting the quality of supply of power. Therefore, it is necessary that reasonable level of user charges is levied. The subsidized rates of electricity should be permitted only up to a pre-identified level of consumption beyond which tariffs reflecting efficient cost of service should be charged from consumers. If the State Government wants to reimburse even part of this cost of electricity to poor category of consumers the amount can be paid in cash or any other suitable way. Use of prepaid meters can also facilitate this transfer of subsidy to such consumers.
5. Metering of supply to agricultural/rural consumers can be achieved in a consumer friendly way and in effective manner by management of local distribution in rural areas through commercial arrangement with franchisees with involvement of panchayat institutions, user associations, cooperative societies etc. Use of smart meters may be encouraged as a cost effective option for metering in cases of "limited use consumers" who are eligible for subsidized electricity.

#### 8.4 Definition of tariff components and their applicability

1. Two-part tariffs featuring separate fixed and variable charges and time differentiated tariff shall be introduced on priority for large consumers (say, consumers with demand exceeding 1 MW) within one year and subsequently for all consumers within a period of five years or such period as may be specified. This would also help in flattening the peak and implementing various energy conservation measures.
2. The National Electricity Policy states that existing PPAs with the generating companies would need to be suitably assigned to the successor distribution companies. The State Governments may make such assignments taking care of different load profiles of the distribution companies so that retail tariffs are uniform in the State for different categories of consumers. Thereafter, the retail tariffs would reflect the relative efficiency of distribution companies in procuring power at competitive costs, controlling theft and reducing other distribution losses.
3. The Appropriate Commission may provide incentives to encourage metering and billing based on metered tariffs, particularly for consumer categories that are presently unmetered to a large extent. The metered tariffs and the incentives should be given wide publicity. Smart meters have the advantages of remote metering and billing, implementation of peak and off-peak tariff and demand side management through demand response. These would become essential in future for load-generation balancing due to increasing penetration of intermittent type of generation like wind and solar power.

Appropriate Commission shall, therefore, mandate smart meters for:

- (a) Consumers with monthly consumption of 500 units and more at the earliest but not later than 31.12.2017;
- (b) Consumers with monthly consumption above 200 units by 31.12.2019.

Further, two way smart meters shall be provided to all prosumers, who also sell back electricity to the grid as and when they require.

In order to enable energy audit in the distribution system, all distribution companies shall ensure smart meters in their electricity system throughout the chain from transformers at 132kV level right down to distribution transformer level at 11kV and further down to each consumer. Further, in order to reduce theft of power, the distribution companies should have enabling feature like distribution SCADA with distribution management system and energy audit functions. SERCs shall mandate these to be in place within two years.



4. The SERCs may also suitably regulate connection charges to be recovered by the distribution licensee to ensure that second distribution licensee does not resort to cherry picking by demanding unreasonable connection charges. The connection charges of the second licensee should not be more than those payable to the incumbent licensee.

#### 8.5 Cross-subsidy surcharge and additional surcharge for open access

- 8.5.1 National Electricity Policy lays down that the amount of cross-subsidy surcharge and the additional surcharge to be levied from consumers who are permitted open access should not be so onerous that it eliminates competition which is intended to be fostered in generation and supply of power directly to the consumers through open access.

A consumer who is permitted open access will have to make payment to the generator, the transmission licensee whose transmission systems are used, distribution utility for the wheeling charges and, in addition, the cross subsidy surcharge. The computation of cross subsidy surcharge, therefore, needs to be done in a manner that while it compensates the distribution licensee, it does not constrain introduction of competition through open access. A consumer would avail of open access only if the payment of all the charges leads to a benefit to him. While the interest of distribution licensee needs to be protected it would be essential that this provision of the Act, which requires the open access to be introduced in a time-bound manner, is used to bring about competition in the larger interest of consumers.

SERCs may calculate the cost of supply of electricity by the distribution licensee to consumers of the applicable class as aggregate of (a) per unit weighted average cost of power purchase including meeting the Renewable Purchase Obligation; (b) transmission and distribution losses applicable to the relevant voltage level and commercial losses allowed by the SERC; (c) transmission, distribution and wheeling charges up to the relevant voltage level; and (d) per unit cost of carrying regulatory assets, if applicable.

#### Surcharge formula:

$$S = T - [C / (1 - L/100) + D + R]$$

Where

S is the surcharge

T is the tariff payable by the relevant category of consumers, including reflecting the Renewable Purchase Obligation

C is the per unit weighted average cost of power purchase by the Licensee, including meeting the Renewable Purchase Obligation

D is the aggregate of transmission, distribution and wheeling charge applicable to the relevant voltage level

L is the aggregate of transmission, distribution and commercial losses, expressed as a percentage applicable to the relevant voltage level

R is the per unit cost of carrying regulatory assets.

Above formula may not work for all distribution licensees, particularly for those having power deficit, the State Regulatory Commissions, while keeping the overall objectives of the Electricity Act in view, may review and vary the same taking into consideration the different circumstances prevailing in the area of distribution licensee.

Provided that the surcharge shall not exceed 20% of the tariff applicable to the category of the consumers seeking open access.

Provided further that the Appropriate Commission, in consultation with the Appropriate Government, shall exempt levy of cross subsidy charge on the Railways, as defined in Indian Railways Act, 1989 being a deemed licensee, on electricity purchased for its own consumption.

- 8.5.2 No surcharge would be required to be paid in terms of sub-section (2) of Section 42 of the Act on the electricity being sold by the generating companies with consent of the competent government under Section 43(A)(1)(c) of the Electricity Act, 1948 (now repealed) and on the electricity being supplied by the distribution licensee on the authorisation by the State Government under Section 27 of the Indian Electricity Act, 1910 (now repealed), till the current validity of such consent or authorisation.
- 8.5.3 The surcharge may be collected either by the distribution licensee, the transmission licensee, the STU or the CTU, depending on whose facilities are used by the consumer for availing electricity supplies. In all cases the amounts collected from a particular consumer should be given to the distribution licensee in whose area the



consumer is located. In case of two licensees supplying in the same area, the licensee from whom the consumer was availing supply shall be paid the amounts collected.

- 8.5.4 The additional surcharge for obligation to supply as per section 42(4) of the Act should become applicable only if it is conclusively demonstrated that the obligation of a licensee, in terms of existing power purchase commitments, has been and continues to be stranded, or there is an unavoidable obligation and incidence to bear fixed costs consequent to such a contract. The fixed costs related to network assets would be recovered through wheeling charges.
- 8.5.5 Wheeling charges should be determined on the basis of same principles as laid down for intra-state transmission charges and in addition would include average loss compensation of the relevant voltage level.
- 8.5.6 In case of outages of generator supplying to a consumer on open access, standby arrangements should be provided by the licensee on the payment of tariff for temporary connection to that consumer category as specified by the Appropriate Commission. Provided that such charges shall not be more than 125 percent of the normal tariff of that category.

#### 9.0 Trading Margin

The Act provides that the Appropriate Commission may fix the trading margin, if considered necessary. Though there is a need to promote trading in electricity for making the markets competitive, the Appropriate Commission should monitor the trading transactions continuously and ensure that the electricity traders do not indulge in profiteering in situation of power shortages. Fixing of trading margin should be resorted to for achieving this objective.

JYOTI ARORA, Jt. Secy

### APPENDIX

#### SALIENT FEATURES OF THE APPROVED R&R PROVISIONS FOR HYDRO POWER PROJECTS

##### 1. SCOPE OF COVERAGE

The following provisions shall be applicable even if one family is affected by the development of a Hydro Power Project.

##### 2. DEFINITION OF PROJECT AFFECTED FAMILIES (PAFs)

A Project Affected Family (PAF) shall mean a family whose place of residence or other property or source of livelihood has been affected by the development of a hydro project and who have been residing in the affected zone for two years preceding the date of declaration of notification under Section-11 of the LARR Act. The affected family would also include squatters.

##### 3. DEFINITION OF AGRICULTURAL LABOURER

A person normally residing in the affected zone for two years preceding the date of declaration of the affected zone and earns his/her livelihood principally by manual labour on agricultural land.

##### 4. DEFINITION OF NON-AGRICULTURAL LABOURER

A person normally residing in the affected zone for two years preceding the date of declaration of the affected zone and who does not hold any land in the affected zone but earns his/her livelihood principally by manual labour or as rural artisan or a service provider to the community.

##### 5. DEFINITION OF SQUATTERS

A family occupying Government land in the affected zone without a legal title, at least for 5 years prior to the date of declaration of notification under Section-11 of LARR Act.

##### 6. REHABILITATION/RESETTLEMENT COLONIES

This policy aims to provide built up houses to Project Affected Families (PAFs) who get displaced due to the development of hydro projects to the extent possible. However, wherever opted for, liberal House Construction Allowance would be given in lieu.

##### 7. TRAINING AND CAPACITY BUILDING

This policy also emphasizes the need to provide training to the Project Affected Families as well as to the local population for a sustained livelihood. Special training programmes from ITIs aimed at providing the required skills



to the local population would be undertaken by the Project developers at least six months prior to commencement of construction. This is expected to boost the employability of the PAFs and other people residing in the vicinity of the project.

**8. ADDITIONAL PROVISIONS**

This policy envisages additional provisions for Project Affected Families such as:

- o scholarships for meritorious students,
- o extension of medical facilities,
- o marriage grants,
- o subsistence grants,
- o support for income generation schemes for cooperative and self-help groups,
- o seed, pesticides and fertilizer subsidies, and irrigation support.

*Besides the additional provisions mentioned above, the normally applicable provisions of the National Policy on Rehabilitation and resettlement, currently in force, would be applicable.*



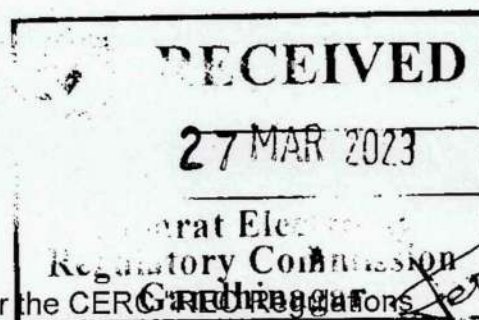




## Annexure P-20

Date: 24 March, 2023

To,  
**The Secretary,**  
 Gujarat Electricity Regulatory Commission  
 6th Floor, GIFT ONE,  
 Road 5C, Zone 5, GIFT City,  
Gandhinagar.



**Subject:** To Allow RPO fungibility in state of Gujarat as per the CERC Regulations, 2022"

Ref: 1) Delhi high Court order dated 20.12.2022 in W.P.(C) 15477/2022 And W.P.(C) 16824/2022 & CM APPL 53244/2022.  
 2) Central Electricity Regulatory Commission -Record of Proceedings, Dated 15.12.2022 Diary (Petition) No.464/2022 and Diary (IA) No.500/2022.  
 3) Indian Energy Exchange (IEX) Circular No -IEX/MO/540/2022 Dated 26 Dec 2022.  
 4) Central Electricity Regulatory Commission (Terms and Conditions for REC for RE Generation) Regulations, 2022- Statement of Objects & Reasons (SOR) thereof. Dt 11 June 2022.

Dear Sir,

We, Reliance Industries Limited have manufacturing facilities in Gujarat. As per GERC "Procurement of Energy from Renewable Sources" Regulations 2010 and its amendment thereof, we are fulfilling our RPO either by way of consuming RE (Solar/ Wind/ Biomass) Power or Purchase Solar / Non-Solar RECs from Power exchange.

With Reference to above, we wish to bring to your notice regarding the following recent changes in the REC market:

1. The Hon'ble Central Electricity Regulatory Commission (CERC) issued Central Electricity Regulatory Commission (Terms and Conditions for Renewable Energy Certificates for Renewable Energy Generation) Regulations, 2022 ("REC Regulations 2022") on 09th May 2022 which has been made effective by Hon'ble Commission from 05th December 2022.

*R. N. Ojha*  
 Gujarat Energy Development Agency,  
 Block No. 11 & 12, Udhayog Bhavan,  
 4th Floor, Sector-11, Gandhinagar.  
 24/03/23

"VRAJ", Near Orion Lawn, Rajpath Rangoli Road, Off Sindhu Bhavan Road, Bodakdev, Ahmedabad - 380 054 Phone: +91-79-35001000

Registered Office : 3rd Floor, Maker Chambers - IV, 222 Nariman Point, Mumbai - 400 021. India  
 CIN: L17110MH1973PLC019786 • Website: www.ril.com



2. Accordingly, IEX has filed a Petition no. 375/MP/2022 before CERC for approval to align its REC contract with the REC Regulations 2022. Hon'ble Commission in its "Record of Proceedings" of hearing dated 15.12.2022 in the said Petition, with respect to REC trading session to be held on 28.12.2022 and onwards during the pendency of the petition, int-alia directed that:

*"4. As to the prayer of the Petitioner for interim order in view of the next bidding session scheduled on 28.12.2022, the Commission directed as under:*

*.....*  
(d) *On the issue of fungibility in RECs and pro-rata allocation of RECs based on source, the Commission noted that categorization of RECs has been dispensed with, on introduction of the concept of multiplier under REC Regulations, 2022. With due regard to the fact that different categories of RPOs still exist for the buyers, the Commission in its Statement of Reasons Order dated 11.06.2022 on REC Regulations, 2022 had stated that the Central Agency will be required to indicate origin of RE source while issuing REC certificates.*

*(e) Accordingly, the Commission directed that while the price discovery and matching methodology in the REC market on power exchanges shall continue to be based on double sided closed bid auction mechanism, pending and subject to final orders in this petition, the mechanism of pro rata allocation based on buyer's preference as proposed by the Petitioner may be followed by the Power Exchanges to allocate cleared RECs in the Power Exchanges among the buyers of RECs."*

3. Accordingly, as per Hon'ble CERC's interim directions, following process to be followed for the REC trading session at IEX platform from 28.12.2022 onwards till further communication:
- 3.1. Solar and Non-Solar REC contract will be de-activated for December 2022 trading and onwards. However, as per Regulation 19(2)(c) of REC Regulations 2022, existing REC contract for Non -Solar RECs issued prior to 01.04.2017 will remain available for the trading till further directions of the Hon'ble Supreme Court/Hon'ble Commission.
  - 3.2. A new contract named "REC" will be available for placing the orders on IEX Platform for Buyer and Sellers. All participants will need to place their orders in new REC symbol "REC" for purchase or sell Bids.
  - 3.3. There will be no Floor and Forbearance price range applicable for REC Contract.
  - 3.4. Bids accumulated in REC contract during the trading session will be matched and Price / Volume will be discovered as per existing matching methodology.
  - 3.5. Buyers will have an option to give their preference quantities in SOLAR & NON-SOLAR type within stipulated time before start of trade.
  - 3.6. In case the cleared quantity in the auction is lesser than the bid quantity placed by a buyer then the allocation of Solar and Non-Solar RECs shall be based on the ratio of respective preference quantity provided by buyer.
  - 3.7. In case the cumulative preference for a particular REC type is less than the cleared RECs in that type then the complete allocation will be made as per the preference. In case the preference for a particular REC type is more than cleared RECs in that type then pro-rata methodology will be followed for the allocation.
  - 3.8. In case the buyer has not given any preference then allocation will be done based on whatever REC types is available after allocating it on preference basis. However, bifurcation of allocated quantity with respect to source of origin will be mentioned in Buyer Certificate.



4. Example of allocation as per new process:

Scenario	Buy Bid	Requirement of Buyer		Total REC Cleared	Available REC		Final Allocation	
		Solar	Non- Solar		Solar	Non- Solar	Solar	Non-Solar
Scenario 1	1000	1000		800	500	300	500	300
Scenario 2	2000		2000	1500	500	1000	500	1000
Scenario 3	2000	1200	800	1000	500	500	500	500
Scenario 4	3000	NA	NA	2000	500	1500	500	1500

5. Based on the above facts, it is evident that in spite the Buyers preference is only for Solar REC (Scenario 1), final allocation may be a mix of Solar and Non-Solar REC.
6. Although, Central Agency Will issue REC certificates based on source of origin, such as Solar/Non-solar. However, trade will be done term "REC" and there will not be any differentiation. Hence, we, as an obligated entity, will not be sure how many Solar or Non-solar REC will be allocated after the trade. Hence, It will be difficult to fulfil source specific RPO (Solar/non-Solar) as required under GERC "Procurement of Energy from Renewable Sources" Regulations 2010 and its amendment.
7. Also, under current CERC REC Regulation 2022, there is no provision for Solar and Non solar REC to trade separately.
8. The price of RECs in the market will be same irrespective of source of REC.
9. Accordingly, we request the Hon'ble Commission to initiate necessary action and issue requisite clarification and allow full fungibility between Solar and Non-Solar, i.e. Obligated entities from state of Gujarat can buy REC (any type) from power exchange and fulfill the Solar / Non-Solar RPO.

Yours faithfully,

  
Authorized Signatory

Enclosure: As stated above.

Cc:- Gujarat Energy Development agency, Gandhinagar



No- SIL/PGVCL/HT-43369/11062024/G-DAM

Date-11-06-2024

To,  
The Executive Engineer (O&M)  
PGVCL-Savarkundla Division Office,  
Jesar Road, Savarkundla

Sub: - Adjustment of Green power units purchased through Power exchange in Monthly Electricity Bill.

Dear Sir,

Sintex Industries Ltd, had applied for Open access in the month of Aug-23 vide SLDC approval Ref no NOC/GJSLDC/WR/2023/23852 to procure the green Power from Power exchange (IEX) in Green - Day ahead market (G-DAM).

On dated 27<sup>th</sup> Aug 2023 Sintex Industries purchased Green Power -0.55 MWh (Solar-0.3 MWh and Non-Solar 0.25 MWh) through IEX. Please find attached IEX Certificate of Purchase of Renewable Energy in Green-Day Ahead Market And SEA report indicating quantum of power procured through power exchange under G-DAM.

Green Power was purchased to fulfill Renewable Purchase obligation of FY 23-24. We would like to inform that in spite of SEA report confirming purchase of Green Power credit for purchased Green Units were not adjusted by your Office in the Adjustment bill/Settlement credit sheet Of Aug-23/Sep-23.

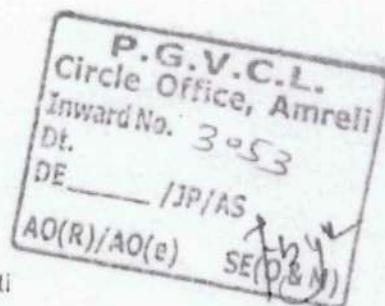
Request to please review and provide adjustment of the units purchased under G-DAM, by providing credit of purchased units in the next bill.

Thanks & Regards,  
Authorized signatory

FOR SINTEX INDUSTRIES LTD.



Authorized Signatory  
For, Sintex Industries Limited



✓ Copy to:- Superintending Engineer, PGVCL Circle office, Amreli

Encl:

1. PGVCL Energy Bill Aug-23 & Sep-23
2. SLDC-SEA report for Aug-23.
3. Certificate-Proof of purchase Green Energy through IEX-Green -Day ahead market (G-DAM)

**SINTEX INDUSTRIES LIMITED** (Yarn Division)

119, Kalasagar Shopping Hub, 1st Floor, Opp. Sai Baba Temple, Sattadhar,  
Ahmedabad - 380061, Gujarat, India. Ph: +91-79-27400500, E-mail: share@sintex.co.in  
Registered Office: Sintex Industries Limited, Katol - 382721, Dist.: Gandhinagar, Gujarat, India.

www.sintex.co.in

CIN: L17110GJ1931PLC000454



**Certificate of Purchase of Renewable Energy in Green-Day Ahead Market**

For Delivery Date: 27/08/2023

Issued on : 28/08/2023

Portfolio Name: Sintex\_Industries\_Ltd\_Cons\_no\_43369

This is certified that Sintex\_Industries\_Ltd\_Cons\_no\_43369 has purchased 0.58 MWh (at regional periphery) of Renewable Energy for the period 27/08/2023 to 27/08/2023 through Indian Energy Exchange Limited in Green-Day Ahead Market.

Solar (in MWh)	Non-Solar (in MWh)	Hydro (in MWh)	Total (in MWh)
0.32	0.26	0	0.58

This certificate represented hereby is issued on non-transferable and non-tradable basis and shall be held subject to Orders and Regulations of Honorable Central Electricity Regulatory Commission as amended from time to time and the Bye-laws, Rules and Business Rules of Indian Energy Exchange Limited.

Amit Kumar  
Sr VP Market Operations

\*Computer generated report signature not required.

**Annexure 1- (Date Wise Scheduling Details)**

Participant ID	N2DL0PTC0000
Participant Name	PTC India Ltd.
Portfolio ID	W2GJ0PTC0842
Portfolio Name	Sintex_Industries_ltd_Cons_no_43369

**Scheduling details at Regional Periphery (Traded)**

Delivery Date	Solar (in MWh)	Non-Solar (in MWh)	Hydro (in MWh)	Total (in MWh)
27-Aug-23	0.32	0.26	0	0.58
Grand Total				0.58

**Scheduling details after applying ISTS (POC) loss**

Delivery Date	Solar (in MWh)	Non-Solar (in MWh)	Hydro (in MWh)	Total (in MWh)
27-Aug-23	0.31	0.25	0	0.56
Grand Total				0.56

**Scheduling details after applying ISTS (POC) and State loss**

Delivery Date	Solar (in MWh)	Non-Solar (in MWh)	Hydro (in MWh)	Total (in MWh)
27-Aug-23	0.3	0.25	0	0.55
Grand Total				0.55

**Scheduling details after applying ISTS (POC) Loss, State Loss, Distribution Loss and Other Loss if any (at Ex-bus)**

Delivery Date	Solar (in MWh)	Non-Solar (in MWh)	Hydro (in MWh)	Total (in MWh)
27-Aug-23	0.3	0.25	0	0.55
Grand Total				0.55

\*Computer generated report signature not required.





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## Paschim Gujarat Vij Company Ltd.

Reg. Off: Paschim Gujarat Vij Seva Sadan Ch. Nana Mava Main Road, Laxminagar, Rajkot-360004  
CIN U40102GJ2003SGC042908 GSTIN 24AADCP1453C1ZZ PAN NO: AADCP1453C Website: http://www.pgvl.com

PG CL

BT BILL FOR THE MONTH OF SEP-2023

By SPAD/Hand Delivery No.

OFFICE OF EXEC. ENGINEER

PGVCL Division Office

Date: 04-10-2023

SCAN to PAY

Division Office Email id:

Phone No:

Cons. GSTIN:

Consumer No:	Tariff	Contract Demand	85% Contract Demand	Actual Max. Demand	Billing Demand	Excess Cont. DMD	SD Cash	Bank Guarantee
43369	STF-I	54500	46325	47344	47344		0	348732588.00
Supp Voltage	KWH	KVAH	KVARH	Avg PF	MF	Actual Max DMD during day	PF Indicator	
220	32746500	32746500	0	1	1500			
Meter No:	Make	CTPT Make	CTPT Sino	CT Ratio	PT Ratio	Meter Constant	MC/MF/CD/TF	Meter Status
GJ3192A	SECURE			1500				Normal
	KWH	KVAH	KVARH	AMD	PEAK HR	NIGHT HR	AMD DAY	AMD NIGHT
Current R	1208851.498	1208981.746	5077.252		401521.776	411269.026	0	
Previous R	1187022.498	1187152.746	5077.252		394243.776	403944.026		
Difference	21829	21829	0		7278	7325		
Diff*MF	32743500	32743500	0		10917000	10987500		
Old Met Cons.								
Enhanced Unit								

## CONSUMPTION DETAILS

A. Total Units	B. Night Units	C. TOU	D. 1/3 Of Units in A	E. Night Concession Units	F. Connection Date	G. Consumer Type
32746500	10989000	10918500	10915500	10989000	01-06-2016	
H. Recoverable SD	I. Seasonal Status	J. ED Exemption Upto	K. Details of Adjustments	CHQ DISHONOUR DT		
372048720.00		07-12-2020				

## CALCULATION OF CHARGES

Demand Charges	DMD in KVA	Rate per KVA	Amount Rs	Electricity Duty	KWH	Consumption Charges	ED Rate	Amount	Exempted Amount
1st 500 KVA	500	150	75000						
2nd 500 KVA	500	260	130000		32715920	271750198.08	.15	40762529.20	
Next	46344	475	22013460		30580	254009	.2	50801.7	0
Excess DMD	0	0	0						
Tot Demand	47344		22218400						
Energy Charges	Rate	Amount	Total->	Wind Energy	CPP	Open Access			
32746500	4.3	140809950.00		0	0	0			
Night Rebate	.43	4725270							
Fuel charge	3.35	109700775.00	Adj (Credit)	0	0	0			
PF Rebate	-2.50%	-3520248.75	Adj (Debit)						
EHV Rebate	1.25	-1760124.38							
TOU	0.85	9280725.00	AMC Charges						
GT Charges	1.5	0.00	CGST:			SGST:			
Tot Consumption Charge		272004206.87							

## SUMMARY OF CHARGES

Demand Charge	Energy Charge	Fuel Surcharge	PF Adj/Rbate	Night Rebate	EHV Rebate	Time Of Use Charges	GT Charges	Tot Consumption Charge
22218400.00	140809950.00	109700775.00	-3520248.75	4725270.00	1760124.38	9280725.00	0.00	272004206.87
Electricity Duty	Meter Charges	Cross Subsidy	Wheeling Charges	Parallel Operation Charges	Current Month's Bill	Outstanding Arrears		
40813330.90	0.00				312817537.77	298954.31		
Delayed Payment Charges	Adv. Payment / Adjust.	Net Payable	TCS	Total Payable	PREV. BILL TCS Cr	Reading Date	Bill Date	Due Date
0.00	-60791281.27	252325212.81		252325212.81		01-10-2023	04-10-2023	16-10-2023
								Freeze Amount
								0.00

Amount in Words: Twenty Five Crores Twenty Three Lakhs Twenty Five Thousand Two Hundred And Twelve And Eighty Paise Only

Mag.U/S 1940 OF IT ACT, TDS @ 0.1% IS APPLICABLE

MC-Meter Charge MF-Multiplication Factor CD-Contract Demand TF-Tariff Change

FOR IMPORTANT NOTE PLEASE SEE OVERLEAF

EXECUTIVE ENGINEER  
PGVCL, DIVISION OFFICE  
SAVARKUNDLA



Meter No:	Make	CTPT Make	CTPT Srno	CT Ratio	PT Ratio	Meter Constant	J.ED Exemption Up to	Meter Status
GJ3192A	SECURE		1500				07-12-2020	Normal
	KWH	KVAH	KVARH	AMD	PEAK HR	NIGHT HR	AMD DAY	AMD NIGHT
Current R	1208851.498	1208981.746	5077.252		401521.776	411269.026		
Previous R	1187022.498	1187152.746	5077.252		394243.776	403944.026		
Difference	21829	21829	0		7278	7325		
Diff*MF	32743500	32743500	0		10917000	10987500		

Meter No:	Make	CTPT Make	CTPT Srno	CT Ratio	PT Ratio	Meter Constant	J.ED Exemption Up to	Meter Status
GJ3193A	SECURE		1500				07-12-2020	Normal
	KWH	KVAH	KVARH	AMD	PEAK HR	NIGHT HR	AMD DAY	AMD NIGHT
Current R	129523.285	131069.117	4499.206		42988.565	43073.049		
Previous R	129521.285	131067.117	4499.206		42987.565	43072.049		
Difference	2	2	0		1	1		
Diff*MF	3000	3000	0		1500	1500		

Paschim Gujarat Vij Company Limited  
Adjustment Details Report for Sep-2023

PERIOD: SEP-2023  
COM: 4 PGVCL

CIR: 37 AMRELI

PROCESSED ON: 04-Oct-2023  
DIV: 22 SAVARKUNDLA

Consumer No : 43369  
Consumer Name: M/S SINTEX INDUSTRIES LTD.

Adjustment Description	Amount	Units	Remarks
Credit Board Charges	60310033.13	0.00	WIND UNIT DIFF AUG.23
Credit ED Charges	9046194.90	0.00	WIND UNIT DIFF AUG.23
Credit JV	514168.84	0.00	TDS DIFF AS PER JV NO-2 OCT.23
Credit JV	53768.06	0.00	TDS DIFF AS PER JV NO-2 OCT.23
Credit TDS	298632.00	0.00	TDS ADJUSTMENT 8-2023
Credit TDS	324.00	0.00	TDS DIFF AUG.23
CREDIT ADJUSTMENT Amount:	70223120.93	0.00	
Debit Board Charges	9431839.66	0.00	CROSS SUBSIDY,ADDI,SURCHARGE,WHEELING CHARGE AUG.23
DEBIT ADJUSTMENT Amount:	9431839.66	0.00	

DEBIT UNIT ADJUSTMENTS FOR PAST BILLING

Consumer Number	Consumer Name	Units
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CREDIT UNIT ADJUSTMENTS FOR PAST BILLING

Consumer Number	Consumer Name	Units
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# Paschim Gujarat Viji Company Ltd.

Reg. Off. Paschim Gujarat Viji Seva Sadan Off. Nana Mava Main Road, Laxminagar, Rajkot 738004  
CIN:U40102GJ2003SGC042938 GSTIN:24AADCP1453C1ZZ PAN:AADEP1453D Website: http://www.pgvcl.com

HT BILL FOR THE MONTH OF :AUG-2023

M/S SINTOX INDUSTRIES LTD.  
VILL-LUNSAPUR TA-JAFRABAD DT-AMRELI  
VILL-LUNSAPUR

By: PFAD/Hand Delivery No. 644

OFFICE OF EXEC. ENGINEER

PGVCL Division Office

Date: 05-09-2023

SCAN to PAY

Division Office Email id:

Consumer No:	Tariff	Contract Demand	85% Contract Demand	Actual Max. Demand	Billing Demand	Excess Cont. DMD	SD Cash	Bank Guarantee
43369	NTP-I	54500	46325	47334	47334		0	348732588.00
Supp Voltage	KWH	KVAH	KVARH	Avg PF	MF	Actual Max DMD during day		PF Indicator
220	33790500	33790500	0	1	1500			
Meter No:	Make	CTPT Make	CTPT Srno	CT Ratio	PT Ratio	Meter Constant	MC/MF/CD/TF	Meter Status
GJ3192A	SECURE		1500					Normal
	KWH	KVAH	KVARH	AND	PEAK HR	NIGHT HR	AND DAY	AND NIGHT
Current R	1187022.498	1187152.746	5077.252		394243.776	403944.026	0	
Previous R	1164499.498	1164629.746	5077.252		386737.776	396375.026		
Difference	22523	22523	0		7506	7569		
Diff*MF	33784500	33784500	0		11259000	11353500		
Old Met Cons.								
Enhanced Unit								

## CONSUMPTION DETAILS

A.Total Units	B.Night Units	C.TOU	D.1/3 Of Units in A	E.Night Concession Units	F.Connection Date	G.Consumer Type
33790500	11356500	11262000	11263500	11356500	01-06-2016	
H.Recoverable SD	I.Seasonal Status	J.ED Exemption Upto	K.Details of Adjustments	CBQ DISHONOUR		
372048720.00		07-12-2020				

## CALCULATION OF CHARGES

Demand Charges	DMD in KVA	Rate per KVA	Amount Rs	Electricity Duty	KWH	Consumption Charges	ED Rate	Amount	Exempted Amount
1st 500 KVA	500	150	75000						
2nd 500 KVA	500	260	130000		30880	255839	.2	51167.68	0
Next	46334	475	22008650		33759620	279695823.53	.15	41954373.86	0
Excess DMD	0	0	0						
Tot Demand	47334		22213650						
SET OFF DETAILS									
Energy Charges	33790500	Rate	Amount	Total->	Wind Energy	CPP	Open Access		
Night Rebate	11356500	4.3	145299150.00	Units	0	0	0		
Fuel charge	33790500	.43	4883295	Amount	0	0	0		
PF Rebate	145299150	3.35	113198175.00	Adj (Credit)		0	0		
EHV Rebate	145299150.00	-2.50%	-3632478.75	Adj (Debit)					
TOU	11262000	1.25	-1816239.38						
GT Charges	33790500	0.85	9572700.00	AMG Charges					
		2.5	0.00	CGST:					
Tot Consumption Charge			279951661.87						

## SUMMARY OF CHARGES

Demand Charge	Energy Charge	Fuel Surcharge	PF Adj./Rebate	Night Rebate	EHV Rebate	Time Of Use Charges	GT Charges	Tot Consumption Charge
22213650.00	145299150.00	113198175.00	-3632478.75	4883295.00	1816239.38	9572700.00	0.00	279951661.87
Electricity Duty	Meter Charges	Cross Subsidy	Wheeling Charges	Parallel Operation Charges	Current Month's Bill	Outstanding Arrears		
42005541.54	0.00				321957203.41	324395.84		
Delayed Payment Charges	Adv. Payment / Adjust.	Net Payable	TCS	Total Payable	PREV.BILL TCS Cr	Reading Date	Bill Date	Due Date
5688.73	-23331600.67	298955687.31		298955687.31		01-09-2023	05-09-2023	15-09-2023

Amount in Words: Twenty Nine Crores Eighty Nine Lakhs Fifty Five Thousand Six Hundred And Eighty Seven And Thirty One Paise Only

Mag:U/S 194Q OF IT ACT, TDS @0.1% IS APPLICABLE

MC-Meter Charge MF-Multiplication Factor CD-Contract Demand TF-Tariff Change  
FOR IMPORTANT NOTE PLEASE SEE OVERLEAF

EXECUTIVE ENGINEER  
PGVCL, LUNSAPUR  
SAVARKUNDA



Meter No:	Make	CTPT Make	CTPT Sero	CT Ratio	PT Ratio	Meter Constant	J.ED Exemption Upto	Meter Status
GJ3192A	SECURE		1500				07-12-2020	Normal
	KWH	KVAH	KVARH	AMD	PEAK HR	NIGHT HR	AMD DAY	AMD NIGHT
Current R	1187022.498	1187152.746	5077.252		394243.776	403944.026		
Previous R	1164499.498	1164629.746	5077.252		386737.776	396375.026		
Difference	22523	22523	0		7506	7569		
Diff*MF	33784500	33784500	0		11259000	11353500		

Meter No:	Make	CTPT Make	CTPT Sero	CT Ratio	PT Ratio	Meter Constant	J.ED Exemption Upto	Meter Status
GJ3193A	SECURE		1500				07-12-2020	Normal
	KWH	KVAH	KVARH	AMD	PEAK HR	NIGHT HR	AMD DAY	AMD NIGHT
Current R	129521.285	131067.117	4499.206		42987.565	43072.049		
Previous R	129517.285	131063.117	4499.206		42985.565	43070.049		
Difference	4	4	0		2	2		
Diff*MF	6000	6000	0		3000	3000		



Paschim Gujarat Vij Company Limited  
Adjustment Details Report for Aug-2023

PERIOD: AUG-2023  
COM: 4 PGVCL

CIR: 37 AMRELI

PROCESSED ON: 05-Sep-2023  
DIV: 22 SAVARKUNDLA

Consumer No : 43369  
Consumer Name: M/S SINTEX INDUSTRIES LTD.

Adjustment Description	Amount	Units	Remarks
Credit Board Charges	23177351.37	0.00	WIND UNIT DIFF JUL.23
Credit DPC	11783.80	0.00	TDS DIFF AMT DPC CR AS PER OFFICE NOTE-05.09.23
Credit ED Charges	3476497.27	0.00	WIND UNIT DIFF JUL.23
Credit TDS	284.00	0.00	TDS RECONCILIATION DIFF AUG.23
Credit TDS	318017.00	0.00	TDS ADJUSTMENT 7-2023
CREDIT ADJUSTMENT Amount:	26983933.44	0.00	
Debit Board Charges	3652332.77	0.00	CROSS SUBSIDY,ADDISHIONAL CHARGE JUL.23
DEBIT ADJUSTMENT Amount:	3652332.77	0.00	

DEBIT UNIT ADJUSTMENTS FOR PAST BILLING

Consumer Number	Consumer Name	Units

CREDIT UNIT ADJUSTMENTS FOR PAST BILLING

Consumer Number	Consumer Name	Units

BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION

AT GANDHINAGAR

PETITION NO. 2408 OF 2024

IN THE MATTER OF:

Reliance Industries Limited

... Petitioner

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Sr No.	Annexure	Particulars	Pg No.
1.	-	Affidavit of Compliance pursuant to order dated 13.06.2025 of the Hon'ble Commission.	339 to 341
2.	'I'	A copy of the order dated 13.06.2025 of the Hon'ble Commission passed in Petition No. 2408 of 2024.	342 to 345
3.	"II-Colly"	The copies of the Public Notices dated 23.06.2025 published by the Petitioner in two Gujarati and one English Newspaper.	346 to 348

	<b>G.E.R.C.</b>
Order No.:	10-3296
Date:	15 JUL 2025

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BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION

AT GANDHINAGAR

PETITION NO. 2408 OF 2024

IN THE MATTER OF:

Reliance Industries Limited  
Vraj, Reliance Corporate House  
Near Vishv Umiyadham  
Umiyadham Road, Jaspur  
Ahmedabad-382721



... Petitioner

**AFFIDAVIT OF COMPLIANCE PURSUANT TO ORDER DATED**  
**13.06.2025 OF THE HON'BLE COMMISSION**

**MOST RESPECTFULLY SHOWETH:**

1. The Petitioner is filing the present Affidavit in due compliance of the directions issued in the order dated 13.06.2025 by this Hon'ble Commission. Copy of the order dated 13.06.2025 of the Hon'ble Commission is annexed hereto and marked as **Annexure-I**.
2. This Hon'ble Commission, vide its order dated 13.06.2025 in the captioned Petition, directed the Petitioner to issue public notices in two Gujarati Newspapers and in one English Newspaper having wide circulation inviting suggestions/views/comments/objections from the stakeholders. Accordingly, the Petitioner has published the Public Notice in two Gujarati Newspapers namely 'Divya Bhaskar' dated **23.06.2025** and 'Sandesh' dated **23.06.2025** and in one English Newspaper namely 'Indian Express' dated **23.06.2025**. Copies of the Public Notices in English as well as Gujarati Newspapers are annexed hereto and marked as **ANNEXURE-II Collectively**.



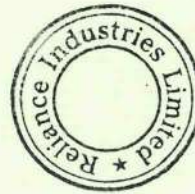




3. This Hon'ble Commission has further directed the Petitioner to upload the Petition along with all relevant documents on Petitioner's website and call for comments/objections/suggestions from the concerned stakeholders on the Petition, on affidavit within 30 days of the issuance of the public notice. Accordingly, in due compliance of the said direction, the Petitioner has uploaded the public notice, Petition along with all documents on its website at [www.ril.com/InvestorRelations/Petitions.aspx](http://www.ril.com/InvestorRelations/Petitions.aspx) calling upon the stakeholders to submit their comments/objections/suggestions within 30 days of the issuance of public notice.

4. The Petitioner submits that the present Affidavit may be treated to be due compliance of the directions issued in the Order dated 13.06.2025 of this Hon'ble Commission.

For, Reliance Industries Limited



Authorised Signatory

**DEPONENT**





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BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION

AT GANDHINAGAR

PETITION NO. 2408 OF 2024

IN THE MATTER OF:

Reliance Industries Limited  
Vraj, Reliance Corporate House  
Near Vishv Umiyadham  
Umiyadham Road, Jaspur  
Ahmedabad-382721

... Petitioner

AFFIDAVIT

I, Sachin Baid, s/o. [Suresh Baid] Male, Aged about [38] years residing at Ahmedabad, do solemnly affirm and say as follows:

That I am [General Manager] of the Petitioner Reliance Industries Limited and authorized signatory of the Petitioner Company herein and I have read the present Affidavit and I am competent and duly authorized by the Petitioner Company to file this Affidavit.

Solemnly affirmed at Ahmedabad on this 03 day of July, 2025 that the contents of the above affidavit are true to my knowledge and belief (as derived from the records), based on information believed to be true and no part of it is false and nothing material has been concealed therefrom.

IDENTIFIED BY ME

ADVOCATE

For, Reliance Industries Limited

Authorised Signatory

DEPONENT

SR. NO. .... 12025  
SOLEMNLY AFFIRMED  
BEFORE ME  
KANAKSINH K. VAGHELA, NOTARY  
DATE 03/07/2025





Annexure- '1'

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**BEFORE THE GUJARAT ELECTRICITY REGULATORY COMMISSION  
GANDHINAGAR**

**Petition No. 2408 of 2024.**

**In the Matter of:**

**Petition under Regulations 4 & 5 and Regulation 9.1 of the GERC (Procurement of Energy from Renewable Sources) Regulations, 2010 and GERC (Procurement of Energy from Renewable Sources) (First Amendment) Regulations, 2014 and GERC (Procurement of Energy from Renewable Sources) (Second Amendment) Regulations, 2018 and GERC (Procurement of Energy from Renewable Sources) (Third Amendment) Regulations, 2022.**

Petitioner : Reliance Industries Limited  
Vraj, Reliance Corporate House  
Near Vishv Umiyadham  
Umiyadham Road, Jaspur, Ahmedabad – 382721.

Represented by : Ld. Adv. Mr. Nisarg Desai alongwith Mr. Anant Kapse  
and Mr. Bhadresh Chauhan

**CORAM:**

**Mehul M. Gandhi, Member  
S. R. Pandey, Member**

**Date: 13/06/2025.**

**DAILY ORDER**

1. The present matter was listed for hearing on 11.06.2025.
2. Ld. Adv. Mr. Nisarg Desai, appearing on behalf of the Petitioner, submitted that through this Petition, permission to carry forward its RPO obligation of FY 2023-24 within one year from the date which this matter is decided by the Commission is sought while seeking relaxation or waiver of the provisions of the GERC (RPO) Regulations by giving effect to revise the RPO targets for the FY 2023-24 and also permitting the Petitioner to fulfil its RPO liability through interchangeability, i.e., allowing the Petitioner to fulfil its entire RPO by biomass co-firing and by allowing



fulfilment of solar RPO through purchase of non-solar renewable energy/RECs and vice-versa at entry level and also implementing circulars dated 01.02.2019 and 01.10.2019 issued by the Ministry of Power, Government of India so as to ensure capping of the RPO for captive power plants as per aforesaid clarificatory Orders of the Ministry of Power.

3. We have considered the submissions on behalf of the Petitioner. We note that the present Petition is filed by the Petitioner under Regulations 4 & 5 and 9.1 of the GERC (Procurement of Energy from Renewable Sources) Regulations, 2010 and subsequent amendments made thereto, seeking permission to the Petitioner to carry forward RPO liability of FY 2023-24 within one year from the date which the present matter is decided by the Commission and RPO compliance be allowed at the entry level instead of unit level. It is prayed to pass appropriate directions/orders under Regulations 4.1, 5.1 and 12 of GERC (Procurement of Energy from Renewable Sources) Regulations, 2010 and subsequent amendments made thereto and thereby removing difficulties in permitting the Petitioner to fulfil its RPO liability through interchangeability. i.e., allowing the Petitioner to fulfil its entire RPO by biomass co-firing and by allowing fulfilment of solar RPO through purchase of non-solar renewable energy/RECs and vice-versa at entry level. The Petitioner has also prayed for revision of the RPO targets for FY 2023-24. We note that the aforesaid Regulations have been notified by the Commission in exercise of the powers conferred under Sections 61, 66, 86 (1)(e) and 181 of the Electricity Act, 2003 and all other powers enabling it in that behalf and further amendments have also been issued from time to time. Since, the present matter pertains to RPO and Section 86 of the Electricity Act, 2003 and aforesaid Regulations, the Commission has the power to decide the same. Hence, we decide to admit the present Petition.
- 3.1. We also note that the Petitioner is seeking revision in RPO of FY 2023-24 within one year from the date which the Petition decides, read with other prayers in present Petition. The subject matter of the present Petition is related to compliance of RPO by obligated entities and/or waiver from it, which needs to hear the stakeholders. Hence, we are of the view that it is necessary to hear stakeholders etc. prior to granting the prayers in the present matter for which, the Petitioner is required to give public notice in two daily newspapers, one in English language and two in vernacular language, in Gujarati, having wide circulation at the State/National level



and invite suggestions/views/comments/objections from the stakeholders on the present Petition and thereafter, the Commission can decide the matter.

3.2. Accordingly, we hold that a public hearing shall be conducted to take into consideration the views/comments/suggestions/objections of the stakeholders before deciding the present matter. The Petitioner is, therefore, directed that as stated above a public notice to be issued in two daily Gujarati Newspaper and one English Newspaper having wide circulation in the State/National level stating that they have filed Petition No. 2408 of 2024 before the Commission under Regulations 4 & 5 and Regulation 9.1 of the GERC (Procurement of Energy from Renewable Sources) Regulations, 2010 and subsequent amendments made thereto, permitting the Petitioner to carry forward RPO liability of FY 2023-24 within one year from the date which the Commission decides and RPO compliance may be allowed at the entry level instead of unit level and to pass appropriate directions/orders under Regulations 4.1, 5.1 and 12 of GERC (Procurement of Energy from Renewable Sources) Regulations, 2010 and subsequent amendments made thereto, for removing difficulties in permitting the Petitioner to fulfil its RPO liability through interchangeability. i.e., allowing the Petitioner to fulfil its entire RPO by biomass co-firing and by allowing fulfilment of solar RPO through purchase of non-solar renewable energy/RECs and vice-versa at entry level. The Petitioner is also directed to upload the present Petition with all the documents on its website and invite comments and suggestions from the stakeholders on the Petition on affidavit within 30 days from the date of issuance of public notice. The Petitioner shall also state in the public notice that the stakeholders/objectors shall file their objections/suggestions in the Petition to the Secretary, Gujarat Electricity Regulatory Commission, 6<sup>th</sup> Floor, GIFT ONE, Road 5C, Zone 5, GIFT City, Gandhinagar - 382355 in five copies along with affidavit in support of their submissions with a direct copy to the Petitioner. Upon receipt of the comments/views/objections/suggestions from the stakeholders, the Petitioner is at liberty to file its reply, if any, to the Commission.

3.3. The staff of the Commission is also directed to upload the Petition along with all relevant documents on the website of the Commission after compliance affidavit of issuing public notice and uploading of Petition is filed by the Petitioner along with



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copy of public notices issued by the Petitioner is provided to the Commission and invite comments/suggestions from the stakeholders.

3.4. The staff of the Commission is also directed to inform/issue hearing notice for the present Petition to stakeholders/objectors who file their submissions/objections/comments before the Commission in the present matter.

4. Next date of date of hearing will be intimated separately.

5. Order accordingly.

**Sd/-**  
**[S. R. Pandey]**  
**Member**

**Sd/-**  
**[Mehul M. Gandhi]**  
**Member**

Place: Gandhinagar.  
Date: 13/06/2025.





## જાહેર નોટિસ

મેસર્સ રિલાયન્સ ઇન્ડસ્ટ્રીઝ લિમિટેડ (આર.આઇ.એલ.), પુરવઠાની ઉપલબ્ધિની મર્યાદાઓ અને આર.આઇ.એલ.ના કાબુ બહારના અન્ય કારણોને લીધે અને નાણાકીય વર્ષ 2023-2024 પુર્તતાની જરૂરિયાતોને કેરી ફોરવર્ડ કરવા માટે, ગુજરાતમાં વિવિધ જગ્યાએ આવેલા તેના પ્લાન્ટ માટે પુનઃ પ્રાપ્ય ઊર્જા ખરીદીની જવાબદારીના પાલનમાં મુશ્કેલીના સંબંધમાં, ગુજરાત વિદ્યુત નિયંત્રણ આયોગ (જી.ઇ.આર.સી.) (પુનઃપ્રાપ્ય ઊર્જાના સ્ત્રોતમાંથી ઊર્જાની પ્રાપ્તિ) વિનિયમ 2010-ના વિનિયમ 4, 5 9.1 હેઠળ અને (જી.ઇ.આર.સી.) (વ્યાપાર વિનિયમોનું સંચાલન)ના વિનિયમો હેઠળ યોગ્ય દિશાનિર્દેશો મેળવવા માટે માનનીય ગુજરાત વિદ્યુત નિયંત્રણ આયોગ (જી.ઇ.આર.સી.) સમક્ષ મેસર્સ રિલાયન્સ ઇન્ડસ્ટ્રીઝ લિમિટેડએ કાઇલ કરેલ પિટિશન નંબર 2408/2024 (વર્ષ 2023-2024)માં હિતધારકો પાસેથી સૂચનો/અભિપ્રાયો/ટિપ્પણો/વાંધા મંગાવે છે. આર.આઇ.એલ., ઊર્જા મંત્રાલય, ભારત સરકારે બહાર પાડેલ તારીખ 01-10-2019ના "પુનઃપ્રાપ્ય ઊર્જાના સ્ત્રોતો ખરીદી સંબંધિત (RPO) સંબંધી સ્પષ્ટીકરણ હુકમો"થી ઊર્જા મંત્રાલય મારફત ભારત સરકારના દિશાનિર્દેશો અમલમાં લાવી અને તેના લાભો આર.આઇ.એલ.ને અપાવવા ઇચ્છે છે. નામદાર (જી.ઇ.આર.સી.) એ તારીખ 13-06-2025 ના હુકમથી આર.આઇ.એલ.ને જાહેર નોટિસ આપીને હિતધારકો પાસેથી ટિપ્પણો/વાંધા/સૂચનો મંગાવવાનો આદેશ કર્યો છે. સદરહુ પીટીશન અને નામદાર જી.ઇ.આર.સી.ના તારીખ 13-06-2025 ના હુકમ સંબંધિત તમામ દસ્તાવેજો આર.આઇ.એલ.ની વેબસાઇટ <https://www.ril.com/investors/resource-center/petitions> ઉપર અને કમિશનની વેબસાઇટ ઉપર પણ અપલોડ કરેલા છે. હિતધારકો આ જાહેર નોટિસ બહાર પડ્યા તારીખથી 30 દિવસની અંદર, સીધા જ આર.આઇ.એલ.ને નીચે આપેલ સરનામે અને સચિવ, ગુજરાત ઇલેક્ટ્રિસિટી રેગ્યુલેટરી કમિશન, 6ઠો માળ, ગિફ્ટ વન, રોડ 5 સી, ઝોન 5, ગિફ્ટ સિટી, ગાંધીનગરને પણ 5 નકલો/સેટમાં સદરહુ અપીલમાં તેમની રજૂઆતના સમર્થનમાં ગાંધીનામાં સાથે તેમના સૂચનો/અભિપ્રાયો/ટિપ્પણો/વાંધા રજૂ કરી શકશે.

શ્રી અનંત કાપસે

સીનિયર જનરલ મેનેજર

"વજ", રિલાયન્સ કોર્પોરેટ હાઉસ,

વિશ્વ ઉમિયા ધામ પાસે, ઉમિયા ધામ રોડ,

જાસપુર, અમદાવાદ - 382721

તારીખ: 23.06.2025





## જાહેર નોટિસ

મેસર્સ રિલાયન્સ ઇન્ડસ્ટ્રીઝ લિમિટેડ (આર.આઇ.એલ.), પુરવઠાની ઉપલબ્ધિની મર્યાદાઓ અને આર.આઇ.એલ.ના કાબુ બહારના અન્ય કારણોને લીધે અને નાણાકીય વર્ષ 2023-2024 પુર્ણતાની જરૂરિયાતોને કેરી ફોરવર્ડ કરવા માટે, ગુજરાતમાં વિવિધ જગ્યાએ આવેલા તેના પ્લાન્ટ માટે પુનઃપ્રાપ્ય ઊર્જા ખરીદીની જવાબદારીના પાલનમાં મુશ્કેલીના સંબંધમાં, ગુજરાત વિદ્યુત નિયંત્રણ આયોગ (જી.ઇ.આર.સી.) (પુનઃપ્રાપ્ય ઊર્જાના સ્ત્રોતમાંથી ઊર્જાની પ્રાપ્તિ) વિનિયમ 2010-ના વિનિયમ 4, 5 9.1 હેઠળ અને (જી.ઇ.આર.સી.) (વ્યાપાર વિનિયમોનું સંચાલન)ના વિનિયમો હેઠળ યોગ્ય દિશાનિર્દેશો મેળવવા માટે માનનીય ગુજરાત વિદ્યુત નિયંત્રણ આયોગ (જી.ઇ.આર.સી.) સમક્ષ મેસર્સ રિલાયન્સ ઇન્ડસ્ટ્રીઝ લિમિટેડએ ફાઇલ કરેલ પિટિશન નંબર 2408/2024 (વર્ષ 2023-2024)માં હિતધારકો પાસેથી સૂચનો/અભિપ્રાયો/ટિપ્પણો/વાંધા મંગાવે છે. આર.આઇ.એલ., ઊર્જા મંત્રાલય, ભારત સરકારે બહાર પાડેલ તારીખ 01-10-2019ના "પુનઃપ્રાપ્ય ઊર્જાના સ્ત્રોતો ખરીદી સંબંધિત (RPO) સંબંધી સ્પષ્ટીકરણ હુકમો"થી ઊર્જા મંત્રાલય મારફત ભારત સરકારના દિશાનિર્દેશો અમલમાં લાવી અને તેના લાભો આર.આઇ.એલ.ને અપાવવા હચ્છે છે. નામદાર (જી.ઇ.આર.સી.) એ તારીખ 13-06-2025 ના હુકમથી આર.આઇ.એલ.ને જાહેર નોટિસ આપીને હિતધારકો પાસેથી ટિપ્પણો/વાંધા/સૂચનો મંગાવવાનો આદેશ કર્યો છે. સદરહુ પીટીશન અને નામદાર જી.ઇ.આર.સી.ના તારીખ 13-06-2025 ના હુકમ સંબંધિત તમામ દસ્તાવેજો આર.આઇ.એલ.ની વેબસાઇટ <https://www.ril.com/investors/resource-center/petitions> ઉપર અને કમિશનની વેબસાઇટ ઉપર પણ અપલોડ કરેલા છે. હિતધારકો આ જાહેર નોટિસ બહાર પડ્યા તારીખથી 30 દિવસની અંદર, સીધા જ આર.આઇ.એલ.ને નીચે આપેલ સરનામે અને સચિવ, ગુજરાત ઇલેક્ટ્રિસિટી રેગ્યુલેટરી કમિશન, 680 માળ, ગિફ્ટ વન, રોડ 5 સી, ઝોન 5, ગિફ્ટ સિટી, ગાંધીનગરને પણ 5 નકલો/સેટમાં સદરહુ અપીલમાં તેમની રજૂઆતના સમર્થનમાં સોગંદનામાં સાથે તેમના સૂચનો/અભિપ્રાયો/ટિપ્પણો/વાંધા રજૂ કરી શકશે.

શ્રી અનંત કાપસે

સીનિયર જનરલ મેનેજર

"વ્રજ", રિલાયન્સ કોર્પોરેટ હાઉસ,

વિશ્વ ઉમિયા ધામ પાસે, ઉમિયા ધામ રોડ,

જાસપુર, અમદાવાદ - 382721

તારીખ: 23.06.2025



## PUBLIC NOTICE

M/s Reliance Industries Ltd (RIL) invites suggestions/ views/ comments/ objections from the stakeholders in Petition No 2408 of 2024 filed by RIL before Hon'ble Gujarat Electricity Regulatory Commission to seek appropriate directions under Regulation 4, 5 and 9.1 of Gujarat Electricity Regulatory Commission (GERC) (Procurement of Energy from Renewable Energy Sources), Regulation 2010 to carry forward the compliance requirement of RPO for the FY 2023-2024, on account of difficulty in complying with the Renewable Purchase Obligation (RPO) for RIL's plants located in Gujarat, due to exigencies beyond the control of the Petitioner. RIL also seeks to get the directives of the Government of India issued through Ministry of Power vide their "Clarification orders related to Renewable Purchase Obligation (RPO)" dated 01.10.2019 be implemented and benefits thereof be given to RIL. Hon'ble GERC vide order dated 13-06-2025 has directed RIL to call for comments/ objections/ suggestions from the stakeholders by issuing public notice. All the relevant documents of the said petition and GERC order dated 13-06-2025 are uploaded on <https://www.ril.com/investors/resource-center/petitions> and also on website of Commission. The stakeholders can file their suggestion/ views/ comments/ objections along with affidavit in support of their submission in the said petition within 30 days from the issuance of this public notice directly to RIL at the address given below and also to the Secretary, Gujarat Electricity Regulatory Commission, 6th Floor, GIFT ONE, Road 5C, Zone 5, GIFT City, Gandhinagar, in 5 copies/sets.

Sh Anant Kapse  
Sr General Manager  
Reliance Industries Limited  
VRAJ, Reliance Corporate House,  
Near Vishv Umiya Dham, Umiya Dham Road,  
Jaspur, Ahmedabad - 382721

Date: 23.06.2025