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REGULATORY INSIGHTS

Centre for Energy Regulation

Evaluating Fuel Purchase Adjustments, Green Energy Open Access, and Renewable Tariff Frameworks

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Editorial

Variations in the Power Purchase Cost (PPC) places burden of working capital requirement on the Discoms. This is subsequently passed on to consumers through the truing up of tariffs in the future. Fuel and Power Purchase Adjustment Surcharge (FPPAS) is a mechanism to bridge the time value of money gap between the wearing cost of power purchase and recovery of tariff from the consumers. The prevailing framework for FPPAS across most of the SERCs provides for automatic recovery of the change in the PPC up to a certain limit, with the requirement for regulatory approval for adjustment beyond that limit. The proposal to link the FPPAS adjustment to historical changes in the fuel cost up to the past three years, may led to significant departure of the actual cost changes in the near term versus those experienced in the distant past. Given the significant impact of proportion of imported coal and its landed cost over the last 3 years, data pertaining to those periods cannot be relied for setting a benchmark for an alternate mechanism for FPPAS. Emphasis on fuel price revisions must be quickly transmitted to the PPC and reflected in the generation tariff. A mechanism to track fuel price changes and their tariff impact across all power plants is urgently needed

Green Energy Open Access (GEOA) has paved way for greater penetration of renewables in the system and its easy access to even smaller consumers (upto 100 kW). The regulatory framework should adopt a technology agnostic approach with respect to the GEOA by source of renewable energy. This would be an attempt to artificially alter the level playing field that goes beyond the cost of harnessing a resource.

Due to the nature of underlying resources, most of the RE plants are subject to seasonality, and variability across the day. Provision for Variable GEOA would provide for better utilisation of the network capacity. For example, a radial network with a solar power plant has the same Capacity Utilization Factor as the plant itself. Connecting a storage services provider nearby allows mutually exclusive network access for both across different hours of the day. The solar power plant injects power during the day, while the storage service provider injects electricity during the evening hours. The storage service provider may have an agreement with another entity in the system, allowing the electricity generated by the solar power plant to be absorbed, through displacement, by the adjacent storage capacity. Resulting in enhancing the network capacity of the radial segment and enhance overall utilisation, lowering per unit cost of the transmission system.

Anoop Singh (Editor)
Founder & Coordinator, Centre for Energy Regulation

Keywords: Stabilization Fund, Tariff Fluctuations, System Constraints, Energy Banking, Generalised Variable Tariff, Transmission Licensee, O&M Expenses, Green Energy Open Access, Additional Surcharge, Open Access Utilisation Factor

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Opinion on CEA Concept Paper on Alternative Mechanism for Implementation of Fuel and Power Purchase Adjustment Surcharge under Rule 14 (Timely Recovery of Power Purchase Cost by Distribution Licensee) of the Electricity (Amendment) Rules, 2022

Cite

Central Electricity Authority (CEA) notified concept paper on "Alternative Mechanism for Implementation of Fuel and Power Purchase Adjustment Surcharge (FPPAS) under Rule 14 (Timely recovery of Power Purchase Cost by Distribution Licensee) of the Electricity (Amendment) Rules, 2022" issued on 30th December, 2024. The key objective of the document is mentioned below:

Objective: The proposed concept paper address mechanisms for handling variations in power procurement costs faced by electricity distribution companies (Discoms). It highlights the FPPAS as a mechanism for periodic revenue recovery, standardized and proposed certain changes under Rule 14 of the Electricity (Amendment) Rules, 2022. Current approach practices, such as Gujarat's base FPPPA and Maharashtra's stabilization fund, aim to minimize tariff fluctuations and ensure financial stability. The CEA's proposed alternative mechanism involves a uniform surcharge collected monthly to avoid consumer tariff shocks while ensuring timely cost recovery for Discoms.

CER Opinion

Past FPPAS and Future Surcharge: In the proposed Clause 7(i) *"Along with monthly electricity bill, Distribution Licensee shall also collect monthly Base Fuel and Power price Adjustment Surcharge (FPPAS) not exceeding X % of monthly average billing rate approved by the State Commission.* ***X shall be decided by the State Commission based on weighted average FPPAS of last 3 years' audited values*** *and the proposal/approval for ensuring year as filed by the Distribution Licensee before the State Commission".* (Emphasis added)

The existing mechanism of FPPAS takes into account most recent changes in fuel and power purchase cost. The proposed mechanism would link the future FPPAS (as a factor X) based on price changes in the past three years. **This would not be a correct reflection of cost changes in the near term and, in fact, increase the delink between cost changes and FPPAS to be collected from consumers (Figure 1).** For example, change in fuel cost and FPPAS was significantly high *in the past few years due to imported fuel, whose share has now reduced. Furthermore, a change in variation in share of coal based generation over the years would also be a reflection of what may happen in the near term.*

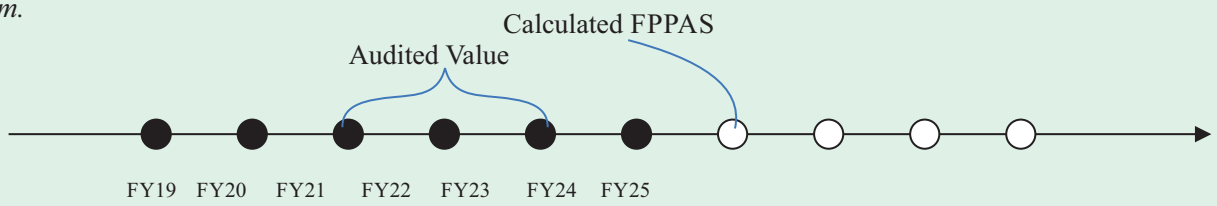

Figure 1: Calculation of FPPAS based on Audited Values from the past

Dependence on past FPPAS would result in higher current FPPAS to be collected from consumers. The opposite may happen when past cost increase was subdued and recent price changes are significant. The differences thereof would be recoverable/adjusted during the true up mechanism, thus may further drive the wedge between the actual cost changes and recovery thereof.

Incorrect Basis in the Proposed Formula for the Alternative to FPPAS: The proposed FPPAS formula, derived from Tables 4 and 5 in the concept paper :

$$X(\%) = \frac{\text{F}}{\text{Total Revenue(R)}} \qquad (1)$$

X= Actual Fuel Cost Adjustment (FAC) (%)

R= Revenue (Rs.) (or sum of the past three years)

F= Actual FAC (Rs.) (or sum of the past three years)

Suggested Citation: Singh A. (ed.). (2025), Opinion on CEA Concept Paper on Alternative Mechanism for Implementation of Fuel and Power Purchase Adjustment Surcharge under Rule 14 (Timely Recovery of Power Purchase Cost by Distribution Licensee) of the Electricity (Amendment) Rules, 2022, *Regulatory Insights* (Vol. 07, Issue 04, pp. 2-3), Centre for Energy Regulation (CER), Indian Institute of Technology Kanpur. https://cer.iitk.ac.in/periodicals/regulatory_insights/Volume07_Issue04.pdf

It is suggested that total revenue is inclusive of the FPPAS. The calculated X, from the past data, would be applied on the revenue excluding FPPAS. Thus, the correct formula for calculation of X should be,

$$X'(\%) = \frac{F}{R-F} \qquad (2)$$

Stabilisation Fund may Increase Working Capital Cost for the Discoms: In the proposed Clause 7(ii) *"Such base FPPAS collected from consumers shall be deposited in a separate account called FPPAS Stabilisation Fund. Any interest* ***accrued/earned*** *on FPPAS stabilisation fund will also be added with FPPAS Stabilisation Fund".*

The purpose of stabilisation fund is to serve as a reserve that holds excess amounts collected from the FPPAS. This would be parked in a separate account with a bank and would bear/accrue interest thereof.

If funds are borrowed by a Discoms against that available in the stabilisation funds, the banks/FIs would charge higher interest rate thereby placing additional cost burden for the Discoms. Hence, such afund should be available to meet the working capital requirement of the Discoms. The interest 'accrued' on the same should be adjusted from the tariff during the true-up exercise.

Adjusted Against Base Rate: In the proposed Clause 7(v) *"In case of surplus balance amount equivalent to last two month's FPPAS demand in FPPAS stabilisation fund at the end of a month, Distribution Licensee shall pass on the incremental amount over and above the two month's FPPAS amount* ***reducing the base rate to that extent"***

Refence to the base rate may be reworded as 'adjusted against the base rate' avoiding violation of Section 62 (4) of the Electricity Act 2003 that allows tariff (base) tariff change only once in a financial year.

Opinion on HERC (Green Energy Open Access) (Ist Amendment) Regulations, 2025 [Draft]

Cite

Haryana Elecrticity Regulatory Commission proposed first amendment for "Green Energy Open Access" Regulations, 2023. The key highlights of the draft are mentioned below:

Objective: The draft documents proposes amendments to align with the Central Government's updated Green Energy Rules. Eligibility for Green Energy Open Access is expanded to include consumers with 100 kW load via single or aggregated connections in the same electricity division. Captive users are allowed unrestricted procurement under Green Energy Open Access. Consumers on non-independent feeders may be allowed access, subject to system constraints and without compensation for power cuts. The additional surcharge exemption for offshore wind energy is extended to projects commissioned up to December 2032.

CER Opinion

Ensuring the Prerequisite of Connectivity for Open Access Approval: In the proposed Clause 1(4) *"Provided that a generating station, including captive generating plant, or a consumer / person shall not be eligible to apply for long term or medium term or short-term open access unless he has the connectivity or he applies for connectivity to the intra-State transmission or distribution system as the case may be. Provided further that a person may apply for connectivity as well as long term or medium term or short-term open access simultaneously".*

It is suggested that draft Clause 1(4) should clearly specify that the granting of open access would be subsequent to the consumer obtaining connectivity to the transmission network since open access cannot be utilized in the absence of such connectivity. In the absence of this clarification, theoretically speaking, a consumer who has applied for connectivity and open access either simultaneously or sequentially may end up blocking/hoarding open access without any consequential possibility of its utilization (due to the absence of connectivity). This could deprive other applications who may have been granted connectivity for long term, medium term, or short-term open access.

Limitations of Contracted Demand for Captive Consumers: In the 1st Proviso of proposed Clause 2 *"there shall be no limit of supply of power for the captive consumers taking power under Green Energy Open Access."*

The draft provision states that there shall be no limit on the supply of power for captive consumers availing Green Energy Open Access (GEOA). However, this should be explicitly subject to the consumer having requisite

Suggested Citation: Singh A. (ed.). (2025), Opinion on HERC (Green Energy Open Access) (Ist Amendment) Regulations, 2025, *Regulatory Insights* (Vol. 07, Issue 04, pp. 3-4), Centre for Energy Regulation (CER), Indian Institute of Technology Kanpur.
https://cer.iitk.ac.in/periodicals/regulatory_insights/Volume07_Issue04.pdf

connectivity to the appropriate transmission or distribution network and any system constrains in granting or operationalization open access. Therefore, it is recommended that the regulation clearly specify that open access for captive consumers will be contingent on connectivity requirements and system constraints.

Clarifying Open Access Terms to Avoid Legal Disputes/Avoiding Legal Ambiguities in Open Access: In the 2nd Proviso of proposed Clause 2 *"Provided further that the eligible consumers of a distribution licensee who are not on independent feeders may be allowed open access subject to the condition that they agree to the system constraints as well as the power cut restrictions imposed by the distribution licensee serving them. In such cases, under drawl, if any, on account of power cut restrictions shall not be compensated."*

To prevent legal disputes arising from the amendment to the fourth proviso, the agreement with open access consumers should clearly specify that supply to consumers not connected to independent feeders may be restricted based on system constraints imposed by the distribution licensee. The phrase "they agree to" should be removed, and it should instead be stated that such consumers shall be subject to system constraints.

Furthermore, it should also clarify that any under-drawal resulting from power cut restrictions shall not be compensated in terms of reduced charges, except those applicable on per unit basis. Applications submitted by consumers who are not connected to independent feeders shall be considered as their implicit acceptance of these restrictions. Additionally, it is recommended to introduce another proviso stating that no charges shall be levied on the energy scheduled but restricted from import by the distribution licensee due to power cut.

Technology Agnostic Approach to Additional Surcharge in Open Access: In the proposed Clause 3 *"Provided also that additional surcharge shall not be applicable in case electricity produced from offshore wind projects, which are commissioned up to December, 2032 and supplied to the Open Access Consumers."*

The principle of additional surcharge applies uniformly to, irrespective of its source, electricity supplied through open access. Therefore, the regulation should adopt a **technology–agnostic approach** and ensure non-discriminatory treatment of different renewable energy sources. The **Electricity Act, 2003 also does not mandate any differentiation** based on the type of source for electricity generation.

Exempting additional surcharge specifically for offshore wind projects could create regulatory inconsistencies and may lead to demands for similar exemptions from other renewable energy technologies. To maintain fairness and regulatory clarity, it is recommended that the additional surcharge provisions apply consistently to all open access transactions, irrespective of the sources of generation.

Opinion on RERC (Terms and Conditions for Green Energy Open Access) Regulations, 2024 [Draft]

Cite

Rajasthan Electricity Regulatory Commission notified draft "Terms and Conditions for Green Energy Open Access" Regulations, 2024 issued on October, 2024. The main objectives of the proposed regulations are:

Objective: The proposed draft regulations aims to promote renewable energy adoption by enabling non-discriminatory open access to green energy for consumer with a demand of 100 kW or above. It aims to facilitate the regulations, reduce dependency on fossil fuels, ensure fair pricing, and align with India's clean energy goals. The framework defines charges, energy banking, compliance norms, and approval processes, making green energy more accessible and efficient for businesses and consumers in Rajasthan.

CER Opinion

Variable Green Energy Open Access (VGEOA): Due to seasonal nature of some of the RE resources like solar and wind, GEOA would neither be utilized uniformly across months, not across the hours of the day. A provision for variable GEOA, especially across hours of the day should be considered. For example, supply from a solar energy based plants would not use the GEOA during non-solar hours. Such time blocks should be available for allocation to other users. For example, an Energy Storage System (with or without the a RE capacity) may be able to utilize the GEOA during non-solar hours. Provision of time specific or VGEOA would help better utilization of the network capacity and would also reduce transmission cost burden for the system.

Suggested Citation: Singh A. (ed.). (2025), Opinion on RERC (Terms and Condition for Green Energy Open Access) Regulations, 2024, *Regulatory Insights* (Vol. 07, Issue 04, pp. 4-6), Centre for Energy Regulation (CER), Indian Institute of Technology Kanpur.
https://cer.iitk.ac.in/periodicals/regulatory_insights/Volume07_Issue04.pdf

Open Access Utilisation Factor (OAUF) and Underutilization of GEOA: In the proposed Clause 9(iii) *"The State Nodal Agency may cancel or reduce the capacity allocated to a short-term open access consumer to the extent it is underutilized, when such a short-term open access consumer under-utilizes the allocated capacity more than 2 times in a month with duration of underutilization exceeding 2 hours each time or fails to inform the distribution licensee of his inability to utilize the allocated capacity. Such cancellation shall be resorted to after giving due notice".*

Underutilisation of GEOA should be objectively defined with respect to a target or normative utilization factor as per the granted GEOA. Open Access Utilisation Factor (OAUF) may be defined as:

$$OAUF = Sum(t, OA\_DS(t)) / GEOA * 24 * d$$

Where,

t – Time block of the day

d – Number of days in a month

OA_DS(t) – Drawal schedule of the GEOA consumer for time block t (MW)

GEOA – Green Energy Open Access granted (MW)

(In case of variable GEOA, the above equation may be modified appropriately)

Underutilisation of GEOA should be defined with respect to monthly varying target for OAUF. Monthly variation is important to account for seasonality in RE generation, particularly that from solar and wind energy sources.

Relinquishment of Open Access and Compensation thereof: In the proposed Clause 9(ii) *"A medium-term/long-term consumer shall not relinquish or transfer his rights and obligations specified in the open access agreement without prior approval of the state nodal agency. The relinquishment or transfer of such rights and obligations by a long-term/medium term consumer shall be subject to payment of compensation, as provided in the procedure to be approved by the Commission."*

Rights to unused/excess open access should be mandatorily relinquished back to the state nodal agency. Provision for its transfers to a third party could harbor transmission capacity withholding with an objective to either earn rent from it or influence economic outcomes for the sector. Compensation for such transfer of rights should be high enough to discourage squatting on transmission network capacity.

The broad framework for the surrender or compensation process should be clearly specified in the regulations. The detailed process to be subsequent outlined by the nodal agency for approval of the Commission.

Cross Subsidy Surcharge: In the proposed Clause No. 11.3(a) *"Provided further that the Commission may not increase cross-subsidy surcharge for Green Energy Open Access Consumer purchasing green energy, from a generating plant using green energy (renewable energy) sources, during twelve years from the date of operating of the generating plant using renewable energy sources, by more than fifty percent of the surcharge fixed for the year in which open access is granted"*

The cross-subsidy surcharge may increase due to general increase in costs including those on account of increase in power purchase. Therefore, limiting the Cross Subsidy (CS) surcharge in absolute terms be reviewed to allow for limited increase to account for such changes in costs across the years. To provide regulatory certainty to the RE project developer, the annual increase in CS surcharge may be capped. However, any decrease in CS surcharge should be passed on[1].

Alternatively, the regulation may also specify that the surcharge does not increase in real terms i.e. in terms of constant prices) compared to the year of first grant of GEOA. Such a condition in term of real prices can help safeguard impact of change in general price level, which are likely to increase across majority of cost components including power purchase, O&M cost etc.

Quantum of Green Energy: In the proposed Clause No. 21(iv) *"Any requisition for green energy from a distribution licensee shall be for a minimum period of one year*

v. The quantum of green energy shall be pre-specified for at least one year".

The above provision would demotivate a consumer to opt for the green energy supply from the distribution licensee. The option for a consumer to seek green energy from a distribution licensee should be in line with the existing

[1] The changes reported from year to year in terms of ARR and its components, and tariffs are expressed in nominal terms i.e. in current prices. These can be converted to real prices (with a base year) using change in the Wholesale Price Index (WPI) for all commodities across the base year and the target year.

conditions for electricity supply to the consumers. To ensure greater acceptability of green energy by final consumers, such limitations should be avoided at the very outset and may be reviewed later, if required.

Given that the RE sources like solar and wind are subject to variation in generation across months, it may not be possible to pre-specify a quantum for the same for a year. No such quantum is to be specified for the consumers under the prevailing supply conditions. Furthermore, it is not easy for a consumer to 'forecast' its consumption for a year. Once the consumer has specified its requirement for, say, partial or full green energy, in terms of green energy embedded in the electricity supplied to it (say, 50% or 100 % green energy), the need for specifying quantum of electricity to be consumed for a year should be dispensed with. If the objective of the above provision is to specify percentage of green energy embedded in the electricity supplied to it, the above Clause should be reworded appropriately[2].

Furthermore, the regulation should provide reduction in quantum of green power in case of part surrender of the load by the consumers.

CER **Standby Charges:** In the proposed Clause No 11.5 *"In case the green energy open access consumer is unable to procure/schedule power from the generating sources with whom they have the agreements to procure power due to* ***outages of generator, transmission systems and the like,*** *standby arrangement shall be provided to Green Energy Open Access consumer by the distribution licensee of the area and the licensee shall be entitled to collect Standby charges as specified by the Commission".*

Provided further that the standby charges shall not be applicable, if the green energy open access consumer has given notice, in advance, at least a day in advance before closure time of Day Ahead Market (DAM) on "D – (minus) 1" day, 'D' being the day of delivery of power for standby arrangement to the distribution licensee.

Provided also that Green Energy Open Access consumers would have the option to arrange standby power from any other source". (Emphasis added)

It is not possible for the nodal agency to verify the "outages of generator, transmission systems and the like" for all GEOA consumers. This provision may be misused, especially during the periods with expected high market prices, when it would be lucrative to sell the green energy on the power exchanges and seek standby power. The nodal agency should monitor all cases of such 'prior information' for unavailability of green energy and request for standby power thereof. A proviso may be added specifying penal action for misuse of the standby provision. **Another alternative would be to link the standby charges to market prices, thus providing correct economic signals and avert any misuse of the provision.**

Opinion on JERC (Goa & UTs) Consultation paper on Determination of the Generic Levelised Tariff for the Renewable Energy Technologies [Draft]

Cite

Joint Electricity Regulatory Commission (Goa & UTs) invited public and stakeholder feedback on a consultation paper on "Determination of the Generic Levelised Tariff for the Renewable Energy Technologies" under JERC Tariff Regulations, 2024. The key objectives of this draft document is mentioned below:

Objective: The paper discusses financial principles such as debt-equity ratio, depreciation, return on equity, working capital interest rates, and tariff applicability for renewable energy projects, with distinct parameters for mainland and island regions. It provides detailed tables of applicable tariffs for different projects during the control period of FY 2024-2027. The overview of the financial parameters affecting the tariff rates are:

1. Debt-Equity Ratio
   - The assumed financing structure of projects is a 70:30 ratio, where 70% of the cost is covered by debt and 30% by equity.
2. Loan Tenure and Interest Rates
   - Loan tenure is standardized at 15 years.
   - Interest rates differ for mainland and island areas, calculated as the SBI MCLR (Marginal Cost of Lending Rate for one year) plus.

[2] See also Singh, A. (Ed.). (2024). Opinion on JERC (Terms and Conditions for Green Energy Open-Access) Regulations, 2024 [Draft], *Regulatory Insights* (Vol. 06, Issue 04, pp. 22-24), Centre for Energy Regulation (CER), Indian Institute of Technology Kanpur. https://cer.iitk.ac.in/newsletters/regulatory_insights/Volume06_Issue04.pdf

- 200 basis points for mainland areas.
- 300 basis points for island areas.

3. Depreciation Rates
   - A depreciation rate of 4.67% per annum for the first 15 years, with the balance spread over the remaining useful life of the project.
   - Projects retain a salvage value of 10%.
4. Return on Equity
   - Return on Equity varies by project type and location
     - Mainland renewable projects: 14% (15% for small hydro projects).
     - Island renewable projects: 16% (17% for small hydro projects).
   - Tax adjustments (MAT and Corporate Tax rates) also affect equity returns.
5. Interest on Working Capital
   - Working capital interest is based on SBI MCLR rates, plus:
     - 325 basis points for mainland projects.
     - 425 basis points for island projects.
6. Discount Factor
   - The discount factor is the weighted average cost of capital considering the debt-equity ratio.
   - This rate varies by location and technology type (e.g., 9.4% for mainland small hydro projects).
7. Escalation Rates for O&M Expenses
   - Operation and Maintenance (O&M) expenses increase at a fixed escalation rate of 5.25% per year.

CER Opinion

Income Tax rate as per the latest Amendment: Draft Clause no. 15.2 states that *"The normative Return on Equity shall be grossed up by latest notified Minimum Alternate Tax (MAT) rate for the first 20 years of the Tariff Period and by the latest available notified Corporate Tax rate for the remaining Tariff Period.*

The Effective Income Tax rate and MAT rate as on 1st April of 2024 are 34.94% and 17.47%, respectively as shown in the Table below:"

The Income Tax Rate Applicable for 2025-26 onward provides for a differential Rate of Corporate Tax for companies based on Certain conditions, including turnover. The scale of the project to be set up subsequent to this regulation is likely to be smaller scale and may be incorporated as a separate Special Purpose Vehicle. Effective income tax rates for such entities as of 1st April 2024 are calculated and reported in the table 2 below:

Table 1: Computation of Income Tax and MAT Rate

Details	Formula	Income Tax Rate	MAT Rate
Corporate Tax	A	30.00%	15.00%
Surcharge	B	12.00%	12.00%
Corporate Tax + Surcharge	C=A+B*A	33.60%	16.80%
Health & Education Cess	D	4.00%	4.00%
Total Tax Rate	E=C+D*C	34.94%	17.47%

As per **Section 115BAA and Section 115BAB** of the Income Tax Act, 1961[3] (Amended by Finance Act, 2024 and Finance (No. 2) Act, 2024

Suggested Citation: Singh A. (ed.). (2025), Opinion on JERC (Goa & UTs) Consultation paper on Determination of the Generic Levelised Tariff for the Renewable Energy Technologies [Draft], *Regulatory Insights* (Vol. 07, Issue 04, pp. 7-9), Centre for Energy Regulation (CER), Indian Institute of Technology Kanpur. https://cer.iitk.ac.in/periodicals/regulatory_insights/Volume07_Issue04.pdf

[3] https://incometaxindia.gov.in/documents/income-tax-act-1961-amended-by-finance-no.-2-act-2024.pdf

Table 2: Revised Computation of Income Tax and MAT Rate

Details	Formula	Income Tax Rate	MAT Rate
Corporate Tax (General Rate - Turnover ⩽ ₹400 Cr)	A	25.00% (AY 2025-26, FY 2022-23)	15.00%
Corporate Tax (General Rate - Turnover > ₹400 Cr)	A	30.00%	15.00%
Corporate Tax (Section 115BAA)	A	22.00%	**Exempt**
Corporate Tax (Section 115BAB)	A	15.00%	**Exempt**
Surcharge (Section 115BAA & 115BAB)	B	10.00%	**Exempt**
Corporate Tax + Surcharge (General or 115BA)	C = A + B*A	25.00%	16.80%
Corporate Tax + Surcharge (115BAA & 115BAB)	C = A + B*A	24.20%	**Exempt**
Health & Education Cess	D	4.00%	4.00%
Total Tax Rate (General or 115BA)	E = C + D*C	26.00%	17.47%
Total Tax Rate (115BAA & 115BAB)	E = C + D*C	25.17%	**Exempt**

These lower rates should be factored into the determination of the effective tax rate used for grossing up the RoE to reflect a more realistic and current tax burden on renewable energy developers. Aligning with these updated rates would ensure that the RoE gross-up remains fair, avoids overstating the tax component in tariffs, and better reflects the tax-saving options available to project developers.

CER **Reduce Risk Premium for Island-Based Projects:** Draft Clause no. 2.2 states that *"Loan and Finance Charges: Regulation 16.1 of the Renewable Energy Tariff Regulations, 2024 specifies loan tenure of 15 years for the determination of the Generic Tariff for RE Projects. Regulation 16.2 provides for consideration of the rate of interest on loan as follows:*

- *Mainland: SBI MCLR (One-year tenor) prevailing during the last available six months (i.e., from 15.03.2024 to 15.09.2024) + 200 basis points, which works out to 8.75%+2% = 10.75%*
- *Island: SBI MCLR (One-year tenor) prevailing during the last available six months (i.e., from 15.03.2024 to 15.09.2024) + 300 basis points, which works out to 8.75%+3%= 11.75%"*

While cost differentiation, towards capex as well as O & M, may be justified for island-based projects, one does not expect significant difference in the applicable interest rate for such projects. The applicable risk premium on base rate of interest should thus be largely aligned with the rates applicable for the mainland projects, unless there is credible information on lenders differentiating the rate of interest. Considering the regulated nature of these projects and the need to ensure affordable tariffs burden to the end consumers, a lower additional premium of 50 basis points would be more appropriate. This adjustment would strike a balance between reflecting any additional perceived risk and maintaining a realistic cost of debt financing for island-based projects.

CER **Normative Rate of Interest on Working Capital for Island Areas:** Draft Clause no. 2.5 specifies as follows: "Regarding the Normative Rate of Interest of Working Capital, Regulation *19.4 specifies as follows: 19.4 Normative Rate of Interest on Working Capital shall be considered as follows"*

Similar to the applicable argument in the context of interest on loan, the additional risk premium for island-based project may be pegged lower at 50 basis points in place of from 100 basis points to better balance cost-reflective tariffs with realistic financing costs. This lower premium would more accurately reflect the additional challenges faced by island projects without overstating financing risks. Accordingly, CER suggests revising Clause 19.4 to apply a normative interest rate of MCLR + 375 basis points for island areas, instead of the proposed MCLR + 425 basis points. Based on the current MCLR of 8.75%, this would result in a normative interest rate of 12.50% for island areas, rather than 13.00%. This balanced approach would support investment in island projects while helping ensure more affordable tariffs for island consumers.

Discount factor vs Discount Rate: Draft Clause no. 2.6 states that ***"Discount Factor"*** *The discount factor has been considered equal to the normative post-tax weighted average cost of capital based on the normative debt-equity ratio of 70:30 specified in the Regulations, and the weighted average rates for the debt and equity components. The discount factor considered for mainland and island areas for Small Hydro Projects (SHP) and other RE technologies are as under:"*

In draft clause uses the term "Discount Factor", whereas the description and context indicate that the intended term should be "Discount Rate." The discount factor is a derived value calculated as:

$$\text{Discount factor} = \frac{1}{1+Discount\ Rate} \qquad (3)$$

Clearly, discount factor is distinct from the discount rate. Since Clause 2.6 refers to the normative post-tax weighted average cost of capital and describes it as a rate applied for discounting cash flows, it would be more accurate to title this clause as "Discount Rate" and replace references to "Discount Factor" with "Discount Rate" throughout.

Project life vs. Tariff Period Clarification: Draft Clause no. 15.2 states that *"The normative Return on Equity shall be grossed up by latest notified Minimum Alternate Tax (MAT) rate for the first 20 years of the Tariff Period and by the latest available notified Corporate Tax rate for the remaining Tariff Period."*

The applicability of the tariff is for the life of the project. To bring clarity, 'Tariff Period' may be replaced with 'life of the project post CoD'. This would reduce regulatory uncertainty.

Opinion on MoP on Amendment to the Gazette Notification on Renewable Consumption Obligation (RCO), 2023

Cite

Ministry of Power (MoP) notified Amendment to the Gazette Notification on Renewable Consumption Obligation (RCO) The key objective of the document is mentioned below:

Objective: The document introduces several key changes aimed at strengthening compliance and promoting renewable energy integration. It specifies the minimum share of electrical energy consumption from non-fossil sources for designated consumers, including electricity distribution licensees, open access consumers, and captive users. The amendment allows for shortfalls in wind or hydro renewable energy consumption to be offset by surplus from other renewable sources. The amendment outlines multiple methods to fulfill RCO, including consuming non-fossil electricity, purchasing Renewable Energy Certificates, or paying a buyout price, with funds from the buyout mechanism supporting non-fossil fuel capacity development. Penalties for non-compliance, including shortfalls or submission of incorrect information, are outlined, with provisions for adjudication under the Energy Conservation Act, 2001. The Bureau of Energy Efficiency (BEE) is tasked with monitoring compliance, issuing periodic reports, and providing implementation guidelines. Additionally, compliance for multiple designated consumers under common control may be considered at the Holding Company level. Overall, the amendment aims to enhance the regulatory framework for renewable consumption obligations and support the integration of renewable energy into the national energy mix.

CER Opinion

Payment of the buyout price specified by Central Electricity Regulatory Commission (CERC): Draft Clause 6 Proviso no. iii. *"Payment of the buyout price specified by Central Electricity Regulatory Commission (CERC)."*

"Provided that the sums received through the buyout mechanism shall be credited to the Central Energy Conservation Fund under a separate head. These sums shall be utilized to support the development of specified non-fossil fuel capacities, with the objective of increasing the share of non- fossil fuel energy in the overall energy mix. The Central Government shall specify the mechanism for utilizing these sums to support the development of such non-fossil fuel capacities."

Suggested Citation: Singh A. (ed.). (2025), Opinion on MoP on Amendment to the Gazette Notification on Renewable Consumption Obligation (RCO), 2023, *Regulatory Insights* (Vol. 07, Issue 04, pp. 9-11), Centre for Energy Regulation (CER), Indian Institute of Technology Kanpur.
https://cer.iitk.ac.in/periodicals/regulatory_insights/Volume07_Issue04.pdf

Buyout mechanism, suggested initially by Singh (2010)[1] as well as in multiple submissions to CERC[2] and MoP[3], is a compliance mechanism for the RPO obligation. This incentivises the obligated entities to ensure compliance by either buying renewable power or the REC certificates. Buyout price also acts as a ceiling price for the REC certificates.

However, the compliance mechanism for renewable consumption obligation, as set out in section 26 of the amended Energy Conservation Act, 2001, does not provide for a buyout mechanism which effectively sets the penalty at the buyout price. The notification route may not stand the test of legal scrutiny. The Energy Conservation Act, 2001 should thus be amended to incorporate the same.

Furthermore, the draft clause refers to 'notification' of the buyout price, which should be **estimated based on a methodological approach which is discussed with the stakeholders. Such methodology should also be published beforehand.**

It also needs to be clarified if such fund could be utilized for nuclear energy, a non-fossil fuel technology. The Energy Conservation Act 2001, in all its operative parts, refers to non-fossil fuel, whereas the MoP notification dated 20th Oct., 2023 limits the meaning of 'non-fossil fuel' to 'renewable energy'. To ensure clarity, the term 'fossil fuel' may be replaced with renewable energy.

CER **Jurisdictional Clarity and Coordination Among Designated Entities:** Draft Clause no. 6. (B). *"In case of a non-compliance of this notification including but not limited to shortfall in meeting Renewable Energy consumption obligations, non-submission of required information, or submission of incorrect information, the Bureau, the State Designated Agency, or any other person designated by the State Government, may file an application before the Adjudicating Officer, for imposing penalty, under the provisions of Section 26 and 27 of the Act ".*

There should be a single entity empowered to file an application before the Adjudicating Officer for non-compliance of RE consumption obligation, non-submission of information or submission of incorrect information. **Multiplicity of entities, as identified in the draft, would not only create multiplicity of filings but also weaken a legal case due to lack of coordination among the entities identified in the draft clause.**

Such ambiguity could hinder the timely and effective enforcement of compliance obligation. **A single entity should be empowered to collect information and report data for RE Consumption Obligation, the same entity should also be empowered for collecting compliance data and follow the process for non-compliance.** BEE may coordinate this effort by finalizing the format and method for data collection, and the associated timelines. This will help streamline the process, ensure accountability, and strengthen the overall compliance framework.

A lack of coordination among the three entities the State Designated Agency, the Bureau, and any other person designated by the State Government may lead to procedural complexities. **This may result in multiple applications being filed before the Adjudicating Officer for the same instance of non-compliance or, conversely, no application being filed at all,** as each entity may assume that the other party would do the needful. It is strongly recommended that a **single entity** be identified and designated for compliance monitoring and for filing applications before the Adjudicating Officer.

The framework should also address a situation where an **Adjudicating Officer has not been appointed** by the designated agency. This could delay enforcement and weaken the compliance framework. The clause should include a provision for alternate enforcement mechanisms or mandate the timely appointment of Adjudicating Officers by the States to ensure effective compliance and enforcement thereof.

CER **Aggregate Compliance for Entities Under a Holding Company:** Draft Clause no. 6 (C). *"Compliance for multiple designated consumers under common control, as defined in the Companies Act, 2013, may be considered on an aggregate basis at the Holding Company level".*

The draft clause allowing aggregate compliance at the holding company level seems to assume that such entities may operate within a single state. However, in practice, entities under a holding company may be located across multiple

[1] Singh A. (2010) "Economics, Regulation and Implementation Strategy for Renewable Energy Certificate in India" in India infrastructure Report 2010, Oxford Univ. Press. https://paper.ssm.com/sol3/papers.cfm?abstract_id=3440253

[2] Singh A. (2010) "Setting a Floor price and Forbearance Price for Renewable Energy Certificate (RECs)" Submitted to Central Electricity Regulatory Commission, April 2010 https://www.iitk.ac.in/ime/anoops/policypapers/Anoop%20Singh%20-%20CERC%20-%20Comments%20on%20Floor%20and%20Forbearance%20Price%20for%20RECs%20-%202010.pdf

[3] Singh A. (ed.). (2021) Comment on MoP "Redesigning the Renewable Energy Certificate (REC) Mechanism" [Discussion Paper] Regulatory Insights(Vol. 4, Issue 01, pp. 7-10) Centre for Energy Regulation (CER), Indian Institute of Technology Kanpur. https://cer.iitk.ac.in/newsletters/regulatory_insights/Volume04_Issue01.pdf

states, falling under different regulatory jurisdictions. This could lead to complications in monitoring and enforcement, especially if compliance shortfalls in one state are to be offset by the surplus in another state. The available information may only be handy with the state level agency in the respective state. How would be state agencies coordinate for seamless exchange of compliance data? **How would one ensure that over compliance by one of the entities concerns located in one state used to offset shortfall for another entities concern located in another state, is extinguished from the accounts of the former and is not double counted?** This provides another justification for a centralized monitoring and compliance entity. REC based RPO/RCO compliance would ensure that there is no double counting as this would apply universal accounting for the RE procurement from various sources.

Since neither the Electricity Act, 2003 not does the Energy Conservation Act, 2001 provide for such cross-entity fungibility, the clause leaves some legal and procedural ambiguities. **Changes in holding patterns of related or subsidiary entities mid-year, and varying monthly consumption pattern and RPO compliance thereof would further complicate the matter.** To avoid regulatory loopholes and ensure accountability, **compliance should be assessed individually for each designated entity or, at most in a consolidated manner for the related entities located in a single state.**

A clear and objective definition of related entities would be crucial to avoid legal disputes. Definition of captive power generation unit and ownership and consumption thereof is a case to point.

CER **Compliance Monitoring and Data Reporting:** Draft Clause no. 7. *"The Bureau shall monitor compliance of this notification and submit periodic report(s) to the Central Government. For this compliance monitoring, all the designated consumers, designated agencies and other persons shall furnish the required information, in such form and manner and within such period, as may be specified by the Bureau."*

A central repository should be empowered to collect and monitor compliance data. This repository must cover all designated consumers and ensure data is furnished in a format, manner and timeline specified by the Bureau.

It should also clarified whether the information is to be sought from the respective adjudicating officers, and how such coordination will take place. **There should also be a clear provision for timely disclosure of the collected information through a publicly accessible web portal to ensure transparency and accountability.**

CER **Importance of Stakeholder Input to Draft Guidelines:** Draft Clause no. 7 (A). *"The Bureau shall issue detailed guidelines for the implementation of this notification".*

The detailed guidelines including data format to be published by the Bureau should be placed for public consultation and incorporate inputs to address potential challenges in its implementation. The draft guidelines and data formats for stakeholder consultation. Seeking inputs from designated consumers, regulators, and other stakeholders will help address practical concerns and ensure effective implementation of the guidelines.

Tariff

BERC has approved the proposed quantum and rates for short-term power procurement by BSPHCL for the period from 01st July to 30th September, 2025. The procurement was conducted through tariff-based bidding on the DEEP portal, as per MoP guidelines. The Commission found the discovered rate reasonable, considering high demand, power deficit, and low clearance from power exchanges during the specified period. The approved power procurement schedule is as follows:

Period (Year 2025)	No. of Days	Time Duration	Bid Quantum (MW)	Price (Rs./kWh)
01–31 July	31	00:00 - 02:00	759	9.90
01–31 July	31	19:00 - 24:00	609.90	9.90
01–31 August	31	00:00 - 02:00	759	9.90
01–31 August	31	19:00 - 24:00	609.90	9.90
01–30 September	30	00:00 - 02:00	759	9.90
01–30 September	30	19:00 - 24:00	609.90	9.90

OERC has determined the Energy Charge Rate for M/s. JSW Energy (Utkal) Ltd., supplying 12% of its energy output to GRIDCO and approved operational parameters, mandated the use of a median GCV value with a moisture correction formula for coal cost calculations, and directed third-party sampling for accuracy. It also instructed the petitioner to secure concessional coal under the Shakti Policy and ordered GRIDCO to reimburse statutory charges like water cess and electricity duty.

UERC rejected review petitions filed by M/s Galwalia Ispat Udyog Pvt. Ltd. and M/s Kumaun Garhwal Chamber of Commerce & Industry against its 30th September, 2024 order setting an additional surcharge of Rs. 1.15/kWh for open access consumers from October 2024 to March 2025. The petitioners argued the surcharge calculation ignored legal provisions and stranded power realities, but the Commission found no apparent error justifying a review. The respondent, UPCL defended the original order, stating all issues were adequately addressed.

WBERC observed that HEL recovered Rs. 2103.16 Cr. against the revised Net ARR of Rs. 1997.51 Cr. for FY 2017-18, resulting in a surplus of Rs. 105.65 Cr. As per Tariff Regulations, this refundable amount will be adjusted against the ARR for future periods as decided by the Commission. Consequently, the FPPCA and APR for HEL for FY 2017-18 have been revised.

Power Procurement

BERC approves the procurement of 100 MW solar power through SECI under Tranche XVII for 25 years, subject to CERC's adoption of the discovered tariff u/s 63 of the Electricity Act, 2003. A trading margin of Rs. 0.07/kWh is approved. The draft Power Supply Agreement is also approved with necessary modifications.

MERC accords approval to deviations proposed in RfP and draft PPA for procurement of Hydro power on Medium/Long term basis. The Commission allows NUPLLP to conduct the bidding process with the bidding documents to be prepared in line with the FDRE Guidelines dated 09th June, 2023. The Commission allows NUPLLP for entering into PPA with new bagasse-based power plants on MoU basis till targets of 1350 MW under the RE policy 2020 targets are met.

MERC accords its approval to Nidar Utilities Panvel LLP (NUPLLP) u/s 63 of the Electricity Act, 2003, the Commission adopts short term power procurement for the period of 01st January to 31st October, 2025 by NUPLLP. Accordingly, PPA with successful bidder is approved with the tariff of Rs. 5.65/kWh at Maharashtra State Periphery. NUPLLP to submit copies of final PPA to office of the Commission for the records.

OERC approved the supplementary PPA dated 02nd December, 2024 filed against the PPA dated 11th August, 2006 between GRIDCO Ltd. and NTPC for procuring 418 MW from Barh Super Thermal Power Station (Stage-I). The approval was granted considering Odisha's rising power demand, the high cost of short-term market power (~Rs.10/kWh), and regulatory obligations. The Commission acknowledged that thermal power remains crucial for peak demand management, ensuring long-term energy security while minimizing costly short-term market dependence.

OERC approved the the supplementary PPA dated 02nd December, 2024 filed against PPA dated 27th December, 2010 between GRIDCO Ltd. and NTPC for procuring 30 MW from Muzaffarpur Thermal Power Station (Stage-II). The approval was granted considering Odisha's rising power demand, the high cost of short-

term market power. The Commission acknowledged that GRIDCO must pay fixed charges for the allocated power and that thermal power remains crucial for peak demand management.

UERC approved a draft Energy Banking Agreement (EBA) on between Uttarakhand Power Corporation Ltd. (UPCL) and Uttar Pradesh Power Corporation Ltd. (UPPCL) for banking 64.40 MU of power. UPCL will receive power during peak hours from 01st January to 15th February, 2025 and return it with zero premium from 01st July to 31st August, 2025, addressing a 300-400 MW deficit. The Commission directed UPCL to revise the force majeure Clause to include detailed events and notice requirements, and to complete the effective date in the EBA. The approval aligns with the Electricity Act, 2003, and respective UERC Regulations, ensuring a cost-effective power management strategy.

WBERC approved WBSEDCL's proposed deviations in the Request for Proposal and Power Supply Agreement (PSA) for procuring 1600 MW power under a long-term DBFOO arrangement from a new 2x800 MW power station. However, WBSEDCL must retain the provisions for determination of GCV and equity transfer as specified in the Model PSA by the MoP, allow a storage/stacking loss of 120 cal/kg in the draft PSA, while removing the word "Normative" from the second sentence of the PSA, and WBSEDCL require WBERC's approval for the PSA with the successful bidder.

Renewable Energy, RPO and REC

JSERC has approved the purchase of 100 MW of solar power by SAIL-Bokaro from SECI to meet their Renewable Energy Purchase Obligation (RPO) u/s 86 (1)(e) of the Electricity Act, 2003. The approved tariff is Rs. 2.85/kWh, comprising the Solar Power Developer rate of Rs. 2.50/kWh, SECI trading margin of Rs. 0.07/kWh, and a tentative Basic Customs Duty of Rs. 0.28/kWh or as per actual.

MPERC approved ACME Solar Energy petition to install 6.03 MW of additional DC solar modules to repower its 25 MW AC solar project, without altering the contracted AC capacity or exceeding the PPA's 53 MU annual energy limit. The decision, prompted by an APTEL directive, addresses natural degradation of solar modules to ensure compliance with the PPA dated 01st August, 2012, while maintaining an average supply of 41.035 MU over seven years. The Commission ruled that DC augmentation is permissible per industry norms, MNRE advisory, and APTEL precedent, provided AC capacity remains unchanged, and no financial burden or tariff revision affects the respondent, MPPMCL. The petitioner bears all costs, with energy supply capped at contracted limits, ensuring no excess obligation on MPPMCL.

MERC accords its approval to MSEDCL's proposal for additional power procurement of 13 MW in respect of BNPP1PL at tariff of Rs. 3.60/kWh discovered through competitive bidding for 25 years. The power procured from projects considered in this Petition shall be considered for meeting the Renewable Purchase Obligation (RPO) requirement of MSEDCL.

OERC has issued an order regarding Distributed Solar Power Association (DiSPA) petition seeking clarifications on energy banking provisions under the OERC Green Energy Open Access Regulations, 2023. The Commission clarified that banking is limited to 30% of monthly generation or consumption, subject to a total of 200 MW for all consumers. It also confirmed that off-peak hours are defined as all hours except 6 PM to midnight. The Commission found no need for further clarification on GEOA Regulations but directed GRIDCO, as the nodal agency, to consider DiSPA's concerns regarding security deposits and banking agreements.

RERC approved a pre-fixed levelised tariff of Rs. 3.04/kWh for 5000 MW solar capacity under the PM-KUSUM scheme. The tariff applies for 25 years, ensuring cost-effectiveness for Rajasthan Discoms. Stakeholder comments on capital costs, grid stability, and return on investment were addressed. The commission directed Discoms to ensure proper integration, grid studies, and transparent project implementation.

TGERC approved PPA between TGSPDCL and Dundigal Waste 2 Energy Pvt. Ltd. for a 14.5 MW plant, signed on 14th Febraury, 2024, despite delays and disputes over fuel type (RDF vs. MSW). The Commission deferred the fuel issue for later tariff determination u/s 62 of the Electricity Act, 2003, focusing instead on PPA consent. Both parties agreed to the PPA terms, including a Clause allowing Discom to inspect fuel usage and terminate the agreement if non-RDF fuel is used. The order mandates a corrected PPA submission, ensuring fairness and consumer interest.

UPERC approved a petition No. 2136 of 2024 on 09th January, 2025 by U.P. Power Corporation Ltd. (UPPCL) to procure 1175 MW of wind power from the SECI under a Power Sale Agreement (PSA) dated 30th May,

2025, following a tariff-based competitive bidding process. The wind power, sourced from projects in Gujarat and Karnataka with tariffs ranging from Rs. 3.60 to Rs. 3.70/ kWh plus a Rs. 0.07/kWh trading margin, was adopted by the CERC on 03rd October, 2024. UPERC justified the approval citing compliance with bidding guidelines, alignment with UPPCL's RPO targets, and peak demand support, despite a 34% tariff increase over two years due to factors like site constraints and rising costs. The PSA was approved with a condition to limit the trading margin to Rs. 0.02/kWh if SECI fails to provide financial assurances, and UPPCL was urged to optimize future procurement costs.

UPERC approved the Petition No. 2003 of 2023 dated 20th February, 2025 filed by the Uttar Pradesh New & Renewable Energy Development Agency (UPNEDA). The petition, filed in June 2023, sought amendments to the UPERC (Promotion of Green Energy through Renewable Purchase Obligation) Regulations, 2010, to align with the Ministry of Power's RPO trajectory from July 2022. During a hearing on 11th February, 2025, UPNEDA's counsel requested withdrawal, citing significant changes since filing that rendered the petition obsolete. The Commission, noting that the requested relief was a legislative matter beyond its adjudicatory scope, allowed the withdrawal and closed the case.

Others

GERC has determined an Additional Surcharge of Rs. 0.82/kWh for Open Access consumers for the period from 01st April to 30th October, 2025. This surcharge applies to consumers of the four state-owned Discoms-DGVCL, MGVCL, PGVCL, and UGVCL-who procure power from sources other than their respective Discoms. The calculation is based on stranded generation capacity and fixed costs incurred due to Open Access usage. The methodology follows the previous order passed, incorporating network-related costs and transmission losses. The order ensures fair cost distribution while maintaining grid stability.

KSERC reviewed a petition by Rubber Park India Private Ltd. (RPIPL) seeking to extend its electricity distribution license to its industrial park in Piravanthoor. RPIPL, a joint venture of KINFRA and the Rubber Board, argued that its park needed dedicated electricity distribution. However, KSEBL opposed the petition, stating it could serve the area efficiently. The Commission ruled against RPIPL's request, directing KSEBL to continue supplying power and allowing RPIPL to reapply if its park reaches a higher energy consumption level.

KSERC directed KSEBL and SLDC to permit LULU Mall to transmit and wheel power from the 1 MW solar plant via intra-state open access. The Commission ruled that the existing regulations support open access and rejected KSEBL's objections regarding deviation settlement and first refusal rights. However, it clarified that LULU Mall and the generator are not entitled to banking or time-based adjustment facilities. The approval remains subject to any final decision by the State Government on the legality of third-party power sales under the Kerala Solar Energy Policy, 2013.

KSERC ratified KSEBL banking agreements with Punjab State Power Corporation Limited for surplus power management. The first agreement covered power supply from 24th May to 01st June, 2024, with a return period in April 2025, and the second agreement covered July 2024, with returns from 01st April to 15th April, 2025. KSERC confirmed that these agreements complied with the Electricity Act 2003 and the KSERC Tariff Regulations, 2021. KSEBL must ensure the timely return of banked power as per the agreed terms.

MPERC approved M.P. Power Management Company Ltd. for procuring 4100 MW of thermal power (900 MW from existing plants and 3200 MW from new plants) via competitive bidding under the DBFOO model. This decision aligns with the CEA's Resource Adequacy Plan, projecting a 5.36% CAGR in electricity demand from FY 2024-25 to 2034-35, necessitating additional power to meet rising industrial and non-industrial needs. The procurement, supported by coal linkage under the SHAKTI Policy, aims to enhance energy security, reduce transmission costs by Rs. 35,000 Cr. over 25 years. The Commission permitted the bidding process initiation with deviations subject to prior approval, ensuring compliance with legal and competitive standards.

MERC penalised Maharashtra State Electricity Distribution Co. Ltd to pay penalty of Rs 1 lakh each for non-compliance of Commission's direction to not release any connection without meter and not providing point wise reply to Maharashtra Veej Grahak Sanghatan as directed in MTR Order. Maharashtra State Electricity Distribution Co. Ltd to comply with directives issued in earlier part of this order failing which action u/s 142 of the Electricity Act, 2003 will be taken.

OERC has granted in-principle approval for the amended PPA dated 23rd December, 2024, between GRIDCO Ltd. and JSW Energy (Utkal) Ltd. (formerly Ind Barath Energy Utkal Ltd.). The revised agreement consolidates previous PPAs and incorporates key provisions such as GRIDCO's entitlement to 12-14% of power at Energy Charge Rate, obligations regarding SHAKTI coal allocation, transmission infrastructure requirements, and a compensation mechanism for

short/non-supply of power. Given the need for thermal power to meet Odisha's future energy demands, the Commission approved the PPA in the interest of energy security and consumer welfare.

OERC reviewed Odisha Hydro Power Corporation's (OHPC) petition for truing up expenses and Gross Fixed Assets from FY 2020-21 to 2023-24. OHPC sought approval for an adjusted GFA of Rs. 2,396.65 Cr. as of 31st March, 2020, and additional claims amounting to Rs. 159.97 Cr.. The Commission approved an adjustment of Rs. 37.7 Cr. for the Upper Indravati Hydro Electric Project but denied additional claims for other power stations prior to 2014, citing past regulatory decisions. Capital expenditures incurred until 31st March, 2024, will be considered in future truing-up exercises, and issues related to non-tariff income will be addressed in the ARR for FY 2025-26.

UERC disposed of a petition by Power Transmission Corporation of Uttarakhand Ltd. (PTCUL) filed on 21st April, 2024, seeking approval to augment the 132 kV Purkul Substation in Dehradun from 100 MVA to 120 MVA, costing Rs. 10.10 Cr.. PTCUL later revised the proposal to increase capacity from 80 MVA to 160 MVA, submitting a new petition with a revised DPR of Rs. 23.47 Cr. on 19th December, 2024, approved by its Board. The Commission found the original petition infructuous due to the updated submission, requiring no further action.

UERC granted in-principle approval for PTCUL revised DPR to construct a 132 kV Bindal-Purkul Transmission Line with underground cabling between towers 47 and 50, costing Rs. 16.63 Cr. (reduced from Rs. 19.17 Cr.). The project, initially approved at Rs. 5.96 Cr. in 2011 and revised to Rs. 19.54 Cr., faced delays due to severe Right of Way (RoW) issues, prompting the underground diversion costing Rs. 38.71 Cr. The Commission approved only the diversion work, adjusting contingencies and excluding certain expenses, with funding partially secured via a Rs. 19.21 Cr. Special Assistance to State for Capital Investment (SASCI) loan recommended by the Government of Uttarakhand. Approval is conditional on compliance with funding terms, submission of financial evidence, and future scrutiny of costs and RoW efforts during ARR determination.

UPERC approved Petition No. 2128 of 2024 on 20th February, 2025 filed by South East U.P. Power Transmission Company Ltd., granting in-principle permission u/s 17(3) of the Electricity Act, 2003, and related regulations to create a security interest over its assets and pledge 51% of its shares. This approval facilitates a revised financial facility of Rs. 3,981 Cr. from the SBI bank and SBI CAP Trustee Company Ltd., up from Rs. 2,205 Cr., to refinance earlier loans and fund the 765 kV Mainpuri-Bara Transmission Line project.

UPERC granted Jewar Transmission Ltd. (JTL) a 25-year transmission license under Petition No. 2102 of 2024 on 10th February, 2025 to build and operate key substations in Jewar, Varanasi, Ghaziabad, and Fatehpur. JTL, transferred to Megha Engineering & Infrastructures Ltd. after winning a competitive bid at Rs. 795.86 million per annum, faced objections about blacklisting and consumer costs, which UPERC dismissed, affirming the project's public benefit. The approval, subject to obtaining a defense NOC within three months, mandates compliance with regulations and open access provisions.

Tariff Orders

State/ Union Territory (SERC)	Licensee/ Utility	True-up	APR	ARR	Tariff
HERC	HVPNL	2023-24	2024-25	2025-26 to 2029-30	-
HERC	HPGCL	2023-24	2024-25	2025-26	-
JSERC	TPCL	2023-24	2024-25	-	-
JSERC	TSUISL, TSL	2023-24	2024-25	2025-26	-
MPERC	MPPMCL	-	-	-	2024-25 to 2028-29
MPERC	MPPGCL	-	-	-	2024-25 to 2028-29
TGERC	TGGENCO	-	-	-	2025-26
TGERC	TGSPDCL, TGNPDCL	-	-	2025-26	-
TGERC	TGTRANCO	2023-24	-	2025-26	-
UERC	UPCL, PTCUL, UJVN, SLDC	2023-24	2024-25	2025-26 to 2027-28	-

Regulations

Title	Date of Approval/Notification
AERC (Grant of Connectivity to the Intra State Transmission System) Regulations, 2025	24th January, 2025
APERC (Electricity Supply Code) (Fourth Amendmend) Regulations, 2004	24th February, 2025
APERC (Licensces' Duty for Supply of Electricity on Request and Recovery of Expenses for Providing Electric Line or Electrical Plant) (Third Amendmend) Regulations, 2013	25th February, 2025
APERC (Security Deposit) (Third Amendmend) Regulations, 2004	24th February, 2025
HPERC (Deviation Settlement Mechanism and Related Matters) (First Amendment) Regulations, 2025.	28th January, 2025
HPERC (Terms and Conditions of Service of Staff) (Fourth Amendment) Regulations, 2025	27th January, 2025
JERC (J&K and L) (Framework for Resource Adequacy) Regulations, 2024	17th January, 2025
KERC (Terms and Conditions for Open Access) Regulations, 2025	26th March, 2025
MPERC (Cogeneration and Generation of Electricity from Renewable Sources of Energy) (Fourth Amendment) Regulations, 2021	07th March, 2025
MPERC (Power Quality) Regulations, 2025	10th January, 2025
MPERC (Terms and Conditions for Intra-State Open Access in Madhya Pradesh) (Fifth Amendmend) Regulations, 2021	04th March, 2025
RERC (Terms and Conditions for Determination of Tariff) Regulations, 2025	29th February, 2025
UPERC (MYT for Distribution and Transmission Tariff) (Third Amendment) Regulations, 2025	08th January, 2025

Symposium of PSR II Project "Shaping next era of Power Sector Reforms in India"

The Centre for Energy Regulation (CER), IIT Kanpur organised the Dissemination Symposium on **"Shaping the Next Era of Power Sector Reforms in India"** under the Power Sector Reforms (PSR) Phase II programme supported by the UK Government's Foreign, Commonwealth & Development Office. This high-profile event hosted regulators, senior government officials, industry leaders, researchers and experts of power sector to discuss the future of India's power sector through regulatory advancements, and data-driven policymaking.

Prof. Anoop Singh (Founder & Coordinator, CER) provided an overview of the key activities and outcomes of the PSR II program. In the special address from Ms. Laura Aylett (Head, Climate and Energy, British High Commission in India) emphasized the achievements of the PSR I and the milestones reached under PSR II. Ms. Aylett also referenced recent advancements in the UK energy sector, drawing parallels to India's transition towards sustainable energy solutions. Mr. Jishnu Barua (Chairperson, CERC) as well as Dr. Alok Tandon (Chairman, JERC (Goa & UTs)) emphasized the need for innovative regulatory interventions supported through focused research and commended the role of CER in this context. Prof. Tarun Gupta (Dean, R&D IIT Kanpur), highlighted the importance of research at academic institutions to support India's energy transition, and highlighted IITK's contributions.

The first session focused on Regulatory Impact Assessment and incentive-based tariffs, emphasizing their role in improving efficiency, attracting private investment, and ensuring. The second session explored market-based mechanisms, including derivatives, Contracts for Difference and Renewable Energy Certificates, highlighting their impact on green energy adoption. The final session highlighted data analytics, and digital tools for policy and planning, showcasing PSR-II innovations like a State-level load forecasting tool, Automated load survey tool and Regulatory dashboard.

The symposium featured a distinguished panel chairs and panellists Mr. Arun Goyal (Former Member, CERC), Mr. Ghanshyam Prasad (Chairperson, CEA), Mr. Alok Kumar (Former Secretary, Ministry of Power), Mr. B.C. Mallick (CEA), Ms. Ann Josey (Prayas), Mr. Vikas Gaba (KPMG India), Mr. S.C. Saxena (Grid-India), Dr. S.K. Chatterjee (CERC), Mr. Rohit Bajaj (IEX), Mr. Milind Deore (BEE), Mr. S.K. Soonee (Former CEO, Grid-India), Mr. Atul Bali (NPMU), Mr. Abhishek Ranjan (BSES Rajdhani), Smt. Rashmi S. Nair (CERC), and Dr. Eshita Gupta (KPMG India)

5th Regulatory Conclave on "Resource Adequacy Framework for Distribution Utilities: Methodological and Implementation Issues"

In a significant step towards strengthening India's power sector, the Centre for Energy Regulation (CER), IIT Kanpur recently hosted the 5th Regulatory Conclave on 15th February, 2025, focusing on the **"Resource Adequacy Framework for Distribution Utilities: Methodological and Implementation Issues".** This online event brought together leading experts from system operation, planning and distribution companies, who discussed the critical challenges in implementing a comprehensive resource adequacy framework. The conclave aimed to address how to ensure a reliable power supply across the country in the future, with particular emphasis on optimizing the efficiency and sustainability of power generation and distribution.

Dr. Srikant Nagulapalli (Additional Secretary, Ministry of Power) attended as the Chief Guest and chaired an insightful panel discussion. The discussion, moderated by Prof. Anoop Singh (Founder and Coordinator, CER & EAL), featured prominent industry experts, including Ms. Ammi Ruhama Toppo (Chief Engineer, CEA), Mr. Vivek Pandey (Senior General Manager, Grid-India), Mr. Deepak Raizada (Chief Engineer, UPPCL) and Mr. Gurmeet Deogen (AVP (Power Management), BSES Rajdhani). The panel explored various methodological challenges in implementing the Resource Adequacy framework and emphasized the importance of building institutional capacity within distribution utilities to ensure long-term energy sustainability. Panellists collectively emphasized several critical implementation challenges and advocated the need for 15-minute, rather than hourly demand projections, differentiated capacity credits for seasonally driven generation resources such as hydro, wind and solar, nationwide optimization of thermal power plant maintenance schedules to ensure higher capacity availability, and assessing the impact of alternate scenarios on final tariffs for consumers.

Prof. Singh presentation, based on in-house research highlighted the importance of resource adequacy planning and their experience in undertaking similar studies for long-term demand forecasting in Uttar Pradesh and Chhattisgarh.

6th Regulatory Conclave on "Energy Transition and Framework for Renewable Purchase Obligation (RPO)

CER hosted an engaging talk on the topic of **"Energy Transition and Framework for Renewable Purchase Obligation (RPO)"** on 11th March 2025. Chaired by former Indian Admistrative Services officer Mr. P. Ravi Kumar (Chairman, KERC), the virtual conclave was attended by more than 250 participants from various professional backgrounds including policymakers, regulatory authorities, non-governmental organizations and officers of government and private sector. The discussions at the conclave focused on India's ambitious renewable energy commitments and the role of RPO framework in facilitating a seamless energy transition. The panel members discussed the challenges faced by obligated entities in fulfilling their RPO mandates, assessed the impact of emerging technologies, and explored policy interventions necessary for reinforcing the RPO framework. The deliberations revolved around regulatory and policy challenges covering RPO definition, transparency and visibility of RE generation and framework for RPO compliance, market-based solutions like Renewable Energy Certificates (RECs), and the effectiveness of penalty mechanisms in ensuring RPO Compliance.

Emphasizing the significance of the conclave's objectives, Prof. Anoop Singh (Founder and Coordinator, CER & EAL) stated *"The RPO framework represents a cornerstone of India's energy transition strategy. As we navigate the complex path toward our national renewable energy targets, we must address the implementation challenges obligated entities face while creating a supportive ecosystem for compliance. This conclave brings together diverse perspectives from policy, regulatory, and industry domains to collectively strengthen the RPO mechanism, to support energy transition in the Indian power sector. Through collaborative dialogue, we aim to identify actionable solutions that balance regulatory oversight with market-based approaches to accelerate India's renewable energy adoption. We propose REC–based Unified RPO Compliance Framework and multiplier-based fungibility for RPO targets across categories of RE sources."*

Distinguished panelists included Mr. Jeevan Kumar Jethani (Senior Director/Scientist-F, MNRE), Mr. Saurabh Diddi (Director, BEE), Mr. Purnendu Chaubey (SVP, ReNew) and Mr. Ashwin Gambhir (Fellow, Prayas).

Regulatory Certification Programme on "Power Sector Reforms: Theory and Practice"

CER in association with EAL, is pleased to announce the 5th Regulatory Certification Program on "Power Sector Regulation: Theory and Practice" commencing from 05th June to 22nd June 2025. The program would help to understand and analyze the key issues in the power sector from economic, legal and regulatory prospective. It builds upon economic rationale for regulatory and policy changes in the power sector, and engage in informed discussions on the regulatory framework, particularly those governing determination of tariff. The Program would be conducted under the aegis of Centre for Continuing Education, IIT Kanpur.

The last date for registration is 04th June, 2025. For further program details including program duration, key topics, schedule, admission process and fees. Scan the QR code or visit: https://cer.iitk.ac.in/olet/rcp

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Regulatory Insight Team- Himanshu, Nainsy, Hardeep, Sandeep, Mohit, Keshav, Gaurav, Diksha, Garima and Sanjit