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REGULATORY INSIGHTS

Implications of the Draft Electricity Amendment Bill, Part-Load Operation Compensation, and RCO Buyout Mechanism

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Editorial

Over the past two and a half decades, the Indian power sector has undergone substantial transformation in terms of resource mix, operational dynamics, performance of regulated entities, and the adoption of emerging technologies. The enactment of the Electricity Act, 2003 marked a watershed moment by deepening sectoral reforms and introducing competition, particularly in wholesale electricity markets. However, as the sector matures, it is evident that a new phase of reforms is required to address persisting structural issues and emerging challenges. While competition has delivered efficiency gains in wholesale supply, the objective of retail supply competition remains largely unfulfilled.

Although the Electricity Act provides for multiple distribution licensees, this framework was primarily designed to address legacy conditions rather than facilitate a competitive retail market. In practice, the presence of multiple licensees within the same area poses significant challenges related to regulation, coordination, and cost efficiency. The loss of economies of scale and the risk of over-investment in distribution infrastructure would ultimately raise network costs, burdening consumers. In this context, carriage-and-content separation recognized internationally as a best practice offers a cleaner and more efficient pathway for introducing retail competition while preserving network efficiency.

Legacy power purchase agreements (PPAs) require careful handling and are best addressed through clear legal provisions in future amendments. At the same time, accumulated regulatory assets and historical losses can be managed through targeted schemes and regulatory interventions. Granting exemptions from the universal service obligation for large industrial consumers would disproportionately increase cross-subsidy burdens on remaining consumers, potentially trapping distribution companies (discoms) in a cycle of revenue shortfalls and repeated government support.

Renewable Consumption Obligations (RCOs) are aligned with specific financial years and should be complied with within the designated period. Allowing unrestricted carry-forward of Renewable Energy Certificates (RECs) undermines the intent of annual targets. While post-compliance trading is justified due to the timing of certificate issuance, RECs generated within the compliance year should not be carried forward, ensuring timely compliance by designated consumers.

As renewable energy penetration increases, the need for flexible operation of thermal power plants becomes critical. Such flexibility must be fairly compensated, but only beyond the technical capabilities already embedded in existing PPAs. Over-compensation would unfairly burden end consumers. The integrity of the commercial operation date, which certifies technical readiness, should not justify additional compensation for routine operational parameters.

Finally, regulatory frameworks must actively incentivize operational flexibility to support higher renewable integration. Enhanced variability in renewable generation calls for state-level unit commitment frameworks, with costs appropriately allocated to beneficiaries. To ensure efficient system operation, Load Despatch Centres should be empowered to access operational data and associated costs, aligning regulatory benchmarks with ground realities and ensuring overall system economy.

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Keywords: Buyout Price Mechanism, Captive Generating Plant, Carriage and Content Separation, Distribution System Operator, Designated Consumers, Renewable Energy Sources, Renewable Purchase Obligation, Renewable Consumption Obligation.

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Opinion on CERC Petition (Determination of the Buyout Price as an Alternate Compliance Mechanism towards Fulfilment of Renewable Consumption Obligation (RCO))

Cite

The CERC notified the regulation titled "Determination of the Buyout Price as an alternate compliance mechanism towards fulfilment of Renewable Consumption Obligation (RCO)", issued on 22nd October, 2025. The key objective of the document is mentioned below:

Objective: The objective is to determine a buyout price as an alternate compliance mechanism for meeting Renewable Consumption Obligation (RCO) in line with the Ministry of Power's notification. It links the buyout price to prevailing REC market prices, while aiming to ensure that direct consumption of renewable energy and REC procurement remain the preferred compliance routes. The proposal intends to discourage over-reliance on buyout by fixing it at a premium over REC prices and to channel buyout proceeds towards the development of renewable energy and storage capacities.

CER Opinion

Timeline for Compliance: As per the Ministry of Power Notification dated 27th September 2025, "*Designated Consumers shall submit their duly certified energy accounts for the year 2024–2025 by 31st October 2025, and by 31st July for each subsequent year. They shall submit compliance report after meeting the shortfall in Renewable Consumption Obligation through purchase of Renewable Energy Certificates or payment of buyout price, if any, by 31st March 2026 for the year 2024-2025, and by 31st December for each subsequent year.*"

The compliance timeline (Figure 1) allows for compliance beyond the compliance year. This is inconsistent with the general set principles for compliance duration, for example in case of tax compliance. Payment of taxes and its compliance is limited to the period of compliance. In case of any shortfall calculated for the period of compliance, interest and penalty are due beyond that year. The buyout mechanism should operate as a last-resort option once REC or renewable procurement avenues are exhausted within the compliance year. Extending REC purchases beyond the compliance period would lead to speculative deferment and distort the REC market dynamics. The current approach is similar to the one adopted in the case of energy saving certificates (Escerts). This should be treated as an aberration rather than as a norm. **The global norm for similar schemes, such a renewable purchase obligations or the emissions trading schemes, also do not envisage purchase of certificates/allowances beyond the compliance year. The sanctity of compliance period should be retained as it is in the case of tax compliance.**

This existing approach may be adopted for the compliance year 2024-25. Beyond that, i.e. for the compliance year 2025-26 onwards, purchase of RECs within a compliance year should only be accounted towards the respective compliance year. Beyond that, the buyout penalty should be operative. This approach would promote accountability, ensure timely RCO fulfillment, and maintain consistency and transparency in the compliance framework.

Suggested Citation: Singh A. (ed.). (2025), Opinion on CERC Petition (Determination of the Buyout Price as an alternate compliance mechanism towards fulfilment of Renewable Consumption Obligation (RCO), 2025, Regulatory Insights (Vol.08, Issue 03, pp. 2-4), Centre for Energy Regulation (CER), Indian Institute of Technology Kanpur. Kanpur. https://cer.iitk.ac.in/periodicals/regulatory_insights/Volume08_Issue03.pdf

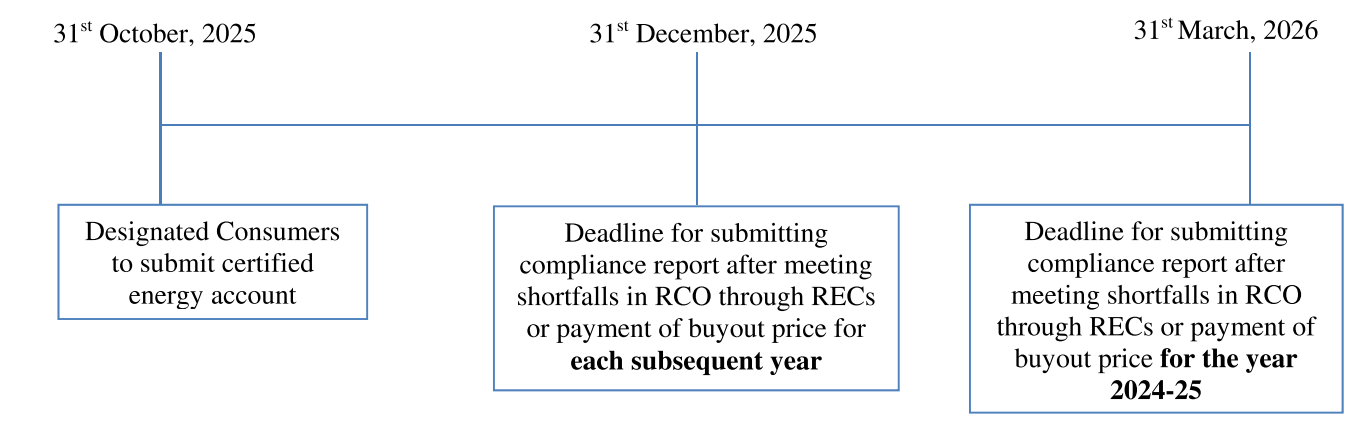


Figure 1: Timeline for RCO compliance year 2024-25

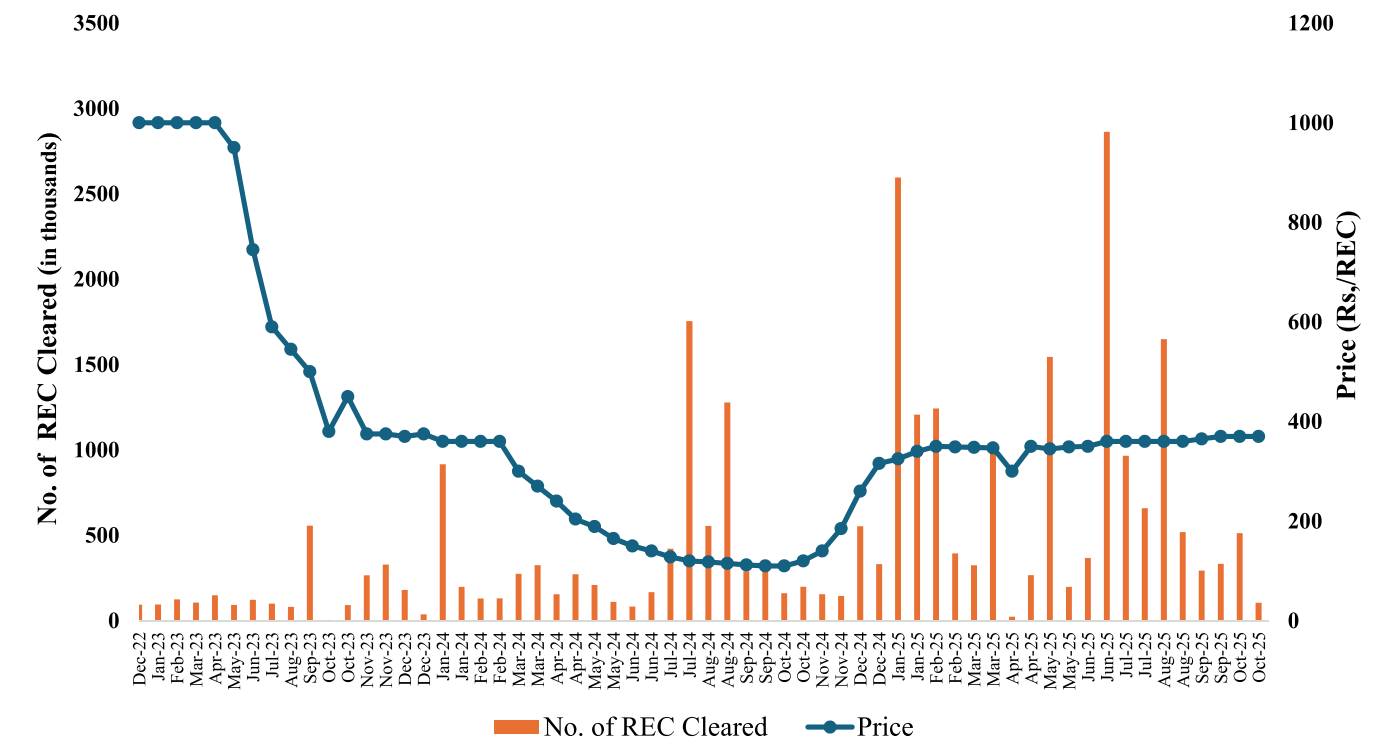


Figure 2: REC Market Trend

Buyout Price: The REC market outcome is subject to market forces as well as the changes in the regulatory and policy framework in the sector. This is reflected in the associated market dynamics resulting in variation in REC prices across time (Figure 2). Singh (2009)[2] proposed the implementation of a buyout price mechanism for ensuring the RPO compliance. The buyout price was suggested to be calculated on the basis of value of the carbon replacement.

The proposed approach to calculate buyout price relates it to the average REC price discovered in the compliance year. The proposed buyout price of Rs. 245/MWh for FY 2024–25 does not take into account the market dynamics within the compliance year that would have motivated compliance by a designated consumer. The buyout price, with appropriate accounting for carrying cost, would influence the upper cap on REC price in the year next to the compliance year.

Singh, A. 2009. "A Market for Renewable Energy Credits in the Indian Power Sector", Renewable and Sustainable Energy Journal, Elsevier https://www.sciencedirect.com/science/article/pii/S030142150400254X?pes=vor&utm_source=scopus&getft_integrator=scopus

Correct price signal for the compliance would only be delivered if buyout penalty is related to the period in which the designated consumers would make the REC purchase. This further highlights the need to limit the REC purchases only to compliance year. The buyout price, linked to the REC price in the compliance year, would then provide an appropriate price signal for effective compliance.

Carrying Cost: The proposed 5% 'carrying cost' does not represent an adequate penalty for deferment. **A uniform 5% premium overlooks the potential financial advantage entities gain by retaining capital during the compliance period, thereby creating an arbitrage between timely and delayed fulfillment.** To ensure fairness and economic neutrality, the buyout price should include a carrying cost beyond the REC benchmark. This should be linked to an appropriate financial benchmark such as the SBI MCLR plus 100 basis points appropriately reflecting the carrying cost and thus providing a correct signal for compliance. A dynamic, cost-reflective premium would eliminate economic gains from delayed compliance, encourage timely RCO fulfillment, and strengthen the overall integrity and credibility of the compliance framework.

Opinion on RERC (Compensation for Part Load Operation for the Generating Stations below the Normative Level of Operation), 2025

Cite

The RERC notified draft on Compensation for Part Load Operation for the Generating Stations below the Normative Level of Operation, 2025, issued on December, 2025. The main objectives of the proposed draft are:

Objective: The draft order establishes a clear and transparent regulation for compensating thermal generating stations that are required to operate below the normative level of operation. In accordance with Regulation 51 of the RERC (Rajasthan Electricity Grid Code) Regulations, 2024, the draft order seeks to specify the methodology and parameters for determining compensation related to degradation in station heat rate, auxiliary energy consumption, and additional secondary fuel oil usage during part-load operation. The draft regulation aim to ensure that generators whose tariffs are determined under Section 62 or Section 63 of the Electricity Act are compensated for efficiency losses attributable to reduced scheduling, while also assigning the financial responsibility to the entity causing such part-load operation.

CER Opinion

Contractual Primacy and Number of Start-ups / Shutdowns: In the Proposed Clause (6) state that *"The additional compensation for secondary fuel oil consumption shall be permissible over and above **seven (7) starts/stops in a year** for the generating station under Unit Shutdown in terms of Rajasthan Electricity Regulatory Commission (Rajasthan Electricity Grid Code) Regulations, 2024."*

The draft order provides compensation for secondary fuel oil consumption beyond seven (7) starts/stops in a year. However, the permissible number of start-ups and shutdowns should also be governed by the provisions of the Power Purchase Agreement (PPA). Accordingly, it is suggested that where **the PPA explicitly provides for a higher number of permissible shutdowns or start-ups, such provisions should prevail, and compensation should be aligned with contractual terms rather than a uniform regulatory cap.**

Additional Start-up Oil Allowance post-COD: In the proposed Clause 6, *"Additional specific secondary fuel oil consumption of 0.2 ml/ kWh shall be provided for units operating below 55% unit loading and for Supercritical or ultra-supercritical units, **a 10% extra quantity of start-up oil shall be provided for a period of 3 years from the Date of Commercial Operation (CoD), due to teething or stabilization issues**. (emphasis added)"*

Suggested Citation: Singh A. (ed.). (2025), Opinion on RERC (Compensation for Part Load Operation for the Generating Stations below the Normative Level of Operation), 2025, Regulatory Insights (Vol.08, Issue 03, pp. 4-6), Centre for Energy Regulation (CER), Indian Institute of Technology Kanpur. https://cer.iitk.ac.in/periodicals/regulatory_insights/Volume08_Issue03.pdf

The provision allowing 10% extra start-up oil for a period of three years from the Date of Commercial Operation (CoD) for supercritical and ultra-supercritical units on account of teething or stabilization issues requires reconsideration. Declaration of CoD signifies that the generating unit has successfully completed all mandatory commissioning tests, trial runs, and stabilization activities and has demonstrated reliable and safe operation. Such a provision for stabilization period was accorded only for those plants, particularly those based on municipal solid waste, which face significant issues due to fuel composition and its variation. Therefore, extending a blanket allowance for stabilization-related start-up oil for three years after CoD to conventional thermal plants is technically or operationally not justified. **Such an automatic entitlement would dilute operational discipline and lead to over-compensation ultimately putting additional burden on final consumers. Therefore, no additional start-up oil allowance linked to stabilization be permitted post-CoD.**

- **Impact of Increasing Renewable Energy Penetration in Rajasthan:** With increasing Renewable Energy (RE) capacity being added in Rajasthan, intra-state thermal generating stations are increasingly subjected to frequent hot, warm, and cold start-ups & shutdowns.

  Further, enhanced ramping capability & operational flexibility of thermal generating stations will be critical to managing the variability and uncertainty associated with renewable energy sources. **Accordingly, the regulatory framework should be designed to appropriately recognize and incentivize the provision of flexibility services and flexibility operation by thermal generating units.**

- **Absence of a Formal Unit Commitment Framework:** In the absence of an institutionalized Unit Commitment framework at the intra-state level, commitment decisions may be driven by short-term operational exigencies rather than system-wide optimization.

  Absence of such a framework increases the likelihood of avoidable cycling, inefficient resource utilisation, and higher system costs. Recognition of this structural limitation within the regulatory framework would enable the **evolution of a transparent, rule-based Unit Commitment process that integrates demand forecasts, renewable availability, and unit-specific constraints.**

- **Intra-state SCED:** A system wide optimization would enable better cost optimization across various contractual agreements. The economic scheduling of such contracts (including those for part load compensation), given the plant level technical constraints (including ramping, technical minimum, etc.) can be **optimized through the Security Constrained Economics Despatch (SCED)[4] implemented at the intra-state level.** The experience from national level SCED has demonstrated economic gains for the sector as a whole.

- **Station-level Operational Optimization within Contractual Boundaries:** Thermal generating stations comprising multiple units may often exhibit technical, operational or economic differences across generating units. A strict unit-level operational decisions may, therefore, constrain efficient station-wide optimization.

  Station level economic operation decision considering part load operation, start-up and shutdown requirements, where technically feasible and without compromising contractual entitlements, could improve operational efficiency and reduce aggregate cycling stress. Such flexibility would be particularly relevant for stations supplying multiple beneficiaries under diverse contractual arrangements.

- **Transition from Normative to Evidence-based Compensation:** While normative benchmarks provide administrative simplicity, they may not adequately capture station-specific operational realities in a dynamically evolving system.

  Greater reliance on verifiable operational data subject to audit and validation would enhance the fairness of compensation for secondary fuel oil consumption and degradation-related impacts. **The SLDC should be empowered to seek such operational data including fuel consumption and share its analysis with the Commission enabling it to set better benchmarks.**

[4]Singh A. (ed.). (2019), Opinion on "POSOCO (Procedure for Pilot on SCED for ISGS PAN India), Power Chronicle (Vol. 01 Issue 03, pp 7-8), Energy Analytics Lab (EAL), Indian Institute of Technology Kanpur. https://eal.iitk.ac.in/assets/docs/power_chronicle_vol_1_issue_3.pdf
Singh A. 2019. "Security Constrained Economic Despatch – India: A Rolling Block Implementation Framework" 2019, 8th International Conference on Power Systems (ICPS), 20-22 Dec. 2019, Jaipur, India. https://ssrn.com/sol3/papers.cfm?abstract_id=3626766

Cost Attribution in Multi-beneficiary Supply Structures: In cases where a generating unit supplies power to multiple DISCOMs, compensation should not arise automatically merely due to scheduling outcomes. If a beneficiary requisitions power within its entitled share, for instance up to 85% of the declared capacity, such requisition should not trigger compensation unless it can be clearly demonstrated that the specific beneficiary's requisition has directly caused additional degradation, increased start-ups, or other incremental operational impacts on the generating unit.

Accordingly, compensation mechanisms should be strictly linked to causation of actual operational impact, rather than being based solely on scheduling or aggregate dispatch decisions.

Data Transparency for Effective Regulation and Research: Robust regulatory oversight depends on the availability of reliable and accessible operational data. Regulatory institutions as well as system operators worldwide ensure such data disclosure keeping the highest priority to transparency.

Public disclosure of scheduling, actual injections, operational directives, and compensation calculations would facilitate informed stakeholder participation, enable regulatory scrutiny, and enhance confidence in the compensation framework. **The SLDC should enable better public data accessibility of scheduling (including various revisions) and the final injection/drawal by the power system constituents. This would also facilitate research based on Indian data rather than those in the international context with limited relevance for the Indian context.**

Opinion on MoP Draft Electricity (Amendment) Bill 2025

Cite

The MoP notified the draft on Electricity (Amendment) Bill, 2025, issued on 9th October, 2025.The key objectives of the draft are mentioned below:

Objective: The Draft Electricity (Amendment) Bill, 2025 aims to strengthen India's power sector so it can deliver affordable, reliable, and clean electricity for all, while supporting the country's transition toward a sustainable and competitive economy. The amendments seek to ensure the financial health of distribution companies through cost-reflective tariffs and timely revisions, while still allowing governments to provide transparent subsidies. They also aim to enhance industrial competitiveness by reducing cross-subsidies, promote greater regulatory accountability and faster decision-making, and modernize the legal framework to reflect emerging needs such as energy storage, renewable energy expansion, cybersecurity, and shared distribution networks. In addition, the bill focuses on improving consumer protection and service quality, strengthening governance through mechanisms like the Electricity Council, and simplifying processes to promote ease of doing business and investment in the power sector.

CER Opinion

Treatment of Energy Storage System (ESS) as Generator: The dual role of ESS as a load and a generator has varying implications for power system operation and the regulatory provisions thereof. Inclusion of ESS as a component of power system (Definition 50) does not address all aspects related to the applicability of various clauses under the Act. For example,

(I) Definition (5) - Definition of appropriate government in case a standalone ESS (generating company) is partly or wholly owned by the central government.

(ii) Definition (8) – A captive generating plant based on standalone ESS.

(iii) Definition (12) – Can Cogeneration include a ESS 'producing' electricity or heat or other energy form?

(iv) Definition (16) – Definition of dedication transmission line to include an ESS.

(v) Definition (19) – Definition of distribution system line to include an ESS.

Suggested Citation: Singh A. (ed.). (2025), Opinion on MoP Draft Electricity (Amendment) Bill 2025, Regulatory Insights (Vol.08, Issue 03, pp. 6-15), Centre for Energy Regulation (CER), Indian Institute of Technology Kanpur.
https://cer.iitk.ac.in/periodicals/regulatory_insights/Volume08_Issue03.pdf

(vi) Definition (22) – Definition of " electrical plant" should include connection with ESS as well.

(vii) Definition (32) – "grid" means the high voltage backbone system of inter-connected transmission lines, sub-stations and generating plants; This does not cover the transmission line connected with the ESS.

(viii) Similarly, Definition 72 and 75 also leave a definitional vacuum.

(ix) Key sections/clauses applicable in the case of a generating company, generating plants or a generating station would also be applicable to an ESS. For example,

Section 7. (Generating company and requirement for setting up of generating station)

Section 9. (Captive generation)

Section 10. (Duties of generating companies)

Section 11. (Directions to generating companies)

Section 14. (Grant of license)

Section 28. (Functions of Regional Load Despatch Centre)

Section 29. (Compliance of directions)

Section 32. (Functions of State Load Despatch Centres)

Section 33. (Compliance of directions)

Alternatively, inclusion of an Energy Storage System (ESS) within the definition for a generating company (28) and generating station (30) would address most of the concerns highlighted above and bring about legal clarity minimizing disputes in the future.

Open Access to Energy Storage System: Section 40 of the Act needs to be amended to allow open access to a stand-alone ESS functioning as a load or a generating plant.

Storage-based Standalone Captive arrangements: With the growing integration of ESS on the generation as well as consumption side, it is important that similar eligibility criteria and regulatory oversight be extended to pure storage-based captive arrangements as well. This will ensure consistency in treatment of storage assets when used in standalone or as a part of captive generating plants, thereby promoting regulatory clarity and alignment with evolving technologies in the power sector.

Eligibility Criteria for Captive Generating Plant: Section 9 *"Provided also that the eligibility criteria for captive generating plant and its users shall be as may be prescribed by the Appropriate Government."*

Section 9 of the Electricity Act, 2003 empowers the SERCs to issue rules laying down the definition for Captive Generating Plants (CGPs). This provides a uniform framework applicable across the country, irrespective of whether CGPs are located within the same state as the consumer or in any other state. Even though a few states have chosen to deviate from the eligibility conditions laid down in the rules, which has impacted the level of investment in CGPs in those states, the uniform framework still serves its purpose in a meaningful manner. It is desirable to further strengthen compliance of the unified framework to further encourage investment and reduce scope for disputes.

Allowing each state to set out its own definition would be a philosophical shift away from the general uniformity that has emerged in several key regulatory areas. Such a departure would not only set back the reform process but also significantly increase the scope for disputes. This is explained below:

This would lead to the emergence of two definitions of eligibility conditions for CGPs:

(i) Inter-state CGPs

(ii) Intra-state CGPs

A change in either ownership or share of consumption could cause an inter-state CGP to become an intra-state CGP or vice versa. Differentiating the definition of CGPs for such scenarios would create significant challenges for CGP developers to ensure compliance with eligibility conditions across jurisdictions. It would also increase the regulatory burden for ERCs and the dispute-resolution load for APTEL, High Courts, and the Supreme Court. **It is suggested that the existing framework be retained and further strengthened for compliance.**

Carriage and Content Separation as Preferred Model for Retail Supply Competition: Unbundling of generation, transmission and bulk supply and distribution and retail supply was the hallmark of the onset of reform process in the power sector across states. Post Electricity Act 2003, **Separation of transmission from energy procurement and its supply to the distribution licensee, along with open access and delicensing enabled emergence of a competitive wholesale electricity market and provided limited choice to the eligible consumers** (Singh, 2006[6], 2010[7]).

The success of an evolving competitive wholesale electricity market cannot be ensured without a clear separation of transmission and electricity trading. The Electricity Act 2003 specifically forbids transmission licensees from engaging in trading. Without such separation, challenges in segregating network and supply costs would increase, along with greater scope for discrimination in providing open access. **Clear separation of the two would also have led to increase the regulatory burden and frequency of disputes. This is why separation of carriage and content (C&C) has been adopted as the preferred model for introducing retail competition across the world.**

The provision for multiple distribution licensees (MDLs) in the EA 2003 was not intended to serve as the primary model for retail supply competition. It emerged from a historical context wherein multiple licensees already existed within the same geographical area, such as in Mumbai. These arrangements were allowed to continue at least for the tenure of existing licenses.

A conceptual argument may also be seen in the **credible threat** that a regulator could use against potential abuse of monopoly power by a single distribution licensee. In fact, the framework for a 'shared' distribution network is already in place in the Mumbai license area. With its own share of the regulatory and legal implications as highlighted below.

Similar to transmission, **the distribution network is also a natural monopoly.** Economic and regulatory literature strongly supports this proposition. Duplication of networks would add to overall system costs and impose additional cost burden on the society. Since distribution licensees are already guaranteed a regulated return on equity (RoE), they have strong incentives to argue for network expansion in anticipation of future load growth. Allowing each licensee to undertake parallel network expansion would not only increase costs but also create a higher regulatory burden.

Phases for Introducing Retail Supply Competition: Based on economic principles, criteria for cost efficiency, avoidance of discrimination, the prevailing conditions and attributes of the Indian power sector, and the international experience, the following phased strategy for introduction of retail supply competition is proposed.

A. Accounting separation of distribution and retail supply businesses

B. Unbundling of the Distribution & Retail Supply Business (D & RS)

C. (Selective Privatization of Distribution / Retail Supply Business of Government owned Discoms)

D. Retail Supply Competition

[6] Singh, A. (2006), "Power Sector Reforms in India: Current Issues and Prospects", Energy Policy, Elsevier, Volume 34, Issue 16, November 2006. https://www.sciencedirect.com/science/article/pii/S030142150400254X

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

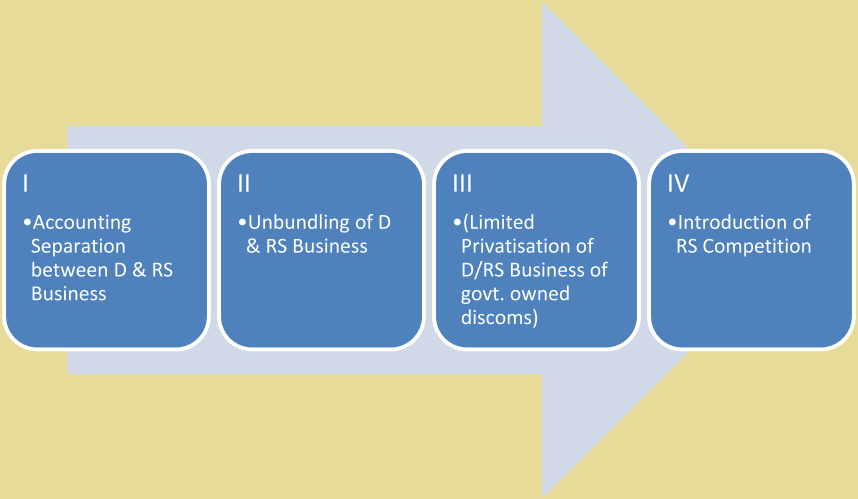


Figure 3: Phases for Introducing Retail Supply Competition in the Electricity Sector

One of the key ingredients to introduction of retail supply competition in India is the separation of the network and the energy business of the discoms. A phased plan to introduce accounting separation leading to unbundling of the distribution and retail supply business holds key to the overall process (Figure 3). This can be implemented under the current legal and regulatory framework. With transparency of costs associated with the network and the energy business, discrimination to network access by competition retails would be avoided. In contrast, lack of transparency of costs and significant scope for disputes would be the hall mark of shared distribution network under the MDL model.

While we do not propose that privatization is a panacea to the problems across all the discoms, as a number of government owned discoms are performing as well as the private discoms, poorly performing discoms that drain the state government's finances and have displayed significant inertia rooted in poor operational and financial performance, Thus, this is only a limited option that may be opted for selected poorly performing discoms. **Finally, the amendment to the Electricity Act 2003 should be built around carriage and content separation model as discussed herein.**

Approach to introducing Retail Supply Competition: C & C Separation vs. multiple Distribution licence: *In the sixth proviso, for the words "through their own distribution system within the same area", the words "through their own or shared distribution system within the same area in accordance with the framework as specified by the* ***Commission****" shall be substituted.*

The importance of C & C Separation

- **Pandorina box for emergence of dispute between the competing distribution licensees.** The presence of M - DNAC for coordinating investment in the distribution network between and dispute it encounters in a testimony to enhanced regulating and legal burden across the sector. The multiple distribution licensee is core of Mumbai licence are including two private licence and a professionally managed public sector undertaking. The unfolding of the competition in the areas under the state government owned distribution licensee areas would see a dominance of private competing licensees who would have faster decision-making processes and better access to funds.
- **Need for a Distribution System Operator (DSO):** With shared or parallel networks, coordination and system operation will become complex. It is suggested to define a *Distribution System Operator (DSO)*

[4]https://powermin.gov.in/sites/default/files/Seeking_comments_on_Revised_Draft_Gazette_Notification_on_Renewable_Consumption_Obligation_under_the_Energy_Conservation_Act.pdf

responsible for network management, data integrity, and coordination among entities, especially under carriage and content separation frameworks.

- **Carriage and Content Separation:** The current amendment merges supply and network functions, leading to possible conflicts. Introducing *carriage and content separation* will help delineate roles between network operation (Discom A, Discom B and Discom C) and energy supply (What if Discom C is bankrupt?), improving efficiency, transparency, and consumer protection.

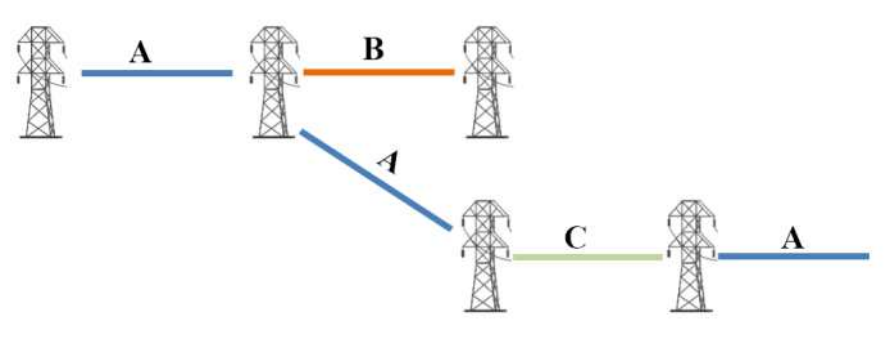


Figure 4: Distribution Network with multiple Licences

Elimination of Cross–Subsidy for Railways, Metro Railways, and Manufacturing Enterprises: Tariff setting exercise in the Indian power sector has been epitomized by the presence of cross-subsidies. Higher tariff for categories like commercial, industries and bulk consumers, along with government subsidy, have been used to support subsidized tariff primarily for the domestic and agricultural category of consumers. An attempt was made to address this anomaly through the provision to eliminate cross-subsidy under the Electricity Act, 2003. However, the subsequent amendment to the Act in 2007 eliminated the effectiveness of this provision by replacing the word 'eliminate' with 'reduce'.

The sector has since witnessed only a gradual decline in cross-subsidy with frequent resistance, often due to economic sensitivity attached to tariff paid by the domestic and agricultural consumers. Notable exceptions in some states are characterized by high tariff, particularly for the domestic category.

Elimination of cross-subsidy would either require immediate increase in tariff or place higher demand for government subsidy — thereby diverting funds away from other priority sectors.

In the light of the above arguments, the criteria for selection of specified consumer categories remains difficult to justify. In fact, a number of other consumers, for example data centers, would present similar arguments to be included in this list. A suggested approach would be to avoid discrimination in the choice of consumers to be protected from cross - subsidization.

Industrial consumers account for 30.15% of total electricity sales, while contribution 34.14% of the revenue of discoms (FY 2023 - 24). Commercial consumers account for 9.37% of the electricity sale but contribute 12.81% of revenue (FY 2023 - 24). This skewness clearly indicates the embedded cross – subsidy in tariff for such categories. Further, **power and fuel expenses account for only about 2% of net sales (Apr – June 2025), the lowest recorded in 20 years (CMIE as cited by Business Standard).** While some of the sectors which have high-cost share for electricity, for example NFM, I&S, cement etc., which already have higher dependence on captive generating capacity.

Period for Assessment of Unauthorised Usage: Draft Section 6 "*If the assessing officer reaches to the conclusion that unauthorized use of electricity has taken place, the assessment shall be made for the entire period during which such unauthorized use of electricity has taken place, and* ***[such period shall be limited to a period of twelve months]*** *immediately preceding the date of inspection.* ***(emphasis added)***

By limiting the period of assessment, there would be an inherent incentive, in connivance with the discom officials, to postpone the discovery of misuse as much beyond one year as far as possible. It is suggested to extend the "12 months" period with with "2 years"or more. A longer tenure would reduce such incentives and act as a stronger deterrent against deliberate delays or collusive practices in detection.

Market-Linked Penalty Mechanism: Draft Section 23 "*Not with standing anything contained in sub-section (1), where the Appropriate Commission is satisfied on a complaint filed before it or otherwise, that a person has not consumed power from non-fossil sources of energy as specified under Section (e) of sub-section (1) of section 86, the Commission shall after giving such person an opportunity of being heard, by order in writing, direct that, without prejudice to any other penalty to which he may be liable under this Act, such person shall be liable to pay a penalty of a sum calculated at a rate of not less than thirty-five paisa per kilowatt-hour and not more than forty-five paisa per kilowatt-hour for default;*" ***(emphasis added)***

It is recommended that the fixed penalty rate be replaced with a market-linked mechanism, such as: ***"Penalty shall be equivalent to the average REC price over the previous six months, subject to limits prescribed by the Commission."***

This approach ensures that the penalty remains dynamic and reflective of prevailing market conditions. By aligning the penalty value with REC market prices, obligated entities are encouraged to fulfil their RPO through actual market participation rather than opting to pay a static penalty. This would also strengthen overall compliance and enhance market liquidity.

Multiple Distribution Licensees and RoW Duplication: Section 14 ***"****In the sixth proviso, for the words "through their own distribution system within the same area", the words "through their own or shared distribution system within the same area in accordance with the framework as specified by the Commission" shall be substituted;"*

Duplication of network due to emergence of MDL would place extra demand for ROW. Enhanced footprint of the DLs network due to duplication would create additional problem particular for the urban local bodies (ULBs) in ensuring upkeep of public space while minimizing disruption of public access to scarce space in urban localities.

Multiple Distribution Licensees and Over-capitalisation: As per the ***Averch–Johnson hypothesis,*** regulated entities would have a tendency to overinvest in the presence of rate of return regulation. Multiple distribution licensees would place a greater pressure for such overinvestment as the competition distribution licensees may hedge risk to their returns from the retiling business by over investing in the distribution network. The overall capital employed in the sector will rise, leading to an increased financial burden on consumers.

MDLs with Exemption from Obligation to Serve and Cost Segregation: Separation of network and supply costs would become more complex for the DLs and would also place greater regulatory burden due to their differential regulatory treatment network cost (regulated, with ROE) and power purchase cost (pass-through). With the onset of the exemption from obligation to serve, it would become increasingly more complex to segregate the power purchase cost across obligated and non-obligated consumers leading to potential disputes in the sector. In the future, **retail supply will further have to be split between consumers with *obligation to serve* and those without it, requiring clear cost and accounting segregation. In the true spirit of competition, only network components of retail tariffs would be determined by the Commission while the energy cost would be governed by the market forces subject to a vigilant regulatory oversight.**

Exemption from obligation to serve may lead to De-facto Cherry picking: The provision for exempting a licensee from obligation to serve may lead to de-facto cherry picking by the entrant private licensees. For example, if a government owned distribution licensee is exempted from obligation to serve, say, HT industrial and commercial consumers, such consumer would likely to migrate to a private distribution licensee, thereby further weakening the financial position of the incumbent the discoms. A delayed operative condition, say 2-3 years from such notification may give sufficient time to the state owned discoms to set their house in order and improve performance, strengthen operational efficiency, and enhance service quality, thereby reducing the likelihood of large-scale migration of high - value consumers.

Tariff Determination for Non-obligated consumer Categories: Once the State Government has decided to exempt a licensee from the obligation to serve, some additional aspects need to be addressed.

(i) Some consumers belonging to the category exempted from the obligation to serve may choose to remain with one of the distribution licensees. Would the tariff for such consumers be regulated by the respective commission? Would such tariff have cross subsidy build therein?

(ii) Would exemption from the obligation to serve also be accompanied by non – obligation to cross – subsidize other categories? It is notable to highlight that under the existing regulatory framework for multiple distribution licensees in Mumbai, cross – subsidy continues to be embedded in the tariff.

In either case, there would be need to identify the cost of serving regulated as well unregulated tariff categories. The distribution licensee would be obligated to share such data, including 'commercially sensitive' data in case of unregulated tariff.

It is important to insert a proviso mandating such data sharing, else this would not only lead to gaps in regulatory process, but also lead to legal disputes. This will also necessitate a proviso clarifying the regulatory proviso for tariff determination for such consumer categories.

CER **Absence of Reference to Telecommunication Network and Need for Section Rephrasing:** In Section 164 **"***The Appropriate Government may, by order through notification in the Official Gazette, for the placing of electric lines or electrical plant for the transmission of electricity necessary for the proper co- ordination of works, confer upon any public officer, licensee or any other person engaged in the business of supplying electricity under this Act, subject to such conditions and restrictions, if any, as the Appropriate Government may think fit to impose and to the provisions of the Act, any of the powers which the Electric Line Authority possesses under the Act with respect to the placing of electric line for the purposes of conveyance of electricity*."

The transmission and the distribution licensees, apart from building and operating the electric network component also setup the required communication network The draft amendment, while removing reference to the ***Indian Telegraph Act, 1885*** **and introducing the concept of an *Electric Line Authority***, does not make any reference to **telecommunication or communication networks**, which are increasingly integrated with modern electricity systems. The absence of such reference may create interpretational and operational gaps, particularly in cases where co-location or shared use of infrastructure is necessary for both electricity and telecommunication/data transfer purposes. To maintain consistency with contemporary grid requirements, the Section may be **rephrased as:**

Section 164 rephase as: *"The Power of placing and maintaining electric lines.— (1) The Appropriate Government may, by order through notification in the Official Gazette, for the placing of electric lines or electrical plant* **and required communication network** *for the transmission of electricity necessary for the proper co-ordination of works, confer upon any public officer, licensee or any other person engaged in the business of supplying electricity under this Act, subject to such conditions and restrictions, if any, as the Appropriate Government may think fit to impose and to the provisions of the Act, any of the powers which the Electric Line Authority possesses under the Act with respect to the placing of electric line for the purposes of conveyance of electricity."* ***(emphasis added)***

CER **Clarity on Exercise of Powers, Advance Intimation, and Dispute Resolution Mechanism:** The draft Section, while referring to the *exercise of powers by the Electric Line Authority and licensees*, does not clearly provide for **prior notice or intimation** to affected persons before undertaking works. There is no stipulation requiring a minimum notice period say, 5-10 working day allowing the concerned individual or entity to raise objections or seek intervention from the District Magistrate. To ensure procedural fairness and transparency, the Section should include a provision mandating prior written notice before initiating works and a defined window for filing objections.

Further, the amendment should establish a **transparent, searchable, and digital dispute resolution mechanism**. A dedicated **web portal** may be created for filing, tracking, and accessing information on disputes. This will ensure that affected parties can directly approach the competent authority without intermediaries and that all dispute decisions are publicly accessible for accountability and consistency.

CER **Constitution and Role of the Electricity Council:** In Section 166 *"(1A) (a) The Central Government shall, by notification, establish an Electricity Council.*

(b) The Minister-in-charge of the Ministry dealing with Power (Electricity) in the Central Government shall be the Chairperson of the Electricity Council. The Ministers-in-charge of the departments dealing with Electricity in the State Governments shall be its members. Secretary-in-charge of the Ministry of the Central Government dealing with Power (Electricity) shall be the Convenor of the Electricity Council.

(c) The Electricity Council shall advise the Central and State Governments on policy measures, facilitate consensus on reforms, and coordinate the implementation of such reforms to ensure achievement of the objects of this Act." ***(emphasis added)***

The draft amendment introduces an *Electricity Council* to advise and coordinate reforms between the Centre and States. This would provide a platform for policy makers to arrive at a broader consensus. However, its proposed functions may overlap with those of the *National Electricity Policy (NEP)* and *Tariff Policy*, which already provide policy guidance through wider stakeholder consultation. Certain aspect needs clarification io avoid duplication and ensure inclusivity, the Council's composition may include representation from other stake holders particularly the *Forum of Regulators* and the CEA. The proposed sub-clause is standalone in nature and does not link up with any other provision of the Act. For e.g. no provision is suggested whereby an advisory from the Electricity Council may be considered. Further, it is not clear if such an advisory is found to be in conflict with, Tariff Policy, regulations, rules or order of the respective bodies. A provision may be introduced to bring about such a safeguard.

CER **"Non-Fossil Sources" and Alignment of Obligations under Related Acts in Section 86.1(e)** *"promote co-generation and generation of electricity from* ***non-fossil sources of energy*** *by providing suitable measures for connectivity with the grid and sale of electricity to any person, and also specify, for purchase of electricity from such sources, a percentage of the total consumption of electricity in the area of a distribution licensee, which shall not be less than such percentage as may be prescribed by the Central Government."* ***(emphasis added)***

The amendment introduces the phrase *"non-fossil sources of energy"* under the provision for promoting co-generation and renewable generation. However, this term "non-fossil" is not presently defined in the *Electricity Act, 2003*. **To avoid ambiguity and ensure consistency in interpretation, it is recommended that *"non-fossil sources"* be formally included in the definition section of the Act, clearly specifying its scope.**

Further, in relation to renewable or non-fossil energy obligations, the framework in the country should maintain a clear demarcation between the regulator's power under the Electricity Act 2003, and those under the Energy Conservation Act 2001. The *designated consumers* are obligated under the *Energy Conservation Act, 2001*, as per the **notification dated 27.09.2025 issued by the Ministry of Power**, through the Bureau of Energy Efficiency (BEE).

It is suggested that the SERC/JERCs should retain their jurisdiction for the obligations related to electricity while those related to other energy forms be covered under the Energy Conservation Act 2001. This separation will provide legal clarity for the obligated entities, ensure development of an effective compliance framework and reduce disputes in the sector.

CER **Ground for Removal of a Member:** As per draft amendment to Section 90 (2), "Provided that no Member shall be removed from his office on any ground specified in clauses (d), (e) ~~and~~, (f), **(g) and (h)** unless the Chairperson of the Appellate Tribunal on a reference being made to him in this behalf by the Central Government or the State Government, ~~as the case may be,~~ has, on an inquiry, held by him in accordance with such procedure as may be prescribed by the Central Government, reported that the Member ought on such ground or grounds to be removed."

The following sub-clause (g) and (h) have been added to Section 90 (2).

"The Central Government, in the case of a Member of the Central Commission, and the State Government, in the case of a Member of the State Commission, may by order remove from office any Member, if he-

(g) has wilfully violated or overlooked the provisions of this Act or the rules or regulations made thereunder;

or

(h) has been grossly negligent in performing one or more functions assigned to him or the Commission under this Act or the rules or regulations made thereunder;"

Furthermore, proviso Section 90 (2) states that

"Provided that no Member shall be removed from his office on any ground specified in clauses (d), (e) and (f) unless the Chairperson of the Appellate Tribunal on a reference being made to him in this behalf by the Central Government, or the State Government, as the case may be, has, on an inquiry, held by him in accordance with such procedure as may

be prescribed by the Central Government, reported that the Member ought on such ground or grounds to be removed."

A judicial order or adjudicatory verdict may be challenged in the Appellate Tribunal or the High Court and the Supreme Court. Differences in the legal interpretation may lead to revision of such verdicts. Fear of a disciplinary action would place significant challenge to the continuity of the regulatory process as there may be multiple interpretations of laws, regulations, rules etc. Such ambiguity is often encountered in the regulatory/judicial process. **The proposed clause would adversely impact the regulatory and adjudicatory functions of a Commission as there would be a tendency to postpone decisions on complex issues due to the fear of subjective evaluation of the decisions taken and disciplinary action thereof.**

Most of the regulatory decisions include participation of multiple members as well as the chairperson. It is not clear if the additional sub clause (g) and (h) would also be applicable to the Chairpersons covered under proviso to the sub-section 2**. If not, it would place a greater moral challenge for removal of a member, being party to a decision, while the other one is excluded.**

CER **Inter-jurisdiction Reference for Removal of a Member?:–** Proposed amendment to Section 176 (iii) "*in the proviso, the words ", **as the case may be**," shall be deleted." **(emphasis added)***

In the amended proviso to Section 176 concerning the removal of a member, the phrase *"as the case may be"* has been omitted after the reference to the Central Government or the State Government. The omission renders the proviso open-ended and 'enables' cross-jurisdiction authority to make a reference to the Chairperson of the Appellate Tribunal. For example, a govt in state A may be able to make a reference for a member of a commission in state B. This is probably a drafting oversight and need to be corrected.

It is therefore suggested that the phrase *"as the case may be"* should be retained.

CER **Timely Disposal of Proceedings by Appropriate Commission:** In Section 92 (6) *"Every proceedings (sic) before the Appropriate Commission shall be decided expeditiously and with the endeavour to dispose the proceedings within one hundred and twenty days and in the event of delay, the Appropriate Commission shall record the reasons for delay*." ***(emphasis added)***

The above sub-section brings in an additional step to the regulatory process and hence may need amendment to the Conduct of Business regulations. The additional step pertains to 'recording' the reason for delay as soon as the 120 days limit has been breached. The spirit of the new section would be to do so rather than recording the reason at the time of final disposal. The time line for disposal of proceeding should be linked to the date of admittance except in Suo - moto cases.

It is suggested that the *reasons for delay* should be recorded and posted on the Commission's website to enhance transparency and accountability.

Further, a **centralized monitoring system**, preferably enabled through the *Forum of Regulators (FoR)*, may be developed to maintain a uniform repository of **all cases and their status** across all Commissions. This will facilitate regular review, improve efficiency, and promote consistency in regulatory performance.

CER **Power of Central Government to Make Rules: In Section 176** *"(i) in sub-section (1), for the words "provisions", the words "purposes" shall be substituted*;"

The term ***"purposes"*** would significantly enhance the scope of rules, and its use would be subjected to interpretational uncertainty.

It is therefore suggested that either:

(i) The term *"purposes"* be **defined explicitly** in the Act to ensure regulatory clarity and limit discretionary interpretation; or

(ii) The earlier term *"provisions"* be **retained**, as it provides a more precise legal basis for rulemaking linked to specific sections of the Act.

A proviso may be introduced to ensure that the rules made in such a manner do not encroach upon powers already bestowed to the respective commission or the authority.

This would reduce regulatory and policy risk in the sector.

- **Electric Line Authority - Safeguards for Access to Premises**: Additional safeguards should be introduced with respect to access to sites, particularly in the context of distribution networks. This is important as such access may involve entry into residential premises with elderly and women. Appropriate provisions may be incorporated to protect the privacy and security of occupants.

- **Tariff-based Vs Lump-sum Subsidy:** Addressing inequality in subsidy provision to consumer's the tariff-based subsidy as implemented across the country does not provide the correct price signal to the consumers thus influencing the consumption behaviour and purchase of energy-efficient appliances. Economic literature clearly highlights the inefficiency of replace price-based subsidies vis a vis lump-sum subsidy. Apart from amendment to Section 65 of the Act, a suitable proviso may also be introduced to Sections 65 specifying the mode of subsidisation of a consumer category.

  "If the State Government requires the grant of any subsidy to any consumer or class of consumers **with respect to** ~~in~~ the tariff determined by the State Commission under section 62, the State Government shall, notwithstanding any direction which may be given under section 108, pay, in advance and in such manner as may be specified, the amount to compensate the person affected by the grant of subsidy in the manner the State Commission may direct, as a condition for the licence or any other person concerned to implement the subsidy provided for by the State Government:"

  The following proviso is suggested. "Provided that the subsidy would be provided to a consumer in a lump sum manner as a reduction in its total bill for the respective billing cycle as per the tariff approved by the respective State Commission up to the specified amount of subsidy."

- **Applicability of CS and Additional Surcharge for Consumers Exempted from Obligation to Supply:** Would cross-subsidy surcharge and additional surcharge be applicable for the consumers for whom a distribution licensee has been exempted from obligation to supply? In the absence of this clarity, the sector may witness disputes abound.

- **Addressing Asymmetry in Representation Capacity of Small Consumers:** Large consumers and generators, due to their size and financial resources, can engage legal and technical experts to advocate their interests effectively before commissions. Conversely, individual consumers lack institutional and financial support, often resulting in outcomes that are not in their favour.

  Additionally, the relatively weaker institutional capacity of distribution companies (DISCOMs) further diminishes the strength of consumer representation in regulatory fora. while regulators, the regulated entities and now the policy maker have a common platform to discuss and coordinate their actions, small consumers do not have such institutional mechanism. The Energy Consumers Australia (ECA) and NASUCA (USA) are the two key examples that serve the need of consumer for fair representation. A legal mandate may be embedded in the Act, providing for an umbrella framework for safeguarding the interest of small consumers with adequate funding through a small regulatory levy on tariffs.

- **Enhancement in Number of Members of State Commissions:** Given the rising complexity of regulatory issues in the power sector, especially post introduction of distribution of retail supply competition, the regulatory burden would rise significantly. The pending cases with the SERCs and expectation in further rise in regulatory burden would warrant that the number of members for SERCs and JERC be enhanced to four. This would also address a gap in the required functional expertise across commissions. Furthermore, delay in appointment of members/chairpersons also significantly undermines the capacity of Commissions to affectively deliver on their regulatory responsibilities. Enhancement of number of members of the SERCs/JERC would help address these existing and emerging challenges in the sector.

- **Typographical Error - Definition of Electric Line Authority:** Draft Section (20a) *"Electric Line Authority" means the person authorized by the Appropriate Government, and includes any officer empowered by him to perform all or any of the functions of the* ***Electrical*** *Line Authority under this Act;"* (emphasis added)

  In the proposed insertion of Clause 20a, both the terms *"Electric Line Authority"* and *"Electrical Line Authority"* are used, which creates ambiguity as to whether **they denote two different entities or if it is a typographical error**.

Regulatory Lexicon

MoP Draft on Electricity (Amendment) Bill, 2025

Electric line authority: The "electric line authority", as defined under proposed Section 2(20A), refers to the person or officer authorised by the Appropriate Government to exercise statutory functions relating to the laying, alteration, maintenance, and management of electric lines, including activities associated with right-of-way and line installation. The provision internalises powers earlier exercised under the Indian Telegraph Act, 1885, ensuring continuity under the Electricity Act, 2003 following the enactment of the Telecommunications Act, 2023.

Energy Storage Obligation (ESO): ESO refers to the requirement that a specified percentage of total electricity consumption be met through energy storage systems, with at least 85% of the energy stored annually sourced from renewable energy. Energy stored from renewable sources under ESO is eligible for fulfilment of Renewable Purchase Obligation (RPO).

Co-generation: Co-generation, also known as combined heat and power, refers to the simultaneous production of electricity and useful thermal energy from a single fuel source within the same system. It emerged as an efficiency-oriented approach to reduce fuel consumption and losses associated with the separate generation of power and heat. By improving fuel utilisation, reducing losses and emissions, and supporting energy security and industrial competitiveness, co-generation aligns with decarbonisation goals. The Electricity Act promotes cogeneration by enabling grid connectivity, sale of such electricity, and inclusion within specified procurement obligations of distribution licensees, which shall not be less than such percentage as may be prescribed by the Central Government. Co-generation continues to receive statutory protection as it delivers system-level efficiency gains that markets may not fully capture.

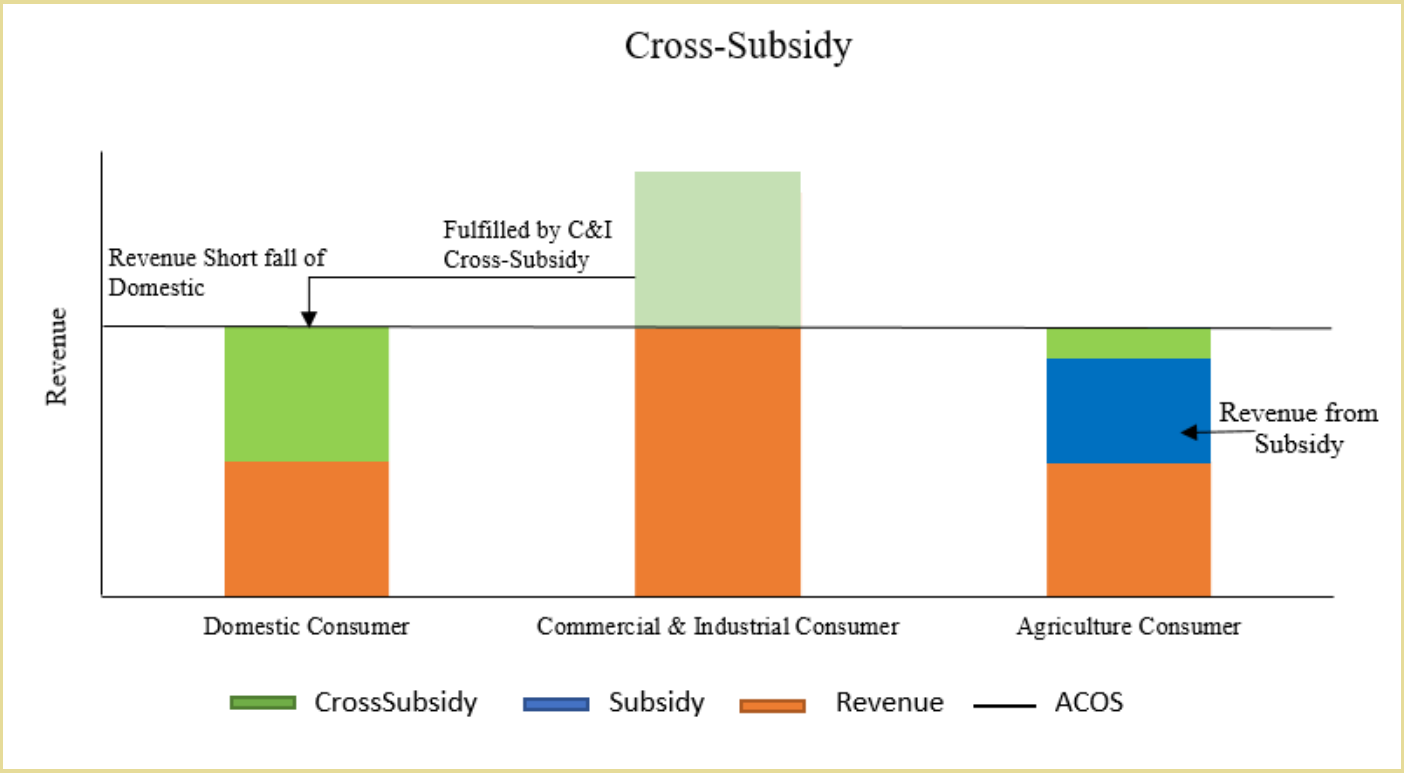
Universal Service Obligation (USO): USO is the statutory duty of a distribution licensee to ensure reliable and continuous electricity supply to all consumers within its licensed area, without discrimination based on consumption, connected load, or eligibility for open access. The Act mandates non-discriminatory access and service standards as part of supply obligations for licensed entities.

Consumer-Friendly Appeal Mechanisms: A consumer-friendly appeal mechanism is a statutory or regulatory process that enables electricity consumers to challenge assessment or penalty orders through a fair, transparent, and time-bound appellate system, ensuring procedural safeguards and effective access to justice.

Cross-subsidy: Cross-subsidy denotes a regulated tariff arrangement in the electricity sector where certain consumers are charged tariffs higher than the actual cost of supplying electricity so that other consumers can be charged tariffs below the cost. This difference is deliberately embedded in regulated retail tariffs and approved by electricity regulators. Cross-subsidy emerged when electricity was treated primarily as a public service, with the objective of ensuring affordability and universal access, particularly for households and agricultural users in rural and low-income areas, at a time when advanced metering, competitive markets, and direct benefit transfer mechanisms were either absent or underdeveloped.

Today, cross-subsidy operates mainly through retail tariffs, determined by SERCs, and affects consumer categories differently. However, persistently higher tariffs for industrial and commercial consumers have led many large users to shift towards open access procurement or captive generation, reducing the paying consumer base of distribution companies. This, in turn, exacerbates financial stress on utilities and can trigger a cycle of rising tariffs for remaining consumers. Consequently, while cross-subsidy continues to receive support from social-equity advocates and state governments, it faces growing resistance from industry, regulators, and market participants who favour cost-reflective pricing. Current policy discussions therefore focus on the gradual rationalisation of cross-subsidy rather than its abrupt removal, seeking to balance social objectives with efficiency and market sustainability.

Regulatory Accountability: Regulatory accountability refers to the obligation of electricity regulators to exercise their statutory powers transparently, lawfully, and in a reasoned manner, including timely decision-making, enforcement of standards, and alignment with consumer protection and sectoral efficiency objectives under the Electricity Act.



Compliance Framework: The Compliance Framework refers to the system of statutory and regulatory requirements governing the electricity sector. It includes licensing conditions, approvals, reporting obligations, performance standards, and enforcement mechanisms prescribed under the Act, rules, and regulations. Compliance is monitored by the Appropriate Commission and the Appropriate Government to ensure that regulated entities operate lawfully, transparently, and in alignment with policy objectives.

Tariff

PSERC approved A.B. Sugars' request to revise both fixed and variable tariff components and permit recovery of additional capital expenditure incurred for modernization. For the variable cost, PSERC adopted Rs. 2.769/kWh for FY 2025-26 with 3.59% annual escalation in the VC for Subsequent years of tariff.

PSERC approved PSTCL's proposal to include Rs. 28.53 crore of emergent capital works, such as replacement of a damaged 100 MVA transformer, procurement of Tan Delta testing sets, cranes, and tower reconstruction, within the 3rd MYT Control Period beyond the approved CIP ceiling. Noting Board of Directors' approval and the urgency of the works, the Commission allowed their inclusion under Regulation 9.14 of the MYT Regulations, 2022.

APSERC approved the MYT and tariff for HNPCL (2×520 MW) for the 5th Control Period (FY 2024-25 to FY 2028-29) by adopting the existing capital cost of Rs. 5,810.75 crore. The Commission approved O&M expenses strictly as per CERC norms, disallowed separate recovery of water and security expenses, and adopted depreciation at 3.5%. WACC was fixed at 11.79%, RoCE allowed accordingly, and annual fixed charges determined. Variable charges were set at Rs. 3.33/kWh, incentive permitted at 25 paise/kWh, and ash-disposal costs allowed only through a separate prudence-checked petition.

CERC approved the tariffs of Rs. 5.06–Rs. 5.07/kWh for the 420 MW RTC-IV projects. SECI filed the petition because the competitive bidding process for RTC- IV India's first tender with stringent firmness and dispatchability criteria had concluded, requiring Commission adoption of tariffs under Section 63 before executing PPAs and PSAs.

WBERC approved the Fuel and Power Purchase Cost Adjustment (FPPCA) for FY 2023–24 for WBSEDCL. Net energy available for sale was 49,840.29 MU against total purchase of 54,410.70 MU. Actual distribution loss was 16.18%, lower than the normative 16.50%, yielding a net gain of Rs. 7,075 lakh, of which Rs. 4,716.67 lakh is retained by WBSEDCL and Rs. 2,358.33 lakh passed to consumers. Total power purchase cost admitted was Rs. 23,17,282 lakh with an average cost of Rs. 4.314/kWh. Prior period adjustments of Rs. 30,094 lakh and NPFC bill discounting of Rs. 13,315 lakh were admitted. WBSEDCL achieved 0.62% Solar RPO and 0.69% Non-Solar RPO against targets.

WBERC approved the impact of the revised project cost of Rs. 5,860.04 crore (revised from Rs. 5,403.60 crore) for the 400 kV double-circuit dedicated transmission line of Haldia Energy Ltd. Capital cost, depreciation, equity (Rs. 1,501.70 lakh per year), debt (Rs. 43,587.0 lakh), interest on capital loan, interest on working capital, and transmission line availability incentive were admitted year-wise. Interest on temporary accommodation was limited to actuals.

UERC approval to PTCUL for replacement of ACSR Zebra with HTLS conductor on the 220 kV SIDCUL–Rishikesh line. Against a DPR cost of Rs. 35.63 crore (incl. IDC), the Commission approved Rs. 33.41 crore (incl. IDC), excluding price contingency of 6.8% and allowing only 3% contingency and 5% project overheads. The HTLS conductor rated at 1600 A addresses recorded contingency loading of 754 A (≈287 MW) and ensures N-1 compliance, especially for Kumbh Mela 2027. Financing is 70:30 (Rs. 24.94 crore REC loan; Rs. 10.69 crore GoU equity).

UERC approved tariff for procurement of 500 MW Round-the-Clock (RTC) coal-based power by UPCL through a transparent Section 63 competitive bidding process for 4 years, extendable by 1 year. Tariff of Rs. 5.85/kWh at CTU periphery (Rs. 6.06/unit at State periphery, excluding transmission charges) was approved for 150 MW from Jindal Power Ltd. and 350 MW from Powerpulse Trading Solutions Ltd. The Commission found the price reasonable, approved the draft APP, and upheld earlier operational conditions, allowing cost recovery only for proven exceptional circumstances.

UERC approved re-determination of tariff for 107 MW contracted capacity from 214 MW GIPL gas-based plant. UERC allowed IDC of Rs. 292.70 crore, pre-operative expenses of Rs.15.54 crore (Unit-1), and hard cost of Rs. 30.96 crore, fixing capital cost at Rs. 492.03 crore (Unit-1). Carrying cost of Rs. 101.15 crore was approved, with total arrears of Rs. 229.46 crore, recoverable from UPCL in 11 monthly instalments from Nov-2025, subject to Supreme Court outcome.

Power Procurement

BERC has approved the long-term procurement of 144.278 MW (AC) solar power under the PM-KUSUM scheme from grid-connected ground-mounted plants to be developed in Bihar. The Commission adopted the competitively discovered tariffs in the range of Rs. 3.30-Rs. 3.48/kWh and approved the draft Power Purchase Agreement (PPA). This procurement aims to support feeder-level solarisation for agriculture and help the state meet its RPO obligations.

HPERC approved the joint petition filed by HPSEBL and M/s Aryan Hydel Pvt. Ltd. For execution of a long-term PPA for the 1 MW Sansal Hydro Electric Project under the generic levellised tariff of the 4th Control Period. The Commission confirmed the project's SCOD of 28.01.2024 and applied the tariff of Rs. 4.93/kWh, further reducing it to Rs. 4.67/kWh by treating the Rs. 93.60 lakh IDS-2017 subsidy as deemed availed. Satisfied with compliance to statutory requirements and agreements, HPERC allowed the petition and directed execution of the PPA within 30 days.

UPERC approved the petition, adopting the individual tariffs discovered for 25 solar projects totalling 82.6 MW and granting approval to the corresponding PPAs executed with UPPCL. The petition was filed because UPNEDA, acting as the implementing agency for PM-KUSUM C2, conducted a statewide TBCB process and required regulatory adoption of tariffs under Section 63 of the Electricity Act for supply of power to UPPCL. The Commission found the bidding process compliant with earlier UPERC directions and confirmed tariff reasonableness. Accordingly, all 25 PPAs were approved and the petition was allowed.

APSERC approved the procurement of 1,162.8 MW of solar power under PM-KUSUM Component-C (Feeder Level Solarisation) through tariff-based competitive bidding, holding that the procurement is necessary, economically justified, and aligned with Andhra Pradesh's long-term resource and DRE obligations. The Commission approved a weighted average tariff of Rs. 3.17/kWh, subject to a ceiling tariff of Rs. 3.09/kWh after passing on GST reduction benefits as a Change-in-Law. Procurement is approved subject to MNRE pump-set sanctions, PPA modifications, 11 kV interconnection, and exploration of distributed BESS.

RERC approved the petition filed by Rajasthan Urja Vikas and IT Services Limited seeking approval for procurement of 3200 MW long-term round-the-clock thermal power through tariff-based competitive bidding on a DBFOO basis, along with deviations from the Model Bidding Documents. The petitioner approached the Commission citing rising electricity demand, impending retirement of ageing thermal units, inadequate existing contracted capacity, and the need to ensure resource adequacy and grid reliability amid increasing renewable energy penetration.

WBERC approved the Power Sale Agreement (PSA) between DVC and NHPC for procurement of ISTS-connected Firm & Dispatchable Renewable Energy (FDRE) with Energy Storage System (ESS). The approved contracted capacity is 250 MW solar coupled with 250 MW / 1150 MWh BESS, sourced from ACME SHL under a 25-year tenure from scheduled commissioning. The tariff approved is Rs. 4.63/kWh, inclusive of Rs. 0.07/kWh trading margin, as adopted by CERC. The procurement is exempted from ISTS charges as per applicable MoP and CERC regulations. The PSA is approved to the extent power is utilised in West Bengal, subject to compliance with scheduling, grid code, and ABT provisions.

WBERC approval for capital expenditure of Rs. 40,687.40 lakh for WBSETCL for implementation of four new transmission schemes. Approved works include: (i) 132/33 kV GIS sub-station at Salt Lake, (ii) 66/33/11 kV sub-station at Lolegaon with 66 kV Chalsa–Kalimpong D/C line, (iii) 132/33 kV GIS sub-station at Bagjola, and (iv) 220/132/33 kV GIS sub-station at Nandapur with 220 kV D/C line. Financing approved at 30% equity and 70% debt, with 9.0% interest on domestic loans.

WBERC approved the Power Purchase Agreement executed between DVC and NHPC for procurement of hydro power from Teesta-VI HEP (500 MW: 4×125 MW) located in South Sikkim, as allocated by MoP, GoI. Power allocation to DVC is limited to 200 MW, for a tenure of 40 years from COD of the last unit or balance normative life, whichever is earlier. The project has annual design energy of 2400 MU and 13% free power/LADF to the home state. Tariff shall be determined by CERC under Section 62, with an indicative levelised tariff of Rs. 4.07/kWh.

UERC approval to UPCL for two projects: (i) construction of 2×5 MVA, 33/11 kV Substation at Pakhi (Chamoli) with 25 km 33 kV and 13.40 km 11 kV lines at an approved cost of Rs. 11.10 crore; and (ii) construction of 2×5 MVA, 33/11 kV Substation at Sara (Dehradun) with 1.7 km 33 kV and 4 km 11 kV lines at Rs. 8.97 crore. Total approved investment is Rs. 20.07 crore, financed 70:30 (debt:equity).

Renewable Energy, RPO and REC

JSERC held that RPO is a statutory obligation and cannot be avoided due to financial or operational difficulties. JBVNL's non-compliance with RPO targets amounts to violation of law and regulatory mandate. The request for waiver was rejected. A penalty of Rs. 25,000 was imposed and JBVNL was directed to clear the pending RPO within six months and file a compliance affidavit. JSERC further ordered 100% RPO compliance from FY 2024-25 onwards.

PSERC examined PSPCL's request to approve procurement of solar power from NHPC's 300 MW Bikaner and 100 MW Khavda projects, whose Scheduled CODs were extended by IREDA and MNRE beyond 30.06.2025. Relying on CERC's Fourth Amendment Regulations, 2025, which permit continued 100% ISTS charge waiver for projects commissioned before 30.06.2026 with valid extensions, the Commission concluded that the remaining capacity qualifies for the waiver. Noting unchanged landed cost from its 2023 approval, PSERC allowed PSPCL to procure the balance capacity.

HPERC approved the levy of tariff-based royalty at Rs. 0.05/unit on all Solar Power Projects above 1 MW and ordered its implementation in earlier PPA approval orders where the provision had been inadvertently omitted. The Commission held that the royalty, mandated by GoHP's notification and already incorporated in subsequent tariff determinations, is payable over and above the approved tariff and recoverable as a pass- through. Rejecting objections about consumer burden, HPERC emphasized its statutory consistency. Accordingly, all ten Suo Moto petitions were allowed, directing HPSEBL to compute and remit royalty for each affected project.

Others

HERC concluded that captive status could only be evaluated for the single generating unit linked to Piccadily Hotels Pvt. Ltd. as the sole captive user, which was required to consume 51% of the generated power. Since the actual consumption was only 37.24%, the mandatory condition under Rule 3(1)(a)(ii) was not fulfilled. The generating plant is not eligible for captive benefits, and DHBVNL is permitted to recover outstanding dues.

MERC approved the petition, holding that the PIR Notifications of 19th October 2022 and 1st February 2023 qualify as a Change in Law event under Article 9 of the PPA. TPREL had filed the petition because these notifications withdrew the concessional 5% customs duty available under Chapter 98, forcing it to pay 25% duty on imported solar cells, thereby increasing the project cost for its 150 MW Achegaon Solar PV Project. MERC accepted that the notifications were issued after the bid deadline and materially altered cost assumptions.TPREL was deemed eligible for compensation, subject to submitting detailed cost evidence.

CERC approved suo motu proceeding, acting because the GST rate for renewable energy devices was reduced from 12% to 5% with effect from materially altering project costs and requiring sector-wide tariff adjustments. The Commission held that the reduction constitutes a Change in Law and must be passed through to beneficiaries, in line with anti-profiteering provisions under Section 171 of the GST Act. CERC directed all RE generators and DISCOMs to compute and adjust tariffs based on invoice dates and one-to-one correlation with project supplies. Accordingly, the suo motu directions were approved and made applicable prospectively.

CERC approved the petition, condoning the delay in filing and granting NREL an extension of up to two months from the date of order for continued injection of infirm power. NREL filed the petition because WRLDC's earlier extensions for infirm power expired in September 2025, yet 13 elements of the Khavda project remained uncommissioned due to unprecedented rainfall, flooding, site inaccessibility, and regional hostilities near the Indo-Pak border. The Commission found the circumstances beyond the petitioner's control and exercised its “Power to Relax.”

Regulatory Updates

APSERC approved the true-down of APTRANSCO's Transmission Business for the 4th Control Period (FY 2019-20 to FY 2023-24), determining a net true-down amount of Rs. 305.01 crore. It approved O&M expenses of Rs. 5,725.52 crore, depreciation of Rs. 3,743.99 crore, taxes of Rs. 443.25 crore, and RoCE of Rs. 3,845.69 crore. After permitted retentions, Rs. 134.08 crore is to be passed on to DISCOMs proportionately.

WBERC approved the impact of the revised project cost of Rs. 5,860.04 crore (revised from Rs. 5,403.60 crore) for the 400 kV double-circuit dedicated transmission line of Haldia Energy Ltd. Capital cost, depreciation, equity (Rs. 1,501.70 lakh/year), debt (Rs. 43,587.0 lakh), interest on capital loan, interest on working capital, and transmission line availability incentive were admitted year-wise. Interest on temporary accommodation was limited to actuals.

WBERC approved for capital expenditure of Rs. 7,698.40 lakh for WBSETCL towards implementation of a new 132/33 kV AIS sub-station at Goaltore, Paschim Medinipur. The approved scope includes 2×132 kV feeder bays, 3×50 MVA 132/33 kV transformers, 12×33 kV feeder bays, 2×33/0.415 kV station service transformers, and 3×33 kV earthing transformers. The project facilitates evacuation of 125 MW solar generation with future provision up to 200 MW, enhances supply reliability, and reduces losses. Financing is approved at 30% equity and 70% debt, with 9.50% interest on domestic borrowings. Capitalization is subject to separate approval with actuals and prudence check.

UERC approved of Rs. 25.06 crore (including IDC) to PTCUL for augmentation of transformation capacity at 220/132 kV Virbhadra substation by installing one 160 MVA transformer, reducing the DPR from Rs. 27.14 crore after disallowing price contingency, subject to competitive bidding, equity confirmation, and post-capitalisation prudence check in ARR.

UERC approved for Rs. 607.47 crore (incl. IDC) for construction of a 400/220 kV GIS Substation at Roorkee with 2×500 MVA transformers and 4.5 km LILO of the 400 kV Puhana–Muzaffarnagar line, superseding the earlier Landhora approval. Approval is under Cost-Plus mode as a special case, subject to competitive procurement, equity assurance of Rs. 211 crore, loan tie-up of Rs. 493.21 crore, statutory clearances, and compliance conditions.

ERC Tracker*

Tariff Orders

State/Union Territory (SERC)	Licensee/Utility	True-up	APR	ARR	Tariff
UPERC	NPCL, DVVNL, MVVNL. PVVNL, PuVVNL, KESCO	2023-24	2024-25	2025-26	2025-26
TERC	TGSPDCL, TGNPDCL				2025-26
TERC	TSECL	2023-24	2024-25	2025-26	2025-26
KSERC	KINESCO, KDHPCL			2022-23 to 2026-27	
AERC	APDCL, APGCL, AEGCL	2024-25	2025-26	2026-27	
JERC(J&K)	JPDCL, KPDCL		2024-25	2025-26	2025-26
APSERC	APSPDCL, APEPDCL, APCPDCL	FY 2019-20 to FY 2023-24			
WBERC	WBSEDCL		2023-24		
WBERC	CESC Limited		2020-21		
WBERC	Adhunik Power and Natural Resources Limited (APNRL)		2022-23		

Regulations

Title	Date of Approval/ Notification
APERC (Terms and Conditions for Tariff Determination from Renewable Energy Sources) Regulations, 2025	8th December 2025
APERC (Green energy Open Access, Charges, and Banking) Regulations, 2024	8th December 2025
APERC (Grid Interactive Solar Rooftop Photovoltaic System under Net/Gross Metering) Regulation, 2023	8th December 2025
APERC (Terms and Conditions for Determination of Tariff for Wheeling and Retail Sale of Electricity) Regulations, 2005	8th December 2025
APERC (Terms and Conditions of Open Access) Regulations, 2005	8th December 2025
APERC (Licensees and Standards of Performance) Regulations, 2004	9th October 2025
BERC (Framework for Resource Adequacy) Regulations, 2025	26th November 2025
BERC (Terms and Conditions for Tariff Determination from Renewable Energy Sources) Regulations, 2025	7th November 2025
CERC (Cross Border Trade of Electricity) (Second Amendment) Regulations, 2025	9th December 2025
DERC (Renewable Purchase Obligation and Renewable Energy Certificate Framework Implementation) Regulations, 2025	10th October 2025
HPERC (Distribution Performance Standards) (Third Amendment) Regulations, 2025	1st December 2025
KSERC (Terms and Conditions for Determination of Tariff) (Third Amendment) Regulations, 2025	24th December 2025
MPERC (Forecasting, Scheduling, deviation settlement Mechanism and Related Matters of Wind and Solar generating Stations) Regulations, 2018	3rd October 2025
PSERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2025	2nd December 2025
RERC (Grid Interactive Distributed Renewable Energy Generating Systems) (Third Amendment) Regulations, 2025	3rd December 2025
TERC (Rooftop Solar PV Grid Interactive Systems) Regulation, 2025	15th November 2025
UERC Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-generating Stations) (Second Amendment) Regulations, 2025	27th November 2025

3rd Regulatory Manthan on the Draft Electricity (Amendment) Bill, 2025

The Centre for Energy Regulation (CER) at the Department of Management Sciences, Indian Institute of Technology (IIT) Kanpur, recently organized the 3rd Regulatory Manthan on "The Draft Electricity (Amendment) Bill, 2025."

The event aimed to facilitate informed discussions on the key provisions and implications of the draft amendment for the Indian power sector, bringing together distinguished regulators, policymakers, legal experts, and industry leaders on a common platform.

The session commenced with a welcome and introductory remarks by the CER team, followed by opening remarks and a detailed presentation on the analysis of the Draft Electricity (Amendment) Bill, 2025, delivered by Prof. Anoop Singh (Founder and Coordinator, CER & EAL, IIT Kanpur). The subsequent panel discussion, moderated by Prof. Singh featured eminent experts, including Mr. V. P. Raja (IAS (Retd.), Former Chairman, MERC), Ms. Manju Gupta (Executive Director (Commercial), PGCIL), Mr. Abhishek Ranjan (CEO, BSES Rajdhani) Mr. Buddy A. Ranganadhan (Senior Advocate, Supreme Court of India), Mr. Chilukamari Chakrapani (Director, TGSPDCL) Mr. Prashant Verma (Director (Commercial), UPPCL) Ms. Paramita Sahoo (Head (Policy Advocacy), Tata Power) and Mr. Shantanu Dixit (Member, Prayas Energy Group).

The discussion centred on the key provisions of the Draft Electricity (Amendment) Bill, 2025, with particular emphasis on the proposed introduction of retail supply competition through shared distribution networks and the associated implementation challenges. Panelists also deliberated on the phased reduction of cross-subsidies for manufacturing, railways, and metro rail consumers with demand above 1 MW, along with proposed revisions to tariff determination timelines and the procedure for removal of members of Electricity Regulatory Commissions (ERCs). The proposal to establish an Electricity Council to strengthen Centre–State coordination was highlighted, and provisions relating to right of way were also examined in detail.

7th Regulatory Conclave on the Draft Electricity (Amendment) Bill, 2025

The Centre for Energy Regulation (CER), IIT Kanpur, successfully organised the 7th Regulatory Conclave on "The Draft Electricity (Amendment) Bill, 2025" on 20th November, 2025 in an online, closed-door format. The conclave was held exclusively for Chairpersons and Members of Electricity Regulatory Commissions (ERCs) across the country.

The session facilitated a structured and in-depth discussion on the key provisions and potential implications of the Draft Bill for India's power sector. Participants shared their perspectives on critical issues, including retail competition through a shared distribution network, exemptions from the obligation to supply, impacts on existing PPAs, phasing out of cross-subsidies, strengthening regulatory governance, non-fossil energy obligations, and the proposed roles of the Electricity Council and the Electricity Line Authority.

The conclave provided an effective platform for peer-level deliberation and knowledge exchange, reinforcing CER's role in fostering informed regulatory dialogue and contributing to policy-relevant insights for the sustainable development of India's power sector.

The editor thanks Regulatory Insights team for their contribution in supporting the analysis, copy editing, compiling snippets of tariff orders, regulatory updates, and coordinating final production of this Issue.

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