



REGULATORY INSIGHTS



Regulatory Outlook

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Editorial

DERC proposed introduction of peer-to-peer (P2P) 'trading' under its net metering regulations. Given the infancy of such transactions, transaction charges, which do not have much economic justification, should not be introduced at the very outset. This would discourage development of P2P segment. Furthermore, the entities engaged in securing such transactions should be registered with the Commission and provide monthly data related to such transactions. Such information should be available in the public domain and archived at the Discom's web portal. Furthermore, the billing framework and its format would also need modification to reflect P2P transactions as suggested herein.

The process of tariff determination, under section 62 of the Electricity Act 2003, and its implementation under the relevant regulations, involves significant regulatory burden both for the respective Commission as well as for the regulated entities. While performance-based regulation or incentive regulation awaits adoption, the current normative cost of service-based regulatory approach should gradually work towards reducing the regulatory burden while ensuring that the objectives of the Act are not compromised. The number of tariff filings for generation and transmission business presents the most significant challenge as they continue to engage the regulatory institutions around the year.

An approach allowing 'automated' tariff calculation based on the prevailing regulatory framework for generation and transmission, within a pre-defined bounds for various sub-components may be adopted. This would then be subjected to truing up at the end of an identified review period (say, 3-5 years). Any over (under) recovery, as per identified limits, discovered during truing up may attract interest cost to the generator (beneficiaries). This would significantly reduce the regulatory burden for these two segments across the country.

Numerous petitions for additional capital expenses also need regulatory approval. Apart from costs on account of change in law, force majeure and arbitration, normative approach with 'automated' approvals for such costs within the defined norms may help further reduce the regulatory burden. This would, however, require regulatory scrutiny at the end of a control period to ensure that there is no duplication of cost, and that the costs are incurred in a prudential manner.

Continued reliance on historical costs for future cost benchmarks with an escalation factor which is also based on historical indices does not reflect the inflationary impact for the ongoing control period. As a departure from continued reliance on historical costs, the sector should adopt benchmarked targets for continuous improvement in cost as well as operational parameters. This should be supplemented with incentives for achievement beyond targets.

Anoop Singh

Founder & Coordinator, Centre for Energy Regulation

The Centre is hosted in the Department of Management Sciences, IIT Kanpur and was seed funded by Government of United Kingdom through a project titled 'Supporting Structural Reforms in the Indian Power Sector' under Power Sector Reforms (PSR) program.

CERC (Terms and Conditions of Tariff Regulations for the tariff period of 2024-29)

CERC released approach paper for terms and conditions of Tariff Regulations for the tariff period 01st April, 2024 to 31st March, 2029. The key highlights of approach paper are given below: -

- The discussion paper includes the approach for determination of different tariff components for a generating company (coal & gas based and large hydro) and a transmission licensee, taking into consideration, the target to be a net-zero country by 2070, revised Intended Nationally Determined Contributions (INDCs) submitted by India and ensure steady growth of power sector.
- The approach has been proposed by the Commission to determine the tariff components on normative basis to reduce the regulatory burden of tariff filings while proposing approval of the major capital expenditure such as additional capital expenditure on coal handling system for a thermal generating station, approval of expenses for advancement of the local area as a part of capital costs of large hydro projects and incentivising/ dis-incentivising the developer for faster/ delayed execution of the hydro projects, treatment of capital cost for projects acquired after NCLT proceedings, approval of interest during construction, treatment of liquidated damages, determination of controllable and uncontrollable factors, servicing the impact of delay, approval of additional capital expenditure for on normative basis, etc.
- Approach for approval of tariff components viz. Return on Equity (RoE), Interest on Loan (IoL), O&M expenses, Depreciation and Interest on Working Capital (IoWC) on normative basis has been discussed. Increasing the useful life of the thermal generating stations and transmission sub-stations to 35 years from the current specified useful life of 25 years is proposed.
- Review of existing operational norms for thermal and hydro generating stations, cost recovery of emission control system and additional expenditure due to flexibilisation of thermal power plants to achieve the technical minimum up to 40% of the maximum continuous rating also have been discussed based on the calculations done by CEA.

CER Opinion

CER Regulatory Impact Analysis (RIA) - Key to a balanced approach to Tariff Determination from the perspectives of investors as well as the consumers: The approach paper outlines various options for a variety of aspects related to tariff determination for generation and transmission u/s 62 of the Electricity Act, 2003 (The Act). Response to the specific aspects are provided herein. Various options suggested in the context of various components of tariff can be evaluated **in terms of their impact on various components of tariff as well as overall tariff to be paid by the consumers and returns to be obtained by the investors.** This would help bring a more balanced perspective from the point of view of the consumers as well as the investors. **The CERC should thus spearhead an approach to Regulatory Impact Assessment (RIA) while approving regulations for the sector.**

CER Regulatory Framework to emphasise Efficiency linked Normative Cost Recovery: The regulatory approach for tariff determination under the CERC framework can generally be classified as normative cost of service approach. In the spirit of the Act and Tariff Policy, the regulatory approach, while approving normative costs, should emphasise on efficiency improvement by the regulated entities both in terms of technical as well as financial costs. **While the adopted approach allows for cost recovery based on norms, the norms themselves are based on actuals, in most cases** (as per CERC's (Terms and Conditions Determination of Tariff) Regulations, 2019). The norms for example, for O&M cost in per MW term for the first year of the control period are based on actuals of the past few years and then escalated as per escalation factor. The regulatory framework should also provide for improvement in efficiency through better norms. Operational efficiency norms must provide incentive for improvement for the generation companies as well as transmission licensees. The co-authored study on tariff increase submitted by Centre for Energy Regulation (CER), IIT Kanpur to FoR (as referred in the approach paper) pointed out various factors summing up to the tariff increase particularly that in the context of transmission tariff. This can partly be attributed to general adherence to historical performance with limited targets for efficiency embedded in the norms for tariff. **The tariff approach to the control period 2024-29 should consider efficiency linked norms as discussed herein.**

CER Normative Approach for Annual Fixed Cost (AFC): As per the suggestions sought in section 3.1, following are the suggestions w.r.t. the approach for determination of AFC:

- a. **Combining the AFC components:** Based on analysis of the actual cost escalation, change in relevant price indices and commonality of basis, Depreciation, Interest on Loan (IoL) and Return on Equity (RoE) can be combined in a single cost element and may be called capital cost recovery, as these can be linked to the same 'basis' for application of norms i.e. the capital cost of the project. Alternatively, RoE is suggested to be identified separately as it is a key parameter that needs separate visibility to the investors. Grouping of cost components should be undertaken if a common 'basis' for the same is used for fixing base year values. O&M and IoWC may be combined once a common 'basis' of application of the norms is identified and implemented for the base year.

An alternate approach is suggested wherein each fixed cost component can be linked to **opening capital cost (OCC)** and following equations may be used to derive the different AFC components in terms of opening capital cost of the project.

i) **Depreciation (Dep_t) :**

$$Dep_t = (OCC_t * 5.28\% * D_t) + (OCC_t * 2.049\% * (1 - D_t)) \dots\dots\dots (1)$$

Where,

OCC_t = Opening Capital Cost in t^{th} year

$D_t = 1$, if $t \leq 12$

$D_t = 0$, Otherwise

The applied rate of depreciation by 5.28% for the first 12 years and 2.049% for rest of the life.

- ii) **Interest on Loan (IOL_t) :** As per the current tariff framework, the loan is treated on normative basis of 70% of the capital cost and the weighted average rate of interest on actual loan portfolio is considered for calculation of AFC.

$$IOL_t = (OL_0 - (OCC_0 * 5.28 * (t - 1))) * IR \dots\dots\dots (2)$$

Where,

Opening Loan Value, $OL_0 = (1 - E) * OCC$, if $E \leq 30\% * OCC$;

$OL_0 = 0.70 * OCC_0$, Otherwise

OCC_0 = Opening Capital Cost at the time of CoD

E = Equity (Normative or actual equity whichever is lower)

IOL_t = Interest on Loan for t^{th} year

IR = Interest Rate on Loan

The rate of interest on the loan, which is linked to market parameter such as SBI MCLR (or any rate as the Commission may deem appropriate).

iii) **Return on Equity :**

$$RoE_t = E\% * OCC_0 * RoE\% \dots\dots\dots (3)$$

Where,

E = Actual Equity (%)

OCC_0 = Opening Capital Cost

$RoE\%$ = Rate of Return on Equity

RoE_t = Return on Equity in t^{th} year

- b. **Reduction of Equity Base¹ post repayment of loan:** It is suggested that accumulated depreciation over and above the accumulated debt repayment (including repayment towards normative loan) should be used to reduce the equity base for allowable RoE as a portion of the risk capital of the investor is available as free cash flow and is no longer deployed in normal business operations. In its absence the consumer is charged RoE for a capital that has already been recouped through depreciation (beyond debt repayment).

In case, such 'excess depreciation' is reinvested in the business, for example to finance working capital, this should attract the appropriate cost of funds as approved for such respective ARR element. The Figure 1 below illustrates the comparison between the prevailing modified GFA approach where only loan is reduced over time while, the equity component, hence RoE remains constant throughout the life of the project vs the net fixed asset (NFA) approach where the depreciation beyond the repayment of loan reduces the equity base. The proposed

¹ CER's opinion on "Developing MYT Framework: Insights and Discussion on the Draft Regulations of Gujarat and Chhattisgarh" at 1st Regulatory Manthan. <https://cer.iitk.ac.in/RM/rm1>

regulatory approach for reduction of equity base should be integral part of the regulatory framework in the power sector, thus mitigating additional burden of tariff paid by the consumers.

The paper justifies continuation of the current framework, *“Increasing the Investors confidence by ensuring assured returns is important, and further considering the recent spikes in power tariffs in power exchanges indicating shortage of power availability, investment in Power sector needs a boost, and therefore the existing GFA approach, being a balanced approach, may be continued”*. It is important to highlight that most of the new investment in the sector is being undertaken through RE capacity addition through competitive bidding. There is limited capacity addition in thermal generation regulated by CERC. The suggested approach is not likely to impact new investment, which is already been serviced through compensatory tariff with such additional allowances. In any case, historical over recoveries to this account also remain irreversible.

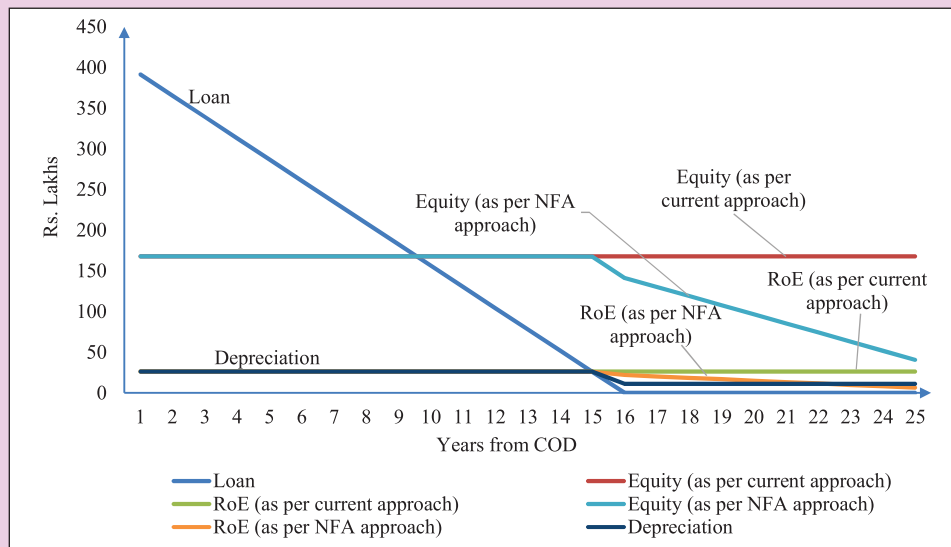


Figure 1: Modified GFA approach vs NFA approach

- c. **Introduction of efficiency factor for O&M expenses²:** In the spirit of encouraging efficient operation, it is suggested that an efficiency factor may be incorporated for arriving at the normative O&M cost for the subsequent year. Efficiency factor may be introduced to encourage continual improvement across the cost components. For the above purpose, a framework similar to RPI-X regulation is suggested to be implemented for treatment of O&M expenses as illustrated in the following figure 1 to encourage efficient performance.

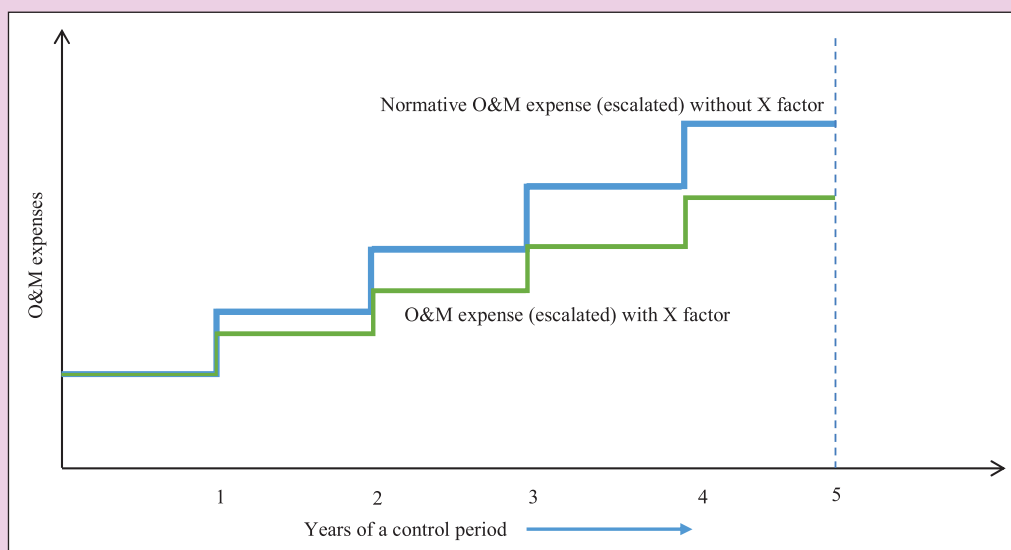


Figure 2: Representation of O&M expenses with efficiency factor (X)

² CER's opinion on "Developing MYT Framework: Insights and Discussion on the Draft Regulations of Gujarat and Chhattisgarh" at 1st Regulatory Manthan. <https://cer.iitk.ac.in/RM/rm1>

Thus, the O&M expenses for a project can be expressed as per the following equation -

$$O\&M_t = O\&M_{t-1} * \left(1 + \frac{Price\ Index_t}{Price\ Index_{t-1}} - X_t^{O\&M}\right) \dots\dots\dots (4)$$

Where,

O&M: Normative Operation & Maintenance expenditure as approved by the Commission;

Price Index: Consumer Price Index for Industrial Workers;

$X_t^{O\&M}$: Factor representing an annual target for efficiency improvement in O&M.

The choice of the price index may be based on a single index or a weighted composite index calculated on the basis of proportion of different cost sub-components of the O&M cost i.e. wages & salary (W&S), repair & maintenance (R&M) and administrative & general (A&G) expenses. The W&S component may be linked to the CPI (industrial worker), R&M to the WPI of electrical equipment or weighted sum of electrical equipment and machinery & equipment and the A&G expenses to be linked to the CPI applicable to white collar workers (CPIurban & clerical workers). Such a sub-component based application of price index could be feasible if costs under the respective heads can be apportioned reliably.

- d. **Determining the Efficiency “X” factor:** Efficiency factor should be an integral part of the O&M cost approval process as the organisation is expected to optimise its cost of operation over time, while still providing for reasonable hedge from general price rise. Appropriate benchmarking studies such as Data Envelopment Analysis, etc. may be conducted to set benchmark for efficiency improvement across individual ‘controllable’ cost parameters across the MYT control period.

CER Self-selection bias between Project-based and Normative tariff: The approach, wherein the generating company or the transmission licensee have an option to select between the determination of tariff either on the project specific basis or normative basis for a particular control period, would lead to self-selection bias. The petitioners whose costs are less than the normative tariff will opt for the normative tariff, while the petitioners whose project costs are higher than the norms, will opt for the project specific tariff leading to the consumers paying higher tariff in totality. This approach would thus be counterproductive to consumer’s interest.

CER Normative tariff to reflect the actual costs?: As per section 3.2.3, “*The asset specific normative tariff will allow the tariff determined to be close to actuals, thereby eliminating the chance of major gain or loss and will also help achieve the other objective of eliminating the need for periodic tariff filings*” (emphasis added). Neither the Act nor the Tariff Policy provide for tariff determination to follow the actuals, and emphasizes role of efficiency improvement. A framework that proposes to set normative tariff close to actuals essentially disregards room for efficiency improvement.

CER Approval of Energy Charges on Actual basis: As per section 3.2.3, “*Further, with regard to Energy Charges, for both new and existing generating stations the same may be approved based on actual fuel cost and normative performance parameters as currently allowed*” (emphasis added). Fuel costs should be allowed on the basis of ‘actual costs’ only to extent the cost of fuel is approved for purchase at a regulated price³ or through competitive bidding.

CER Fixing of Indexation: The proposed approach for specifying the indexation in section 3.2.3.1.b states “*The indexation specified can be with regard to the previous year, i.e., AFC component as computed for the Nth year/ AFC component as computed for the N-1th year.*” Thus, the proposed index is derived based on the **approval of the historical costs with a lag of 1 year** as also demonstrated in the appendix. The proposed indexation is a reflection of historical expenses and also disregards the need for improvement in normative parameters. This also seems to suggest that there would be separate index for each project as it refers to the respective AFC components.

It is important to note that in the case of the regulatory framework for the distribution segment across most of the states, the normative parameters imbibe the need for continuous efficiency improvement. As suggested above the indexation (escalation) to be based on normative indices along with efficiency ‘X’. It is suggested that the determination of index could be on the basis of weightage average index using appropriate WPI and CPI indices.

CER Approval of Additional Capitalisation Post Cut-off Date: As per section 3.2.3.1.f “*Further, in case any additional capitalisation is incurred or is required, the petitioner may file a separate petition seeking approval of capital expenditure, and once such capital expenditure is allowed, the variation on account of additional capitalisation on the AFC can be serviced by first computing the impact on the AFC and then adjusting the same through the same indexation mechanism as specified above. Such an adjustment can be carried out from the date of capitalisation of such additional capitalisation*” (emphasis added).

³ In case the tariff of captive mines of a thermal station are approved on normative basis, the fuel costs of such thermal stations should remain norm based and not be approved on actuals.

Additional capitalisation up to the proposed cut-off period should be the one which has been envisioned and approved as a part of the original capex approval by CERC. It is suggested that, the separate approval for additional capitalisation post cut-off date of the plant to be allowed only in case such requirements arise due to change in law events, force majeure or due to arbitration. Further, in case of implementation of the proposed 'compensation allowance', there should not be a need for additional capitalisation.

CER Procurement of goods and services for Additional Capitalisation through Competitive Bidding: As per the suggestions sought for *"Need to mandatorily award work and services contracts for developing projects under the regulated tariff mechanism through a transparent process of competitive bidding, duly complying with the policy/guidelines issued by the Govt. of India as applicable from time to time."*, it is suggested that the additional capitalisation allowed either within the cut-off date or outside the cut-off date (due to change in law or arbitration), should also be mandated to be procured through competitive bidding process.

CER Investment costs to be considered for Approval of Capital Cost of project: As per the section 4.2.3 of the proposed approach, *".... However, the hard costs of recently commissioned projects of similar specifications are referred to for prudence checks...."* It is suggested that the hard costs of the recently commissioned projects whose **hard costs of various components of the project which have been approved by the Central Commission** should be referred for approval of the capital costs of the projects.

Benchmarking of capital cost would thus be of significant importance. The Commission may come up with a separate framework for arriving at the benchmark after due consultation with the stakeholders. In the interim, **minimum of the hard costs as approved by the Commission may be considered as the benchmark cost** and if the project cost is higher than the benchmark cost, a certain fraction of the difference in the cost (say 75%) may be allowed as pass through after prudence check. Similarly, if the actual costs come to be less than the benchmark cost, then the developer may be allowed to retain a certain fraction of the difference (say 25%) as an incentive for efficiency and the rest 75% goes to beneficiary.

CER Capital cost of Hydro Generating Stations: As per the suggestions asked in section 4.2.4 of the proposed approach *"As these expenses towards the advancement of the Local Area are required for the development of the project and for alleviating public resistance and delays, such expenses may be allowed as part of the capital cost with certain limits. Alternatively, these expenses may be met through budgetary support for funding the enabling infrastructure, i.e., roads and bridges, on a case-to-case basis which could be (i) as per actuals, limited to Rs. 1.5 crore/ MW for up to 200 MW projects and (ii) Rs. 1.0 crore/ MW for above 200 MW projects, as per the Ministry of Power guidelines dated 28.09.2021 for budgetary support for "Flood Moderation" and for budgetary support for "Enabling Infrastructure"*, it is suggested that, the tariff framework should mandate that any portion of the budgetary support provided by the Ministry of Power for enhancement of the local area is neither claimed nor approved through the tariff determination process by the hydro generating station.

CER Differentiated RoE for Hydro projects with and without Dam/ Reservoir: Given the fact that the cost of equity for infrastructure sector has reduced⁴, the return on equity for the projects should also be reduced. However, given higher risk for the hydro projects, the return on equity for the new hydro power projects under the current tariff framework may be retained for the next control period (2024-29). Further, it is suggested that in case of new hydro projects, which include a large dam/ reservoir or a pumped storage facility (with a cut-off date), higher return on equity (say 50 basis points) as compared to the run of the river projects may be introduced.

CER Higher Return on Investments for Hydro projects for Early Completion: For enabling higher return on investments for timely/ early completion of projects, if the project is completed 90 days prior to the scheduled date of commercial operation (SCOD), a higher RoE (say 50 basis points) may be allowed for a period of 5 years from the COD irrespective of the control period. Similarly, RoE may be reduced (say 50 basis points) for the projects whose commissioning is delayed for more than 120 days post SCOD, applicable for 5 years irrespective of control period.

CER Acquisition value of the projects acquired post NCLT and its effect on the AFC of the project: As per the suggestions sought for the cost to be considered while determination of tariff u/s 62 of the Act for the projects acquired post NCLT proceedings, the approach of considering the lower of the historical cost and acquisition value of the project seems appropriate. However, it need to be clarified whether the acquisition value consist only of the equity component of the project cost or complete cost of the project.

⁴ Kewal Singh, Anoop Singh, Puneet Prakash, 2022, "Estimating the cost of equity for the regulated energy and infrastructure sectors in India" <http://dx.doi.org/10.1016/j.jup.2021.101327>

CER The following cases illustrate the possible scenarios that may occur post NCLT proceedings and the treatment of the cost:

Case 1: When the acquisition value post NCLT proceedings are less than the actual project capital cost – In such cases, both debt and equity component of the cost of acquired project will be restructured (**reduced**). Hence, the **RoE and IoL component of the AFC will reduce** leading to reduction in the tariff of the beneficiary.

Case 1 scenario: For e.g. the cost of the project is Rs. 1000 Cr. Considering the debt to equity ratio as 70:30, the loan and equity will be Rs. 700 Cr. and Rs. 300 Cr. respectively. When the project goes to NCLT, the entity buying the project may not be willing to pay Rs. 300 Cr. equity. At the same time the banks may restructure the loan and forego some principal amount component of project. Thus, after the NCLT proceedings, the actual loan and equity of the project will be reduced to, say 300 Cr. and 150 Cr. respectively. Thus, the interest rate on the loan component will be applicable on Rs. 300 Cr. instead of Rs. 700 Cr. and the return on equity will be applicable on Rs. 150 Cr. instead of Rs. 300 Cr. Also, the depreciation allowed should be lower of the restructured loan repayment amount or the applicable depreciation under the tariff framework.

Further, the depreciation should only be applicable on the restructured capital cost.

Case 2: When the acquisition value post NCLT proceedings is greater than the actual project capital cost – In such cases, the historical value of the project, at the time of acquisition (after appropriate deduction of costs recovered and debt restructuring), should be considered for recovery.

CER **Revenue earned during Construction period to offset IDC and IEDC:** It is suggested that in cases when the revenue earned during construction phase of the project is higher than IDC, such amount may be used to offset the IEDC incurred for the project.

CER **Pro-rated IDC to be allowed:** As per the suggestions sought between the two options in section 4.4.1 of the proposed approach, “Pro-rata IDC may be allowed considering the total implementation period wherein the actual IDC till implementation of the project is pro-rated considering the period upto SCOD and period of delay condoned over total implementation period.....Under Option 1 above the allowable IDC shall be Rs. $X + [Y*(4/12)]$, i.e., only IDC pertaining to delay is pro-rated. Under Option 2 the allowable IDC shall be Rs. $(X+Y)*[(36+4)/48]$ wherein the total IDC is pro-rated based on the SCOD and delay condoned vis-à-vis the actual implementation period of 48 months”, option 1 seems appropriate because, while it provides solace for the generator/ transmission licensee, it also encourages the generating station/ transmission licensee to complete the project in timely manner.

An another option may be exercised, where the 50% IDC and IEDC applicable for the delay condoned beyond the SCOD may be allowed as pass through, **given the fact that the generating station/ transmission licensee has collected the LD, if any, and it has been deducted from the total IDC and IEDC incurred.**

CER **Deduction of LD amount collected from total IDC and IEDC incurred:** As per the proposed approach in section 4.4.2, “It is observed that the current provisions specify that in the event that the delay is not attributable to the generating company or transmission licensee, the additional IDC and IEDC beyond SCOD **shall be allowed and the total LD amount collected shall be deducted**” (emphasis added). It is suggested that the clause may be rephrased as “.....additional IDC and IEDC beyond SCOD shall be allowed **after deduction of collected LD amount from total IDC and IEDC.**”

CER **Servicing the Impact of delay on account of Forest Clearances and Approvals:** The comments sought in section 4.9 of the proposed approach states, “1. To encourage rigorous pursuit of such approvals from statutory authorities, even if delay beyond SCOD on account of clearances and approvals that are condoned, some part of the cost impact (Say 20%) corresponding to the delay condoned may be disallowed. 2. Alternatively, **RoE corresponding to cost and time overruns allowed over and above project cost as per investment approval may be allowed at the weighted average rate of interest on of a fixed RoE.** 3. The current mechanism of treating time overrun may be continued, considering that utilities are automatically disincentivised if the project gets delayed” (emphasis added).

The approach 1 to disallow 20% of the impact of delay seems a little too harsh and may be reduced to 15% to encourage the generating company or transmission licensee for rigorous pursuit of approvals given the fact that the generation company or transmission licensee may have limited control over clearances and approvals but need to pursue the approvals diligently.

The approach 2 is a better approach as it allows return on the cost and time overruns corresponding to delay in approvals and clearances, allowed over and above the project cost as per investment approval, **at the weighted average rate of interest on loans and not on fixed RoE.**

CER Additional Capitalisation:

A. Normative add-cap for works related to original scope works within as well as beyond the cut-off date and corresponding liability discharge: Add-Cap on account of the original scope works within the cut-off date and corresponding liability discharges may be represented as a percentage of the total investment approval or total capital cost admitted by the Commission and allowed only up to the cut-off date.

The capacity-wise analysis of capital expenditure as a **percentage of admitted capital cost**, for the plants with years of operation up to 7 years from COD as on 31st March, 2023 is shown in the following Table 1.

Capacity (MW)* No. of Units	Plant Name	Years from COD							
		0	1	2	3	4	5	6	7
250*2	Barauni II	78.45%	0.01%	1.94%	9.51%	3.94%	6.15%	-	-
500*1	Unchahar Stg-IV	80.04%	2.59%	4.76%	8.75%	3.44%	0.28%	0.14%	0.00%
660*2	Khargone	81.49%	4.29%	5.35%	6.28%	2.59%	0.00%	-	-
660*2	Tanda Stg-II	81.21%	4.17%	4.18%	2.32%	6.61%	1.51%	-	-
660*2	Solapur	86.72%	1.66%	1.79%	3.51%	3.51%	3.26%	0.00%	0.00%
660*3	Nabinagar	86.79%	0.73%	3.41%	0.70%	3.97%	4.39%	-	-
800*2	Gadarwara	96.39%	1.49%	0.44%	0.85%	0.41%	0.41%	-	-
800*2	Lara	71.61%	6.77%	2.38%	5.60%	10.10%	3.53%	-	-
	Weighted Average	83.66%	3.01%	2.24%	2.96%	4.57%	2.45%	0.00%	0.00%
	Median	81.35%	2.12%	2.90%	4.55%	3.72%	2.39%	0.00%	0.00%
	Suggested Norm	84%	3%	3%	3%	5%	2%		

Table 1: Admitted capital cost distribution across years

- The majority of Add-Cap is distributed during the initial 4-5 years of operation of a plant from COD. Hence, it is suggested that the cut-off for add-cap may be extended from 3 years to 5 years from COD, and the definition of the cut-off date may be modified as “the last day of the sixtieth calendar month from the date of commercial operation of the project”. Based on the admitted capital cost, proportion of capital cost up to SCOD and proportional distribution of add-cap across the first 5 years from COD may be fixed as a norm as suggested in Table 1 above.
- It is suggested that no add-cap on account of original scope works and corresponding liability discharge to be approved post cut-off date i.e. 5 years from SCOD. The expenditure due to add-cap for ash dyke/ ash transportation is observed to be minimal up to first 15 years from COD. Hence, the add-cap on account of ash dyke/ ash transportation should not be allowed up to 15 years from COD and may be allowed beyond 15 years on a case to case basis.

CER Deemed approval of variation in Add-cap to reduce Regulatory Burden: Under the deemed approval framework (as proposed herein), a generating company or a transmission licensee could be allowed to recover the excess amount over the (approved) annual add-cap expenditure⁵ (while still remaining within the overall approved capital cost) for the respective years (within the first 5 years) if the impact of such additional recovery on tariff is within a percentage range to be defined by the Commission. This would also mean that the generation company would consider lower add-cap amount for a subsequent year (within the five year period) so that the overall capital cost remains the same as originally approved. This would only affect the time value of money as total capex spend would remain the same. The adjustment/ true-up of such recovery can be done at the time of true-up at the end of the control period or at any interval within the control period as the Commission may deem appropriate. The suggested approach is similar to the mechanism for approval of fuel and power purchase adjustment cost (FPPAC) in the case of distribution licensees.

Following scenario illustrates the possible approach for approval of add-cap -

- In case add-cap proposed to be treated as change in existing tariff due to add-cap $\leq x\%$, 80% cost recoverable of the additional tariff by the generating company or the transmission licensee may be levied without going through any regulatory proceedings.
- If, $x\% < \text{change in existing tariff due to add-cap} \leq y\%$, $y\%$ cost recoverable of the additional tariff by the generating company or the transmission licensee may be levied onto the consumers, and the balance shall be recoverable up to 70% without going through any regulatory proceedings.

⁵ As suggested above in Table 1.

- If, change in existing tariff due to add-cap $> y\%$, 10% cost recoverable of the additional tariff by the generating company or the transmission licensee may be levied onto the consumers without going through any regulatory proceedings, and the differential claim shall be recoverable on filing of an application for prior approval by the Commission at the time of true-up or any such interval within the control period as specified by the Commission. The values of 'x' and 'y' may be as specified by the Commission.
- **Adjustment of under-/over-recovery of revenue:** The revenue recovered by a generating company or a transmission licensee on account of change in existing tariff due to add-cap, without going through any regulatory proceedings, shall be trued up at the end of control period or any such interval as decided by the Commission within a control period.

In the case of under-recovery, a carrying cost at the benchmark interest (i.e. interest on loan) be allowed. In case of excess revenue recovered for the year against cost incurred due to add-cap, the same would be recovered from the generating company/ transmission licensee at the time of truing up along with **its carrying cost to be charged at least 400 basis point above the benchmark interest rate** at the time of truing up of the costs accounting for the fact that interest also has been claimed from over recovery by the generating company/ transmission licensee. This will disincentivise undue over recovery from the beneficiary.

Capital expenditures due to arbitration, change in law, force majeure, etc. do not have a predictable pattern and cannot be envisaged as a norm. Hence, they may be dealt on case-to-case basis and separate approval should be taken from the Commission.

CER No separate yearly Allowance/ Special Compensation for Add-cap: As per clause 4.10.1, the approach for normative add-cap for generating stations states *"For generating stations that have already crossed the cut-off date as on 31.03.2024, 1. Thermal Generating Stations – Based on the **analysis of actual additional capitalisation incurred by such generating stations in the past (15-20 years)** and co-relating such expenses to different unit sizes such as 200/210 MW series, 500/660 MW Series and different vintages (5-10, 10-15, 15-20, 20-25 years post COD), **a special compensation in the form of yearly allowance may be allowed based on unit sizes and vintage**, which shall not be subject to any true up and shall not be required to be capitalised. 2. Hydro Generating Stations - As each hydro generating station is unique owing to various factors, additional capitalisation of such generating stations may not be benchmarked as can be done for thermal generating stations. However, in the case of a **specific hydro generating station, the additional capitalisation is recurring in nature, and hence station wise normative additional capitalisation may be approved in the form of special compensation** which shall not be subject to any true up and shall not be required to be capitalised"* (emphasis added).

As referred above in Table 1, in case of thermal generating stations, add-cap does not occur beyond 5 years of operation from COD. Hence it is suggested that the **add-cap may not be allowed beyond 5 years of operation from COD for thermal generating stations**. Further, the proposed approach takes into account the past expenditure incurred by the generating stations and defines a particular number to be approved either based on the capacity of the station for thermal stations or the project specific numbers in case of hydro generating stations. Dependence on past data (without efficiency factors) not only passes on the inefficiencies of the past but also allows the generating stations to overlook the efficient practices and measures for add-cap expenditure. **This may also lead to increase in the expenditure of the generating stations beyond the actual requirement of the add-cap.**

CER Regulatory Sandbox - Deemed approval of Add-cap in case of Transmission System: In case of transmission systems, the projects are often implemented in multiple stages and capital investment towards each of such components of project implementation is presented as separate petition.

An approach considering Deemed approval as discussed in the above section can be considered for approval of the add-cap wherein the transmission licensee is allowed to recover the add-cap expenditure incurred if the impact of such additional recovery on tariff is within the range as defined by the Commission. The adjustment/ true-up of such recovery can be done at the time of true-up at the end of the control period or at any interval within the control period as the Commission may deem appropriate including the deduction of over recovery done by the transmission licensee as already explained above. This would reduce the number of petitions before the Commission and thus reduce the overall regulatory burden. A mechanism similar to the one mentioned above could be implemented for under-/over-recoveries.

Such deemed approval should only be available for such transmission licensees who have already files at least five tariff petitions and have been issued an order against the same demonstrating that they have an established internal mechanism for the same. **A Regulatory Sandbox approach may be considered as a test case by the Commission.** Based on its outcome, such a process can then be implemented, say, one year after the beginning of the upcoming control period.... *Read more on CER Website*

DERC (Net Metering for Renewable Energy) (1st Amendment) Regulations, 2023

DERC notified draft “(Net Metering for Renewable Energy) (1st Amendment) Regulations, 2023”. The key highlights of this document are given below:

- In the proposed amendment, the definitions of ‘Blockchain’, ‘Peer to Peer Transaction’ and ‘Prosumer’ have been introduced.
- The objective of this regulations is to provide flexibility to the prosumer and consumer to use renewable energy using distribution network of distribution licensee. This peer to peer mode of transaction billing and accounting will be done by distribution licensee.
- Further that Delhi discoms shall file petition under this regulation for determination of transaction charge/ fee, if required, for enabling peer to peer transactions.

CER Opinion

CER Definition of Peer to Peer Transaction: The definition of ‘Peer to Peer Transaction’ in the proposed draft Clause 2(22) states, “*Peer to Peer Transaction*” means a transaction, based on interconnected platform that serves as marketplace wherein Consumers and Prosumers meet to trade electricity through Blockchain or any other technology.” (emphasis added).

The Clause may be rephrased as “... .. Consumers and Prosumers meet to **transact** electricity through Blockchain or any other technology.”, because as per the Act the trading of electricity is a licensed activity and each consumer cannot be given trading license.

CER Definition of Prosumer : Clause 2(23) of the proposed draft states that “ ‘Prosumer’ means a person who consumes Electricity from the Grid and can also inject Renewable Energy into the Grid using the same network. ”

Current definition subsumes the case of an Open Access consumer who may also have a Renewable Energy based captive power plant through which it can inject electricity into the grid as well and may not have any contracted demand with the discom. Hence, the Clause may be rephrased as “ ‘Prosumer’ means a consumer who consumes Electricity from the **Distribution Licensee** and also inject Renewable Energy into the distribution network using the same network. ”

CER Definition of ‘Eligible Consumer’: The term ‘eligible consumer’ in the proposed Clause 4(3) need to be defined in Clause 2 of the regulations and may be included in the current amendment.

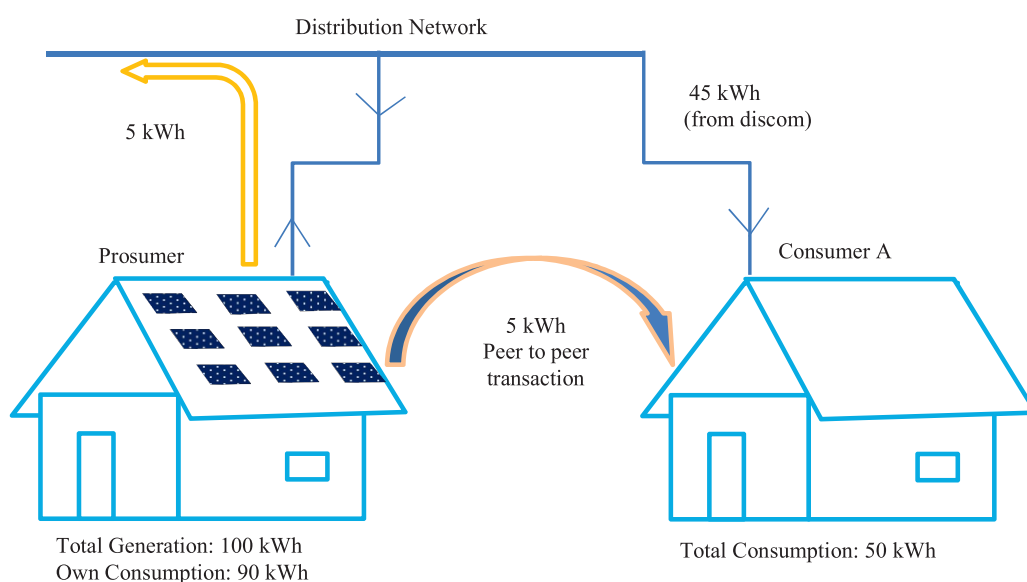
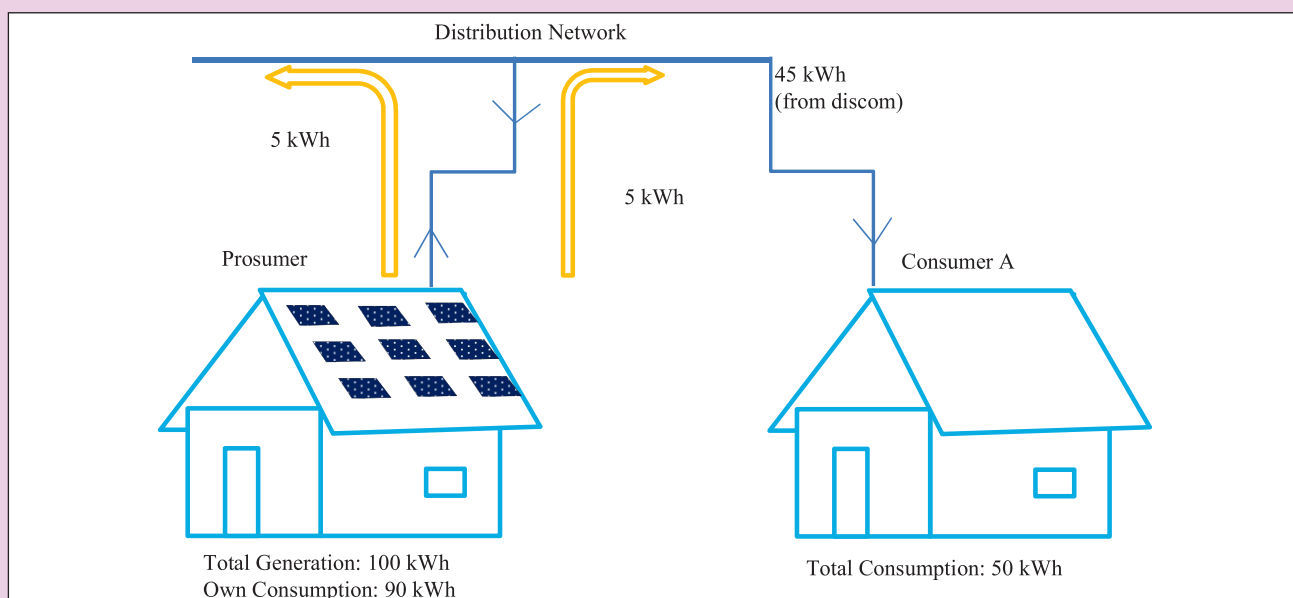
CER Levy of Transaction Charges/ Fee by the Discom: The proviso to the proposed Clause 4(3) states, “*Provided further that Delhi DISCOMs shall file Petition under this Regulation for determination of Transaction charges/ fee, if required, for enabling Peer to Peer Transactions.*” Considering a scenario of net-metering arrangement as illustrated in Figure 1, out of 100 kWh generated by the prosumer, 90 kWh is self-consumption of the prosumer and other 10 kWh is injected in distribution network. Total consumption of Consumer A is 50 kWh, out of which 45 kWh is supplied by the discom and the rest 5 kWh may be supplied from the energy injected by the prosumer in the distribution network. In case of peer to peer transaction, the same 5 kWh is **procured** by Consumer A from the prosumer (Figure 2). Thus, similar to the net metering arrangement, the transmission and distribution losses and charges for the 5 kWh of electricity consumed by the Consumer A are not borne by the discom. Therefore, as there are no separate transaction charges/ fee for the energy injected by the prosumer according to the prevailing Regulations, the rationale for the transaction charges/ fee to be levied by the discoms for such peer to peer transactions between a prosumer and its consumer need further clarification.

CER Billing of Peer to Peer Transaction to be done by Discom?: As per the current proposed amendment the billing and accounting is to be only done by discom and the peer to peer platform is owned and operated by the discom. This creates a barrier for the third party to own and operate peer to peer platform and perform the billing. It is thus suggested that, while the energy accounting should be done by the discom, billing should be done by the peer to peer platform. Also, the term peer to peer platform may be defined in Clause 2 of these Regulation.

The Regulations should ensure the appropriate registration of the peer to peer platform with the discom as well as the Commission and should not require any licensee for such peer to peer transactions.

CER The proposed amendment to the Regulations corresponding to the billing of the peer to peer transaction definition seems to be inadequate. It is suggested that the proposed amendment Regulations should also include the following important parameters for implementation of peer to peer technology:

- Provisions for third party to do energy accounting and billing
- The purpose of application of transaction fee: As explain above, given the energy accounting and billing should not done by the discoms, the reason for applicability of transaction fee should be clearly specified in the Regulations.
- Entry barrier for a third party to do O&M of peer to peer platform, and energy accounting and billing may be removed and the provisions for the same may be included in these Regulations.
- Provisions for registration of third party peer to peer platform with the discoms and DERC should be included in the regulations. Also, no license should be required for such peer to peer platform. The format the submission of peer to peer transaction reports to the discoms and DERC should be part of these regulations.
- Change in the billing format to include energy accounting and billing for the peer to peer transactions should be mentioned in the Regulations.
- In the Proposed Clause 4(3) have mentioned “mutually sell” for that it may be “mutually agreed transaction”.



Regulatory Updates

Tariff



AERC approved the petition of APDCL to recover FPPPA from January to March, 2023 and also directed APDCL not to increase the FPPPA rates beyond Rs. 0.30/ kWh for low-end domestic consumers and Rs. 0.70/ kWh for others and shall adjust the subsidy amount of Rs. 400 Cr. against FPPPA amount.



CSERC approved ECR of Rs. 1.86/ kWh instead of Rs. 1.90/ kWh for FY-22 to FY-24 for supply of power to CSPDCL by allowing the water charges, electricity duty and cess be passed through to the beneficiaries and also allowed the carrying costs to be recovered from 20th December, 2022.

CSERC approved ECR of Rs. 2.74/ kWh instead of Rs. 3.03/ kWh for FY-21 as filed by M/s Bharat Aluminium Company Ltd. and also allowed to recover the carrying costs from 23rd January, 2023 for FY-22.

CSERC approved a cumulative revenue gap of Rs. 2.64 lakh after true-up for FY-21 in order dated 28th October, 2022 and adjusted this amount in revised tariff for FY-23 and did not considered it in the opening revenue gap FY-22. CSERC after the final true-up approved revenue surplus of Rs. 138.60 lakh for FY-22 and directed to adjust along with associated holding costs in the FY-24.

CSERC allowed M/s Jindal Steel and Power Ltd. to procure 200 MW of power from Jindal Power Ltd. at the rate of Rs. 5.40/ kWh from 01st August, 2023 to 30th September, 2023, which is lower than the approved tariff. The decision will be subject to an examination of the licensee's surplus power during tariff determination, with any cost below the specified rate to be addressed based on Hon'ble APTEL related orders.



DERC approved surplus/ deficit if any, to be allowed with carrying cost, on verification of Power Purchase and Transmission Bills, in true-up of relevant financial year and no other PPA shall be levied by NDMC till 31st March, 2024.



HERC recalculated the revenue gap for the FY-22 to arrive at a figure of Rs. 833.08 Cr. instead of Rs. 1,245.64 Cr. of Dakshin Haryana Bijli Vitran Nigam Ltd. (DHBVNL) and Uttar Haryana Bijli Vitran Nigam Ltd. (UHBVNL) and approved the inter-state revenue gap of Rs. 683.09 Cr. HERC further clarified that LT supply consumers (having sanctioned load up to 20 kW) to be billed only on

kVAh tariff with the exception of billing in kWh only, where the installed meter at consumer premises is not kVAh compliant.



HPERC approved capital expenditure for HPSEBL to upgrade its existing sub-station and cost of the scheme after due diligence at the time of filing of the true-up petition.



JSERC observed that the proposed capital expenditure will not have any impact on the existing tariff of the Tata Steel Ltd. (TSL) and the proposal of capital expenditure is important in nature to meet the power supply to the upcoming loads in the area, however, it requires public consultation process. Hence, JSERC allowed the prayer of TSL subject to the condition of re-submission of the proposal for capital expenditure in the business plan along with the next tariff petition.

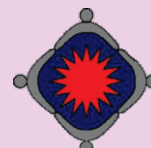
JSERC approved the capital expenditure for replacement of exciter and convertor as prayed by the Inland Power Ltd. (IPL) with an estimated cost of approximately Rs. 2.80 Cr. subject to prudence check in the true-up petition.



MPERC observed that the additional surcharge u/s 42(4) of the Act is not leviable on the quantum of power consumed by Captive Power Plant and directed MP Paschim Kshetra Vidyut Vitaran Co. Ltd. to refund the amount deposited by Rama Phosphates Ltd. from its onsite 2250 kVA Steam Turbine along with consequential surcharge and withdraw the demand of Rs. 1,84,32,834/- on account of additional surcharge on captive use of electricity.



MERC directed STU to release the withheld amount if any, of the monthly transmission charges payable to VIPL-T against the said noncompliance and VIPL-T shall maintain separate audited accounts for its business as per the requirement of the MYT Regulations and henceforth submit it along with reconciliation statement duly certified by the statutory auditors while claiming true-up of completed years.



OERC approved the construction of multistoried quarter complex consisting of quarters (under Phase-1) with energy efficient features & modern amenities for OPTCL employees at Bhojnagar, Bhubaneswar as per the details provided

Regulatory Updates

in the DPR and directed OPTCL to include the reduced HRA while proposing the ARR.



PSERC approved the FCA Surcharge for 4th quarter of FY-23 to be considered in the Tariff Order for FY-25 subject to the reconciliation/ validation during the true up of FY-23.

PSERC directed PSPCL to pay GVK Power Ltd. for the impugned period as per the SEA prepared by SLDC in compliance of the Commission's order dated 22nd July, 2022 in petition no. 15/2020 along with applicable LPS.

PSERC allowed provisional additional capital expenditure to GVK Power Ltd.'s project for the 3rd MYT Control Period as under:

Sr. No.	Particulars	FY-24	FY-25	FY-26
1	Installation of FGD	0	0	Rs. 243 (Cr.)

PSERC approved the consequent tariff adjustment as sought by the Talwandi Sabo Power Ltd. and determined the threshold amount for entitlement of the compensation payable on account of the 'Change in Law' in terms of the PPA vide Letter of Credit (LoC) maintained by it on fortnightly basis to be aggregated for the full contract year.



TNERC approved the energy charge tariff paid by the TANGEDCO based on the benchmark ECR fixed by the committee constituted by the MoP as pass through basis and also allowed the power dispatched from M/s Coastal Energen Pvt. Ltd., M/s IL&FS Tamil Nadu Power Company Ltd. and M/s OPG Power Generators Pvt. Ltd. during the period from 01st May, 2022 to 30th November, 2022 by relaxing the provisions of the PPA as one time measure.



UERC approved capital cost of Rs. 14.96 Cr. submitted by PTCUL for increasing the capacity of 132 kV substation Bazpur from 1*80 + 1*40 MVA to 2*80 MVA and of 132 kV substation Ramnagar from (1*20 + 1*40) MVA to 2*40 MVA provided that after completion, PTCUL shall submit the complete cost and finance of the project. The project cost will be allowed in the ARR of PTCUL after the assets are capitalised subject to prudence check of cost incurred.

UERC allowed UPCL to recover the Fuel Charge Adjustment (FCA) amount from various consumer categories during the second quarter of FY-24 at the rate submitted by UPCL as given below.

Sr. No.	Category	ABR
1	Domestic (RTS-1) / Concessional Snowbound Area (RTS-1A)	
1.1	Lifeline Consumers(RTS-1) / Concessional Snowbound Area (RTS-1A)	Rs. 0.14/ kWh
1.2	Consumers (Metered) (RTS-1)	Rs. 0.36/ kWh Rs. 0.34/ kVAh
2	Non-Domestic (RTS-2)	Rs. 0.52/ kWh Rs. 0.50/ kVAh
3	Govt. Public Utilities (RTS-3)	Rs. 0.49/ kWh
4	PTW/ Pumping Sets (RTS-4)	Rs. 0.16/ kWh
5	Agriculture Allied Activities (RTS-4A)	Rs. 0.22/ kWh
6	LT Industries (RTS-5)	Rs. 0.49/ kWh Rs. 0.46/ kVAh
7	HT Industries (RTS-5)	Rs. 0.47/ kWh
8	Mixed Load (RTS-6)	Rs. 0.45/ kWh
9	Railway Traction (RTS-7)	Rs. 0.44/ kWh
10	Electric Vehicle Charging Stations (RTS-8)	Rs. 0.42/ kWh



WBERC allowed the entire amount of Rs. 65,280.09 lakhs to be recovered by CESC Ltd. with the ARR for the FY-23 or that for any other ensuing year through a separate order.

Power Procurement



BERC approved the procurement of 3.573 MW power allocated to Bihar by the MoP, Govt. of India, from unallocated quota of kurichhu HEP situated in Bhutan on the tariff as agreed between the Govt. of India and Govt. of Bhutan plus a trading margin of Rs 0.04/ kWh to PTC.



CSERC approved the proposal of M/s Indoves Industrial Pvt. Ltd. for the supply of bulk power (20 MVA) at EHV by establishing of pooled substation with loop-in and loop-out arrangements and permitted 132 kV pooling substation for M/s MSP Steel and also recommended in assessing technical feasibility for any future load enhancement or connectivity issues by performing construction of pooling substation.

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KSERC allowed KSEB Ltd. to draw power from Design, Build, Finance, Own and Operate (DBFOO) contracts at PPA rate till the finalisation of the medium-term power procurement, due to the severe financial crisis faced by KSEBL because of critical power shortage in the state caused by failure of monsoon. KSERC (Terms and Conditions of Determination of Tariff) Regulations, 2021, hereby orders the following;

- Extending of the interim arrangement for procurement of power from the unapproved DBFOO contracts for the period upto 31st December, 2023 or till KSEB Ltd. make alternate arrangements of procuring 500 MW RTC power on medium term basis, whichever earlier.
- KSEB Ltd. shall take appropriate decision on the outcome of the bid and submit the petition before the KSERC accordingly, through an affidavit with all supporting documents.
- The interim arrangement as above, shall be subject to the final decision given by the Hon'ble APTEL against the order of the Commission.
- All other terms and conditions as per the order of the Commission dated in petition is applicable for the extended period.

KSERC ordered KSEB Ltd. to adopt the tariff discovered via e-Reverse Auction (e-RA) on the DEEP portal for procuring power from August, 2023 to May, 2024 on short-term basis and ensured that the tariff which is single part, include all charges like capacity, energy, trading margin (if applicable), transmission and taxes, at the delivery point.



GERC allowed GUVNL to purchase Round-the-Clock (RTC) power for the period of September, 2023 to December, 2023. Further, GUVNL is directed to make the bids public by indicating the tariff quoted by all the bidders for the purpose of transparency.

Renewable Energy, RPO and REC

APERC determined the levelised tariff of Rs. 2.64/ kWh for wind power plants from 11th to 20th year of operation with similar terms as applicable and allowed the APSPDCL, the first right for power purchase beyond 20th year.

AERC allowed APDCL to procure 70 MW AC power from a Solar PV Project by Green Energy Ltd. (SGEL) at a tariff rate of Rs. 3.92/ kWh.

AERC allowed APDCL to procure 200 MW AC power from a SJVN Green Energy Ltd. at a tariff rate of Rs. 3.90/ kWh.

AERC allowed APDCL to procure 50 MW AC power from a SJVN Green Energy Ltd. Sitalmari Village, Assam, at a tariff rate of Rs. 3.92/ kWh and directed APDCL to prepare a Resource Adequacy (RA) Plan for the next 10 years, incorporating RE sources with storage.

CSERC exempted captive generating plants from RPO obligation from FY-17 as stated in CSERC (Renewable Purchase Obligation & REC Framework Implementation) Regulation, 2016, amended in 2020.

GERC allowed Jai Hind Projects Ltd. to replace defective damaged Solar PV modules, invertors etc. at its 5 MW plant but the total replacement of solar modules capacity shall not exceed 10236*85 Wp work to 870.060 kW.

GERC allowed GUVNL to execute the PPA for procurement of power from Solar Projects and also directed GUVNL to submit the copies of duly executed PPAs to the commission along with an affidavit stating that the articles/ provisions of the PPAs is executed.

Sr. No.	Bidder's Name	Base Capacity (MW) (A)	Tariff (Rs./ kWh)	Greenshoe Capacity (MW) (B)	Tariff (Rs./ kWh)	Total Capacity (MW) (A+B)	Weighted average tariff for total capacity
1.	ReNew Solar Power Pvt. Limited	200	2.71	200	2.71	400	2.71
2.	Solarcraft Power India 21 Pvt. Limited	60	2.74	60	2.71	120	2.72
3.	Mahindra Susten Pvt. Limited	100	2.74	100	2.71	280	2.73
4.	Avaada Energy Pvt. Limited	140	2.75	140	2.71	280	2.72

HPERC approved the PPA under generic levellised tariff to be executed by the HPSEBL with M/s V.B. Hydro Projects Ltd. with respect to Kuwarsi HEP of capacity 9.90 MW and directed to execute the PPA accordingly within a period of 30 days from the date of order.

HPERC approved the capital expenditure of Rs. 27,68,577/- to HPSEBL to be paid to M/s DSL Hydro watt Pvt. Ltd. for 33kV transmission line of Bhutti sub-station.

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HERC approved the ceiling tariff of Rs. 2.33/ kWh, as sought by Dakshin Haryana Bijli Vitran Nigam Ltd. (DHBVNL) for procurement of solar power from the RESCOs under feeder level solarisation, in compliance with Component-C of PM KUSUM Scheme.

KERC instructed GESCOM to deduct the energy units consumed for start-up purposes from the delivered in regard of energy for their 5 MW Bio Mass Cogeneration Power Plant in response to a petition by M/s Manchukonda Agrotech Private Limited against Gulbarga Electricity Supply Company Limited (GESCOM). This directive stems from the absence of separate metering during plant synchronisation, aligning with the relevant Article of the PPA.

KERC directed MESCOM to pay Rs. 74,50,608/- as an interest on a delayed payment of the differential tariff claimed in the petition by M/s Soham Phalguni Renewable Energy Pvt Ltd. against Karnataka Power Transmission Corporation Limited (KPTCL) and MESCOM. MESCOM must make this payment within two months from the date of the order and in case of default, MESCOM will incur an interest rate of 9% per annum from the date of default until payment is made.

KERC approved the petition filed by M/s Raygen Power Private Limited (RPPL) and M/s Tanivi Solar Pvt Ltd. (TSPL) against Chamundeshwari Electricity Supply Corporation Ltd. (CESCL), allowing for the recovery of payment for the delayed Scheduled Commercial Operation Date (SCOD) of a solar power plant. CESCL is required to make this payment along with 10% interest within 90 days. Failure to comply will result in RPPL and TSPL being entitled to a LPS from the date of default until the payment is realized.

KERC granted Sri. H.V. Thimmaiah and B.G. Sun Solar Hiriyur Private Ltd. several approvals, including a new Scheduled CoD for their Solar Power Project from BESCOM, a tariff rate of Rs. 8.40/ kWh as per the PPA, a directive for BESCOM not to impose or refund liquidated damages if already levied, and instructions for the execution of the Solar Power Purchase Agreement (SPPA) in favor of B.G. Sun Solar Hiriyur Private Ltd.

KSERC exempted Greenland Paper Mills Ltd. (GPML) from the mandatory installation of Special Energy Meters (SEM) subject to certain conditions that GPML must install SEM in accordance with the provisions of the Regulations on Intra-state Deviation Settlement and related matters or the Regulations on 'Forecasting, Scheduling, and Deviation Settlement of Wind and Solar Generating Stations' once the Commission notifies these regulations.

MERC allowed MSEDCL for procurement of 7000 MW

on long term basis for 25 years from solar generator under MSKVY 2.0 and approved the Request for Selection (RfS) document & draft PPA with proposed deviations filed by MSEDCL. However, MSEDCL has to file a separate petition after completion of the bidding process for adoption of tariff as mandated u/s 63 of the Act.

MERC allowed Pimpri Chinchwad Municipal Corporation and Antony Lara Renewable Energy Pvt. Ltd. To comply with provisions for Green Energy Open Access (OA) Rules notified on 6th June, 2022 by MoP as amended from time to time.

OERC approved the proposed PPA to be executed between GRIDCO & NLCIL for procurement of state entitlement share of 800 MW of Power (i.e., 400 MW under Phase-I (3*800 MW) & 400 MW under Phase-II (1*800 MW)] from 3200 MW Thermal Power Projects of NLCIL at Talabira, in Jharsuguda district of Odisha to meet the increasing demand of power in spite of large-scale integration of RE power.

PSERC approved the tariff of Rs. 2.53/ kWh for 1000 MW Solar power projects to be located anywhere in India and Rs. 2.75/ kWh for 200 MW Solar power projects to be located anywhere in Punjab and also approved PSPCL's proposal for power procurement arrangement in respect thereof.

PSERC approved the PPA for the procurement of surplus power up to 8.45 MW and 20.06 MW from the Bagasse/Bio-mass based Co-generation Power Plants of Batala Co-operative Sugar Mill Limited and Gurdaspur Co-operative Sugar Mill Limited respectively, at the fixed tariff of Rs. 3.50/ kWh without escalation for a tenure of 25 years.

PSERC approved the proposal of a PPA for procurement of 400 MW Solar Power from NHPC Ltd for a period of 25 years at the ceiling fixed tariff of Rs. 2.45/ kWh (at the Interconnection Point) under Tranche-III of phase-II of CPSU scheme notified by the MNRE.

PSERC approved the proposal by PSPCL for the extension of its power procurement arrangement with the 200 kW Solar PV Project of PGL at Khatkar Kalan in Punjab in terms of Amendment No. 2 dated 18th May, 2023 to the PPA executed by the parties through mutual agreement, for a period of 10 years at the fixed tariff of Rs. 2.65/ kWh.

RERC approved the power purchase from the NTC Logistic India (P) Ltd., Barkat Hiring Company Pvt. Ltd., Kataria Cargo Mover, Kataria Transport and Company u/s 86(1)(b) of the Act at Rs. 2.24/ kWh for solar and Rs. 2.44/ kWh for wind. RUVNL is also

Regulatory Updates

directed to make full payment of arrears of principal amount up to 30th June, 2023 and also if RUVNL doesn't make future payments within the stipulated time, then LPS as per the prevailing regulations from time to time will be applicable.

TNERC ordered TANGEDCO to publish a fresh tender for purchase solar power of 420 MW capacity from the developers/ farmers establishing the solar power plants under Component A of PM-KUSUM scheme with upper ceiling limit of Rs. 3.30/ kWh and approved the draft PPA for the period of 25 years.

TSERC directed SPDCL to compensate the Hyderabad Institute of Oncology Pvt. Ltd. for the energy supplied from its 1 MW solar power plant during the period of February, 2018 to November, 2021 at the rate of average power purchase cost and allowed SPDCL to utilise the energy consumed to set off the RPO.

TSERC approved J.K Fenner (India) Ltd. to treat the energy injected into the grid by 2.5 MW of captive solar plant from the period of synchronisation as unutilised banked energy and ordered Telangana State Southern Power Distribution Ltd. (TSSPDCL) to pay for the energy consumed at the rate of average pooled power purchase cost.

TSERC approved the claim of Shri Prashanth Narayan G (PNG) to treat 7 MW of energy injected as banked energy and the amount of payment for unutilized banked energy at the rate of average pooled power purchase cost.

UPERC ordered M/s Reliance Industries Ltd. to purchase adequate REC/ green power by the end of FY-24 to ensure compliance with the RPO trajectory for the entire period from FY-19 to FY-24.

UPERC approved the capital expenditure of UPPTCL at estimated cost of Rs. 5,375.85 Cr. for implementation of 21 Nos. of new EHV Substation and associated transmission system to implement the scheme "Intra State Transmission System" green energy corridor phase-II.

Others

APERC allowed Sri Ch. Venugopal Rao to claim compensation of a tower base and Right of Way (RoW) corridor area, along with 9% per annum interest from 3rd September, 2021 until payment and additional sum of Rs. 20,000/- for soil heap removal expenses.

AERC approved prepaid smart metering without cost burden by disallowing a choice between payment modes & directed APDCL to provide energy bills upon request as per rules and the compensation claims.

BERC approved CAPEX Plan of BSTCL at the time of truing up condition under the project named Implementation, Establishment and Maintenance of C-SOC of Rs. 10.46 Cr. (with GST) and Implementation of Automated system.

CSERC directed Bhilai Steel Plant Town Electrical Engineering Department (BSP-TEED), upgrade its distribution system promptly, establish a functioning CGRF and provide necessary data for revenue calculations in line with the revised tariff structure.

CSERC directed CSPDCL to reimburse Rs. 1,00,15,615/- to Maruti Clean Coal & Power Ltd. for electricity duty paid to the State Government, with payment due within two months of this order with 1% rate of interest in case of any delay.

CSERC granted OA to M/s Abha Power & Steel Private Ltd. for multi-consumer supply without the need for a dedicated feeder after the report was submitted by CSPDCL to confirm no technical constraints in granting OA.

CSERC approved that Singhal Forestry Pvt. Ltd. is eligible to claim any delay in payment surcharge for power purchase bills raised from March, 2017 to November, 2021 for which CSPDCL shall review and pay these surcharges as per regulations.

CSERC granted OA to Hira Ferro Alloys Ltd. at the 33 kV Rotocast Feeder without the need for a dedicated feeder based on the agreement with CSPDCL of grid operation.

CSERC determined the effective date of OA within the original application's time limits and also determined the energy injected into the grid between synchronisation and OA approval as deemed banked energy, which will be purchased as per regulations.

CSERC acknowledged and rectified the error made while applying the escalation factor for O&M expenses in the original order of M/s Shikhar Commodities'.

CSERC directed M/s. Shree Shiv Industries to comply with technical safety standards, install an ABT meter with AMR and RTU for data communication according to metering regulations, and refrain from filing claims during feeder issues and CSPDCL is directed to grant OA to M/s. Shree Shiv Industries once these conditions are met.

CSERC approved the proposal of CSPDCL to provide an additional 500 kVA HT power supply to M/s. International Institute of Information Technology (IIIT) Naya Raipur due to technical feasibility, as per the provisions outlined.

Regulatory Updates

DERC allowed BYPL and BRPL for the replacement of Air Conditioners subject to consideration of cost benefit analysis, for the buyback arrangement, rebate/ discount rate, expenses in ARR, eligibility of consumers, implementing agency, maintenance records, proper & safe disposal of old replaced ACs and validity of scheme.

GERC allowed the Short-term Power Purchase of RTC power (from 00:00 to 24:00) for the period from 01st July, 2023 to 31st August, 2023 as recommended in the certificates issued by the Standing Committee of Bid Evaluation to Torrent Power Ltd. to cater to the demand of Ahmedabad, Gandhinagar and Surat license.

GERC partly allowed Madhya Gujarat Vij Company Limited, Gujarat Energy Transmission Corporation Ltd. to pay the 50% of the amount Rs. 43,93,680/- Rs. 30,82,500/- and Rs. 14,54,160/- to the respective petitions along with interest at the rate 8% per annum to the respective Baroda Mould & Dies and Others in equal proportion till its payment.

HERC reviewed the petition filed by HVPNL for seeking necessary directions for clarification/ modification/ amendment and removal of difficulties for implementation of certain Regulations of the HERC (Deviation Settlement Mechanism and related matters) Regulations, 2019. HERC clarified the issues raised as under.

- Specification of Additional Charge of Deviation under Regulation 10(I),
- Clarification with respect to the levy of Additional Deviation Charges under Regulation 10(C) and Table-II(A) of Annexure-II,
- Specification of Volume Limit of [X] MW under Table-II (B) of Annexure II for Sellers, Clarification with respect to Clause 10(B)(iii),
- Clarification with respect to the imposition of Additional Charges for change of sign under Regulation 9(A)(1),
- Clarification w.r.t the applicability of Regulation 11(1) w.r.t under/ over Injection of electricity by Seller when the grid frequency is below 49.70 Hz/ 50.05 Hz, Clarification regarding telescopic or non-telescopic nature of slabs given under Table-I of Annexure-II.

JSERC ordered Jharkhand Urja Sancharan Nigam Ltd. (JUSNL) to operate Indian Railways and install ABT Meters and associated equipments including upgradation of software & hardware as required for DSM calculation at their drawal points and O&M cost is to be borne by Indian Railways.

JSERC observed that the proposed investment in phased manner for creation of 11 kV infrastructure will have an impact on the existing tariff of DVC as such it requires public consultation process and the Damodar Valley Corporation (DVC) is directed to re-submit the proposal for approval of the investment towards creation of necessary infrastructure to provide supply of electricity to consumers at 11 kV level in the state of Jharkhand as Business Plan with the next tariff petition.

KERC ordered BESCO, Chamundeshwari Electricity Supply Company Ltd. (CESCL) and others to establish a fixed rate of Rs. 5.08/ kWh for all parties, with instructions for ESCOMs to refund any collected differential amounts with interest at 9% per annum. However, the rate of Rs. 5.08/ kWh for energy supplied by M/s JSW Energy Ltd. is subject to the outcome of a pending appeal in the Hon'ble Supreme Court of India.

KSERC ordered Thrissur Corporation Electricity Department (TCED) to directly provide electricity supply to all the occupants within the premises of the developer M/s Vadakke Madham Brahmaswam, as per the provisions of the Act and Kerala Electricity Supply Code, 2014 and other Rules and Regulations in force.

KSERC approved the True-up for Rubber Park India Private Limited (RPIL) for the FY-22 on the basis of clarifications and details provided by the licensee as total income to be Rs. 2,212.89 lakh, total expenditure as Rs. 2049.33 lakh, revenue surplus for the year as Rs. 163.56 lakh, accumulated revenue surplus up to FY-21 as Rs. 540.99 lakh and accumulated revenue surplus till FY-22 will be Rs. 704.55 lakh (Rs. 540.99 lakh + Rs. 163.56 lakh).

KSERC allowed Phillips Carbon Black Limited (PCBL Ltd.) to schedule the surplus power after self-consumption from its co-generation plant to third parties by availing open access and the deviations may be dealt as per the agreement dated 25th September, 2017, the supplementary agreement signed between M/s PCBL Ltd. and KSEB Ltd. until regulations in this regard are notified.

KSERC approved the true up of Kinesco Power and Utilities Private Ltd. (KPUPL) for FY-22 on the provided details & clarifications and approved the Income as Rs. 5,552.60 lakh, total Expenditure as Rs. 4,819.41 lakh and revenue surplus as Rs. 733.19 lakh.

KSERC approved the true up of M/s Technopark for the FY-21 based on the provided details and clarifications by the licensee and approved the total revenue as Rs. 4,432.28 lakh, total expenditure for the year as Rs. 4,151.86 lakh, revenue surplus as Rs. 280.42 lakh.

Regulatory Updates

KERC observed that there is no outstanding charge owned by HESCOM to M/s Manali Sugars Limited (MSL) and directed MSL to pay LPS towards HESCOM.

MERC partly allowed claimed amount (Principal - Rs. 8,42,22,553/- and DPC - Rs. 4,23,91,719/-) by M/s Shah Promoters & Developers (SPD) on MSEDCL with due date as stipulated in respective WEPA. MPERC also directed the parties to compute balance DPC amount and interest on delayed payment of DPC as per directives respectively and in case MSEDCL fails to pay the amount within due date, SPD may take recourse to mechanism stipulated in the recently notified MERC (Late Payment Surcharge and related matters) Rules, 2022 for recovering its due amount.

MPERC allowed MPPGCL to avail the Special Allowance of Rs. 39.90 Cr. without any interest in six equal monthly instalments for 2*210 MW Units (Unit No. 1 & 2) of PH-1, SGTPS, Birsinghpur from FY-24 under condition that Special Allowance shall be included in the AFC and expenditure incurred or utilised from 'Special Allowance' shall be maintained separately and details of same shall be made available to the Commission.

OERC approved the business plan for all the four discoms (TPCODL, TPNODL, TPWODL and TPSODL) for the period 2024-25 to 2027-28. The proposals which are not specifically approved shall be separately considered by the Commission. The investment plan & other proposal will be examined in detail on yearly basis for business plan period and approved in the separate order of respective year.

OERC directed to amend the PPA in terms of connectivity arrangement along with energy accounting and billing procedure after execution of aforesaid tripartite agreement and submit the amended PPA before the Commission for approval.

OERC approved the purchase of power from un-allocated quota of Central Generating Stations which were uniformly re-allocated to eastern region beneficiaries by Eastern Region Power Committee (ERPC), Govt. of India (GoI) and buying and selling of power re-allocated through PUSHp scheme of CEA.

PSERC approved the Long-term Power purchase arrangement of PSPCL for 197 MW of nuclear Power from Units 1 & 2 of Narora Atomic Power Station (51 MW), Units 3 & 4 Rajasthan Atomic Power Station (100 MW) And Units 5 and 6 Rajasthan Atomic Power Station (46 MW) of NPCIL.

PSERC directed PSPCL to refund the recovered amount from Chandigarh Distillers and Bottlers Ltd. bills, if any, along with applicable LPS.

TNERC permitted M/s SEPC Power Pvt. Ltd. to procure imported coal, as an interim arrangement until SEPC procures domestic coal linkage and commences supply of power using domestic coal supplied through the linkage to SEPC Power Pvt. Ltd. and directed to take all the necessary steps in an expeditious manner so that the cost of the procured imported coal shall not exceed the Argus index price during that period for the supply of power to the TANGEDCO.

UERC approved capital investment by UJVN Ltd. for Supply Installation Testing and Commissioning (SITC) of 220 kV XLPE Armoured Power Cable with all accessories including dismantling of existing oil filled cable at Chibro Powerhouse.

UERC approved investment by UPCL on the project covering the construction of new 33/11 kV Substation along with its associated 33 kV and 11 kV line at Sarkada Sitarganj (U.S. Nagar) under condition that the prices discovered by competitive bidding and project cost after prudence check shall be allowed in ARR.



Tariff Orders

State/ Union Territory (SERC)	Licensee/ Utility	True-up	Annual Performance Review (APR)	Aggregate Revenue Requirement (ARR)	Tariff
JERC(Goa & UT's)	Electricity Department, Government of Goa (EDG)	2020-21 and 2021-22	-	-	-
JERC(Goa & UT's)	DNH and DD Power Distribution Corporation Limited (DNHDDPDCL)	-	2023-24	2022-23	2023-24
RERC	RVUN	-	-	2020-21 to 2023-24	2020-21 to 2023-24
RERC	RVPN	2021-22	-	2023-24	2023-24
TERC	TSECL	2020-21 and 2021-22	2022-23	2023-24	2023-24

Regulations

Title	Date of Approval/Notification
AERC (Electricity Supply Code) (6 th Amendment) Regulations, 2023	03 rd July, 2023
APERC (Compliance By Purchase Of Renewable Energy / Renewable Energy Certificates) (1 st Amendment) Regulations, 2022	14 th July, 2023
APERC (Fees) (2 nd Amendment) Regulations, 2022	14 th July, 2023
CSERC (Recruitment and conditions of service of officers and employees) (2 nd Amendment) Regulations, 2023	14 th September, 2023
HERC (Duty to Supply Electricity on Request and Power to Recover Expenditure and Power to Require Security) (2 nd Amendment) Regulations, 2023	27 th September, 2023
HERC (Duty to Supply Electricity on Request and Power to Recover Expenditure and Power to Require Security) (3 rd Amendment) Regulations, 2023	27 th September, 2023
HPERC (Compensation to Victims of Electrical Accidents) Regulations, 2023	22 nd July, 2023
JERC (Goa & UTs) (Generation, Transmission and Distribution Multi Year Tariff) (1 st Amendment) Regulations, 2023	23 rd August, 2023
JERC (Goa & UTs) (Appointment of Consultants) (2 nd Amendment) Regulations, 2023.	04 th August, 2023
MPERC (Distribution Performance Standards) (Revision-II) (2 nd Amendment) Regulations, 2023	17 th August, 2023
MPERC (Methodology for determination of OA charges and Bankingcharges for Green Energy OA consumers) (1 st Amendment) Regulations, 2023	26 th July, 2023
MPERC (Terms and Conditions for Intra-State OA in Madhya Pradesh) (Revision-I) (3 rd Amendment) Regulations, 2023	26 th July, 2023
MPERC (Co-generation and Generation of Electricity from Renewable sources of Energy) (Revision-II) (3 rd Amendment) Regulations, 2023	26 th July, 2023
NERC (Renewable Purchase Obligation and its Compliance) (4 th Amendment) Regulations, 2023.	03 rd August, 2023
PSERC (Appointment & Service conditions of Employees) (1 st Amendment) Regulations, 2023	11 th August, 2023
RERC (Terms and Conditions for Determination of Tariff) (3 rd Amendment) Regulations, 2023	29 th September, 2023
RERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) (1 st Amendment) Regulations, 2023	04 th September, 2023
RERC (Grid Interactive Distributed Renewable Energy Generating Systems) (1 st Amendment) Regulations, 2023	28 th August, 2023
TNERC (Distribution Code embodying stipulations of Electricity) (Rights of consumer rules) (Amendment) Regulation, 2023	8 th September, 2023
TNERC (Renewable Energy Purchase Obligation) Regulations, 2023	27 th September, 2023
TNERC (Supply Code embodying stipulations of Electricity) (Rights of consumer rules) (Amendment) Regulation, 2023	8 th September, 2023
TERC (Compensation to Victims of Electrical Accidents) Regulation, 2023	16 th September, 2023
UERC (Tariff and Other Terms for Supply of Electricity from Renewable Energy Sources and non-fossil fuel based Co-generating Stations) Regulations, 2023	16 th August, 2023
UERC (Terms and Conditions for Determination of Multi Year Tariff) (2 nd Amendment) Regulations, 2023	16 th August, 2023
WBERC (Modalities of Tariff Determination) Regulations, 2023	04 th August, 2023

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Regulatory Insights Team



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Other Initiatives



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