

# REGULATORY INSIGHTS



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### Editorial

The regulatory framework for the determination of tariffs for the generation, transmission, and distribution segments, while ensuring the recovery of prudentially incurred costs, should also ensure that regulated entities continuously try to strive for efficiency improvement. In general, tariff regulations have paid more significant attention to cost recovery with regulatory oversight over the prudential aspects of costs.

The impact of coal shortages on a significant rise in electricity prices on power exchanges highlights the need for greater preparedness through quarterly fuel utilization and fuel procurement plans, and transparent disclosure thereof would bring greater accountability. The regulatory uncertainty associated with the approach for the approval of special allowances versus compensation allowances can be addressed by ensuring that generators nearing completion of their life are able to make appropriate decisions regarding required renovation and modernization expenses, thus avoiding double burdening of consumers. Any recovery of costs towards R&M should be linked to the performance of the plants post-implementation of such plans, thus providing necessary protection to consumers.

The normative operational parameters, including auxiliary consumption, Station Heat Rate (SHR), and secondary fuel consumption, should reflect an improvement in efficiency. The tariff approach should provide for the recovery of a part of the operational cost for performance beyond these benchmarks.

The Electricity Act, 2003, delicensed generation, including captive generation, subsequent amendments to the Act, and the follow-ups through regulatory and policy changes have given greater room for captive generation plants. To avail benefits that accrue to captive generators, especially in terms of open access, such plants first need to qualify the definition criteria. The Electricity Rules, 2005, laid down the criteria defining captive generators. Grey definitional areas have often invited legal complications. In the case of multiple locations of captive plants or their users, definitional clarity begs attention. The draft procedure aiming to cover such gaps seems to leave little room for ambiguity, as highlighted in the comments herein. Differential ownership across multiple captive users for the different generation units of an SPV-owned generation units needs to be evaluated separately to ensure that there is no room for definitional ambiguity in this respect. Changes in ownership within a financial year need to be monitored closely to ensure that the definitional criteria are met seamlessly. The definition of 'end use,' and uniformity of definitions within the procedure would add potential room for legal disputes. A national portal for the timely submission of information in a structured manner by existing and prospective captive generators can not only enhance procedural efficiency but also ensure that publicly accessible status information can be verified by stakeholders to ensure effective compliance monitoring.

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### GERC (Multi-Year Tariff) Regulations, 2023 [Draft]

GERC notified draft "Multi-Year Tariff Regulations, 2023", on 4<sup>th</sup> September, 2023 applicable for Tariff Determination during Control Period (CP) 2024-29. The key highlights of this draft are mentioned below:

**Objectives:** The document includes details about financial principles, capital costs, consumer contributions and debtequity ratios. The document also mentions the need for quantifiable benefits, technical justification, risk analysis and project monitoring mechanisms.

#### **Highlights:**

- The financial principles related to multi-year tariffs, includes capital costs, additional capitalisation and consumer contributions.
- The importance of quantifiable benefits and need for justification & evidence for RoE are emphasized.
- The need for technical justification, including compliance with planning criteria, assessment of equipment lifespan and technology obsolescence are reflected.
- It highlights the importance of risk analysis and the development of a project monitoring mechanism with execution timelines.
- Consideration for choices of alternative schemes and the risks associated with minor works are to be emphasized.
- It provides an overview of the general principles of multi-year tariffs and the determination of tariff rates.
- It also includes information about the filing procedure, tariff orders, adherence to tariff orders and the subsidy mechanism.

#### **CER Opinion**

**The Interest on Working Capital (IoWC):** As per the proposed Clause 38.1.1, "Provided further that in the event that availability by any thermal generating station is less than the Normative availability due to less coal stock maintained by the plant, the penalty shall be determined as per Regulation 57 of these Regulations".

As per the prevailing framework, there is no independent way to assess the availability of a thermal generating station due to coal stock availability. Generating stations, specifically the high cost ones, may not maintain the normative coal stock due to lower scheduling of such high Variable Costs (VC) plants as per the merit order, especially during the offpeak seasons. Monthly opening, closing stock, purchases, delivery and sales should be reported to the Commission. Furthermore, it is suggested that the Commission may provide for random stock verification from time to time.

Based on analysis of merit order based schedule of high cost generating stations, a seasonal coal stock requirement may be specified. This would ensure higher coal stock during peak season and lower during off-peak season, while optimizing IoWC.

In case of imported coal, if required/ mandated, higher calorific value of the imported coal should be considered to adjust overall coal stock maintained at the generating stations.

**Geo-tagging of assets:** As per the proposed Clause 46.5, "Generating company shall be required to ensure that the procurement of the assets have been undertaken in a competitive and transparent manner. Further the assets so capitalized as a part of the approved capital investment plan under these Regulations should necessarily be geotagged and properly recorded in Fixed Asset Register (FAR) for allowance of the capitalization of the same by the Commission".

Geo-tagging of assets is a good initiative as it enables tracking of the assets for the generating stations and the licensees, and also makes it easier to undertake stock taking. It is suggested that **geo-tagging should also be extended to the renewable assets** as well and should be implemented as a part of the respective regulations for renewable energy.

**Fuel utilization plan:** As per the proposed Clause 47.2, "The Fuel Utilization Plan should ensure that fuel quantum is allocated to different generating Stations/ Units in accordance with the merit order of different generation Stations/ Units in terms of variable cost:

Provided that the fuel allocation should be such that, subject to system and other constraints, the least cost generating Stations/ Units are operated at maximum availability and other generating Stations/ Units are operated at maximum availability thereafter in the ascending order of variable cost".

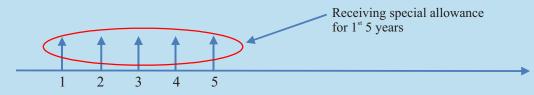
This will ensure the higher availability of the low VC generating stations w.r.t the fuel allocation. This will subsequently lead to lower fuel allocation to the generating stations with high VC (marginal plants). It is recommended to modify calculation of fuel component in the working capital requirement for those marginal plants, so that the beneficiary will not incur the extra burden while paying the tariff of marginal generating stations.

Apart from Fuel Utilizaiton Plan (FUP), a quarterly Fuel Procurement Plan (FPP) should also be submitted by the generating stations. This is required to ensure that timely order for domestic coal are placed and followed up to minimize the need for costly imported fuel. Quarterly FPP should be submitted to the Commission and deviations thereof be identified and justified. The regulation should provide for adjustment of fuel cost if actions of the generating stations, leading to higher overall fuel cost, cannot be justified.

The quarterly FUP and FPP should be timely uploaded on the generating station as well as the Commission's website and archived there. FPP should highlight any changes leading to higher fuel cost, especially the imported fuel.

Renovation and Modernization - Regulatory certainty for plants beyond useful life: The coal/ lignite based generating stations after completing its uselife of 25 years have the option to either avail expenditure for "Renovation & Modernization (R&M)" or special allowance as compensation for meeting requirement of expenses including R&M. We highlight certain, economic/financial aspect of alternate financial mechanisms for R&M:

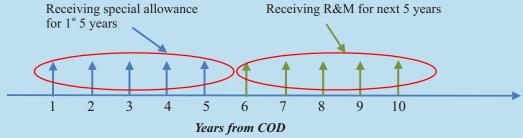
1. Opting for special allowance for 1<sup>st</sup> 5 years after the completion of its useful life and then shutting down the plant:



Years from COD

Assuming that the generating station have a capacity of 1 MW, it will receive a special allowance of Rs. 11 lakhs for a period of 5 years after the years of its useful life. The NPV for this scenario considering a discount rate of 10% will be around Rs. 42 lakhs. Since the special allowance is in lieu of the expenses for the requirement of R&M, shutting down of a plant after receiving the special allowance may not be financially justified.

2. Opting for special allowance for 1<sup>st</sup> 5 years after the completion of its useful life and then opting for R&M for the next CP:



Assuming that the generating stations have a capacity of 1 MW, it will receive a special allowance of Rs. 11 lakhs for a period of 5 years after the years of its useful life. Also, it is opting for Rs. 30 lakhs per year for 5 years as expense for R&M. The NPV for this scenario considering a discount rate of 10% will be around Rs. 1.123 Crs. The scenario is more expensive as compared to the previous scenario. Subsequently, it makes little sense to invest in R&M after receiving the special allowance.

This approach would place higher cost burden on the consumers. Alternatively, the generating station should have examined economics of R&M and gone for the same instead of claiming special allowance for the first 5 years.

**Alternate Approach 1**: Instead of scenario (i) as shown above, the generating plant can opt for the **compensation allowance for a period of minimum two CPs**. In short, plant opting for special allowance shall not opt for R&M and the special allowance will be continued for a minimum of 2 CPs. That will also give them financial certainty to invest in the R&M of the plant. The same has been provided in the Clause 50.6 of the draft which states, "... *Provided further* 

that the special allowance for the generating station, which, in its discretion, has already availed of a 'special allowance' in accordance with the norms specified in Regulation 50.6 of the Gujarat Electricity Regulatory Commission (Multi-Year Tariff) Regulations, 2016, shall continue to be allowed Special Allowance in accordance with Regulation 50.6 of these Regulations, every year during the CP".

However, the Clause can further include the provisions for the generating plants that have not availed the special allowance so far but are completing their useful life in the CP 2024-29. For e.g., a generating station completing its useful life on 31.03.2025 and opts for special allowance for the remaining CP, the special allowance will be given for next 10 years. The NPV of this approach considering same data as above will be around Rs. 1.10 Cr., which is Rs. 2 Lakhs/ MW less than that of the scenario (i) mentioned above. Along with that, the special allowance should be made compulsory for those generating plants, which have already taken the same during the previous CP.

Alternate Approach 2: Plant opting for R&M will receive the same just after the completion of its useful life. In this way, the expenditure will rightly be used for extending the plant's life which will be fruitful for the beneficiaries. However, the generating station should ensure minimum operational availability and performance parameters. In case of failure to achieve so, the allowable recovery of the R&M investment should be reduced on a pro-rata basis relating it to the gap between the promised (post R&M) and actual delivered performance. An index can be developed for measuring such a gap in a holistic manner.

Thus, R&M investment approval and its recovery be linked to minimum availability & performance and its recovery can be prorated as explained above.

In case of special allowance as well, minimum availability and performance of the plant should be ensured. Recovery of special allowance can be linked to the same.

- **Lower special allowance for gas based thermal power plants**: As per the proposed Clause 50.6, "Special Allowance shall be @ Rs. 11.00 lakh/MW/year for the entire CP."
  - Based on technical evaluation, the Commission may decide to set a lower special allowance for the gas based power plants, which are expected to have much lower associated cost due to the nature of the technology and the fact that wear and tear of such plants would have been lower due to lower scheduling over their life span.
- **CER Annual filing of special allowance**: As per the proposed Clause 50.7, "In the event of granting special allowance by the Commission, the expenditure incurred or utilized from special allowance shall be maintained separately by the generating station and details of same shall be made available to the Commission as and when directed to furnish details of such expenditure."
  - It should also be ensured **that expenditures funded by the special allowance are not recovered and accounted for by the generating station in any of the cost heads attributable to the tariff.** These may include depreciation as well as interest cost, if any.
  - In order to assess the benefits of special allowance on the availability and operational performance of the generating station, **special allowance should be trued up in the interim or at the end of the CP.**
- Actual values of performance parameters to achieve better performance: The parameters of the generating station like auxiliary consumption, Station Heat Rate (SHR), Secondary Fuel Consumption for each year in the 2024-29 CP are fixed at historical values. The normative operational parameters should reflect improvement in efficiency. Partial recovery of operational cost should be linked to actual operational performance being greater than the benchmarks.
- kWh) has been specified only for the lignite based thermal power plants and does not consider the limestone consumption for the use of Flue Gas Desulphurization (FGD). It is suggested that normative parameters may be specified for the purpose of Flue Gas Sulphurization for coal as well lignite based thermal power plants. **Recovery of operational costs of the FGD should be linked to the reduction in the emissions.** This should be measured at preand post-FGD stage.
  - Data from Continuous Emission Monitoring Stations (CEMS) at each of the unit (block wise) to be available in public domain and can be maintained & archived by the generating station/company at its web portal. Historical data for the emission should also be shared for comparison purpose.
- **Upper limit of transit and handling losses**: As per the proposed Clause 53.7.1, "...Provided further that in case of imported coal, the transit and handling losses shall be 0.20%, subject to terms of delivery."
  - It is to be made clear that the value of 0.2% of transit and handling losses should be the upper limit in each of the

scenario. Similarly 0.2% and 0.8% of transit and handling losses should be the upper limit for pit head and non-pit head generating stations respectively. These should not be exceed on the basis of 'terms of delivery'. This would ensure that fuel procurement contracts would also provide the same upfront.

- Plant availability during the R&M period: If a unit or station is shut down for a significant period in a year (say, 6 months) for R&M, it is suggested that the availability factor for rest of the year for which it is operational (and not for the complete year) should be considered while computing the recovery of AFC.
- Annual target of operational parameters of thermal generating stations for improving efficiency: As per the proposed Clause 53.2 Gross Station Heat Rate, and Clause 53.5 Auxiliary Energy Consumption, the proposed operational norms are constant for each year. It has been observed that actual auxiliary consumption of generating stations have been below the norms set for them, as shown in Table 1. The norms for auxiliary consumption for some of the plants are proposed to be higher than the actual performance. Regulatory approach needs to encourage performance improvement and hence set non-flexible norms. Furthermore, in order to encourage long-term investment and planning, a trajectory may be specified for the operational parameters (SHR and Aux. consumption) of the generating stations. It is suggested that the smaller capacity and inefficient thermal plants which have exceeded their useful life may be retired. Such plants would generally attract lower schedule due to higher ECR.

**Table 1:** Auxiliary Consumption of GSECL plants<sup>1</sup>

						Auxiliary Consumption					
	Unit	COD	Yrs. of Opn.	Installed Capacity (MW)	FY-14	FY-15	FY-16	FY-17	FY-18	Norms for 3 <sup>rd</sup> CP FY 2016 to 22	Proposed Norms for 4 <sup>th</sup> CP FY 24 to 29
	1	13-03-1977	47	120						10%	
	2	10-04-1977	47	120						10%	
Gandhinagar TPS	3	20-03-1990	34	210	10.12%	9.17%	9.64%	9.85%	9.27%	10%	9%
115	4	20-07-1991	32	210						10%	9%
	5	17-03-1998	26	210							9.50%
	1	19-03-1976	48	120						9%	
	2	23-06-1976	47	120					8.03%	9%	
VII - TEDG	3	21-01-1979	45	200	7.560/	6.660/	8.22%	7.500/		9%	9%
Ukai TPS	4	11-09-1979	44	200	7.56%	6.66%	8.22%	7.59%		9%	9%
	5	30-01-1985	39	210						9%	9%
	6	08-06-2013	10	500							
	1	23-03-1982	42	210						9%	9%
	2	15-01-1983	41	210						9%	9%
	3	15-03-1984	40	210						9%	9%
Wanakabori TPS	4	09-03-1986	38	210	9.19%	8.76%	8.90%	9.27%	8.61%	9%	9%
115	5	23-09-1986	37	210						9%	9%
	6	18-11-1987	36	210							9%
	7	31-12-1998	25	210							9.50%
	1	26-03-1988	36	120							
an a ma	2	26-03-1988	36	120	10.000	11.250	11.000	0.050/	0.6604		
Sikka TPS	3	14-09-2015	8	250	12.33%	11.37%	11.06%	9.95%	9.66%	9%	9%
	4	28-12-2015	8	250						9%	9%

<sup>&</sup>lt;sup>1</sup> Source: CEA report on Review of Performance of Thermal Power Station 2017-18 and GERC MYT Regulations, 2016 for 3<sup>rd</sup> CP



				Auxiliary Consumption							
	Unit	COD	Yrs. of Opn.	Installed Capacity (MW)	FY-14	FY-15	FY-16	FY-17	FY-18	Norms for 3 <sup>rd</sup> CP FY 2016 to 22	Proposed Norms for 4 <sup>th</sup> CP FY 24 to 29
	1	26-03-1988	36	120							
and made	2	26-03-1988	36	120	10.000/	11.250/	11.060/	0.050/	0.6604		
Sikka TPS	3	14-09-2015	8	250	12.33%	2.33% 11.37%	11.06%	1.06% 9.95%	9.66%	9%	9%
	4 28-12-2015 <b>8</b> 250				9%	9%					

- Availability of tariff worksheet in public domain: It is suggested that the tariff worksheets for the templates and calculation of actual tariff should be provided in the tariff orders. These should be available on the Commission website. This in general is the international best practice adopted by a number of Commissions across the world.
- **CER Operation and Maintenance (O&M) expenses for thermal generating stations:** As per the proposed Clause 54.1.2, "The Operation and Maintenance expenses for n<sup>th</sup> year of the CP shall be determined based on the formula shown below:

 $O\&Mn = (R\&Mn + EMPn + A\&Gn) \times (1 - Xn) + Terminal Liabilities and other one-time expenses$ 

**R&Mn**—Repair and Maintenance Costs of Generating Station / Generating unit for the n<sup>th</sup> year;

**EMPn**–Employee Cost of Generating Station / Generating unit for the n<sup>th</sup> year;

A&Gn – Administrative and General Costs of Generating Station / Generating unit for the  $n^{th}$  year;

Xn -Efficiency factor for  $n^{\text{th}}$  Year. Value of Xn to be considered as zero till such time the same is determined through a study by the Commission:

Provided that the Terminal Liabilities and other **one-time expenses** shall be allowed separately on actual basis subject to prudence check.

It is suggested that the term other 'one-time expenses' may be further clarified and a list of such 'one-time expenses' may be included in the regulations. It should exclude any penalties or expenses attributable to the generating stations or the licensees. Such one-time expenses may include those on account of force majure conditions, change in law or an outcome of a legal proceedings (not attributable to the shortcoming of the regulated entities).

Differentiated escalation index for different components of O&M expenses: As per the proposed Clause 54.1.3, the average inflation escalation 'Esc' is considered by considering the weightage of CPI ( $WE_{CPI}$ ) and weightage of WPI ( $WE_{WPI}$ ) for the calculation of complete O&M expenses and is same for R&M, A&G and employee expenses. It is suggested that the weights,  $WE_{CPI}$  and  $WE_{WPI}$  may be differentiated for each of components of O&M expenses and the ratio  $WE_{CPI}$ :  $WE_{WPI}$  should be lower for R&M and higher for employee expenses and A&G expenses.

Also, the basis of differentiation of  $WE_{CPI}$ :  $WE_{WPI}$  based on individual company as well as technology, as per note (a), (b), and (c) of the proposed Clause 54.1.3, does not seem to be justified based on economic concepts. Economic cost escalations (due to rising cost of material/labour etc.) are not driven by 'who' is incurring those costs, but 'what' constitutes those costs.

**Differentiated working capital for marginal plants:** As per the proposed Clause 53.1, "53.1.1 Normative Annual Plant Availability Factor for full recovery of Annual Capacity Charges for the following stations shall be:

Table: Normative Annual Plant Availability Factor for GSECL Generating Stations

Station	Target Availability (%)
Ukai TPS (Unit 3 - 5)	80
Kutch Lignite TPS (Unit 3)	72
Kutch Lignite TPS (Unit 4)	72

Provided that the Commission may revise the norms for Availability for the above mentioned Generating Stations in case of renovation & modernisation undertaken by the Generating Station.

Normative Annual Plant Availability Factor for full recovery of Annual Capacity Charges for all other thermal generating stations, except those covered under Regulation 53.1.1 shall be **85 percent**". (emphasis added)

The working capital for all the coal/ lignite based plants have been considered at the normative plant availability regardless the actual PLF/ schedule given to the plant. It can be observed that the average annual PLF for the thermal plants have reduced far below the normative PLF (85%). For marginal plants, i.e. those having higher ECR, get significantly lesser schedule and thus have much lower working capital requirement.

Hence, it is suggested that the computation of the working capital requirement at least for the marginal plants may done on the basis of actual average PLF of the previous year and may even be differentiated across peak and off-peak seasons (as explained earlier).

Also, the consideration of fuel oil stock of two months, which seems higher, may be reviewed to allow the actual cost of oil stock kept by the generating stations during the previous year. Since lead times for plants located within the state is expected to be much lower, higher liquid fuel stocks need to be reviewed downwards.

CER Calculation of WE<sub>CPI</sub> and WE<sub>WPI</sub> on three year rolling basis: As per the proposed Clause 54.1.3, "... Provided further that the escalation rate for FY 2023-24 and for the complete CP i.e. FY 2024-25, FY 2025-26, FY 2026-27, FY 2027-28, and FY 2028-29 shall be computed by considering (WE<sub>WPI</sub>) weightage to the 10-year average of the yearly inflation of the last ten years ending March 31, 2023 for Wholesale Price Index (WPI) and (WE<sub>CPI</sub>) weightage to the 10-year average of the yearly inflation of the last ten years ending March 31, 2023 for Consumer Price Index (CPI)...". (emphasis added)

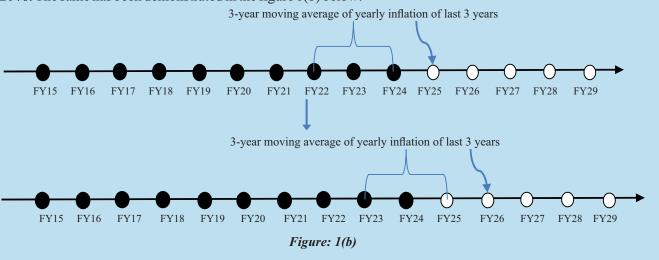
The proposed framework for the estimation of the escalation rate would use past 10 year data (10 years before beginning of the CP). This data would be used to arrive at an escalation rate that would be applicable for the first year as well as the last year of the CP. Thus the escalation for the last years of the CP would effectively use 15 year old data as well. It is suggested that a rolling window may be used for arriving at the escalation rate. This is further highlighted in the figure 1(a) below.



Two main reasons are described below:

- Figure: 1(a)
- i Estimation of values of future 5 years depends on the values of past 10 years with equal weightage assigned to value of each of the 10 years. In the extreme, the value in FY15 will have an impact in the projection in FY29.
- ii. Each year of the future CP has a static escalation rate, which generally do not occur in reality.

To address the same, it is recommended to use the 3-year moving average escalation rate with the latest year having a weightage of 50%, mid-year having the weightage of 30% and oldest year having the weightage of 20%. The same has been demonstrated in the figure 1(b) below:



#### CERC (Procedure, Terms and Conditions for grant of Transmission Licence and other related matters) Regulations, 2023 [Draft]

CERC notified draft "Procedure, Terms and Conditions for grant of Transmission Licence and other related matters Regulations, 2023" on 28<sup>th</sup> November, 2023 applicable for inter-state entities for transmission of power. The key highlights of this draft is mentioned below:

**Objective:** To establish eligibility criteria, procedures, terms and conditions for entities involved in inter-state power transmission and to formalize arrangement for regulated tariff mechanism, enabling licence acquisition by winning TBCB bidders, streamline the process for bulk consumers to construct connecting transmission lines.

**Procedure for grant of licence**: The process for obtaining a transmission licence the applicant can file the application to Commissions. It involves publishing a proposal on the Commission's website and in two digital newspapers for inviting suggestions/ objections in public domain and after considering these, the Commission may providing an opportunity for a public hearing before grant the licence or reject the application. The Commission must send a copy of the licence to relevant authorities and parties after making decision.

**Obligations of licensee:** In this draft there some obligations that the licensee must maintain insurance, adhere to utility practices, project construction must be time-bound and efficient. It is imperative to comply with direction of the NLDC and failure may intervention by the Commission, provide open access to the transmission system and seek Commission approval when required.

#### **CER Opinion**

Timeframe for receiving suggestion/ objection from public/ stakeholder: Draft Clause No. 4(7) states, "In the notice published in the digital newspapers and on the applicant's website under this Regulation, it shall be indicated that the suggestions and objections to the application, if any, may be filed by any person within 15 days of publication of the notice to The Secretary, Central Electricity Regulatory Commission at the address where the office of the Commission is situated and at email id: registry@cercind.gov.in. Any suggestion or objection furnished shall be forwarded to the applicant and the respondents by the registry of the Commission". (Emphasis added)

"In the notice published in the digital newspapers and on the applicant's website under this Regulation, it shall be indicated that the suggestions and objections to the application, if any, may be filed by any person **at least 30 days** of publication of the notice to The Secretary, Central Electricity Regulatory Commission at the address where the office of the Commission is situated and at email id: <code>registry@cercind.gov.in</code>. Any suggestion / objection furnished shall be forwarded to the applicant and the respondents by the registry of the Commission."

The transmission line petition may include large documentation, which needs scrutiny and analysis to understand and to prepare comments on the same. A 15 days duration for submission of the comments seems inadequate. It is suggested that a **time period of at least 25 days to be provided for the same.** 

**Duration for applicant response and option of bundling the responses:** Draft Clause No. 4(10) states, "The applicant may file its comments, duly supported by an affidavit, on the recommendations made by the Central Transmission Utility and the suggestions and objections, if any, received in response to the public notice published by it, within 3 days of receipt of such suggestions and objections, with an advance copy to the Central Transmission Utility or the person who has filed the suggestions and objections on the proposal made in the application, as the case may be".

An applicant may receive multiple responses of similar type or related ones, spread over the time window for submission of comments. An applicant may find synergies/linkages across such multiple comments to ensure that the applicant is able to holistically response to the comments especially the ones which may have relationship with each other. It is likely that the later comments may have a new perspective, which may lead the applicant to formulate a different response for the earlier comments for which response has been already submitted. Thus, an option of consolidating the responses of comments may be given to the applicant.

"Before granting a licence, the Commission shall publish a notice of its proposal on the Commission's website and in two daily digital newspapers, having wide circulation, as the Commission may consider appropriate, stating the name and address of the person to whom it proposes to grant the licence, details of the project for which it proposes to grant

licence, location or route of the elements of the project, and any other details that the Commission may consider appropriate, to invite further suggestions and objections on its proposal".

The draft document does not propose a time limit for public notice and issuance of grant of licence by the Commission. It is suggested that a **defined time line for publishing the public notice and grant of licence may be specifically provided in the document with a proviso for its extension by the Commission on recording reasons thereof.** 

**Modification in Annexures (Form II):** Draft annexure of form II, A (3) states, "Objections or suggestions, if any, be filed before the Secretary, Central Electricity Regulatory Commission, .......(Give address of the Office of the Commission), with a copy of the objection(s)/suggestion(s) to the applicant or its authorized agent, within 30 days of the publication of the notice in the newspaper".

The timeline proposed in the draft and that mentioned in the forms given in the annexures do not match. This typo may be corrected while finalizing the regulation.

**Searchable Webpage for Monitoring Applications**: A publically accessible web link at CERC should host a searchable database and archive for seeking the information related to an application for the license and timelines thereof. Furthermore, any reason for the departure from timeline should also be recorded. This would ensure effective monitoring of the applications.

# CEA (Procedure for verification of Captive Status of such Generating Plants, Where Captive Generating Plant and its Captive User(s) are located in more than one location) [Draft]

CEA notified the draft "Procedure for verification of captive status of such generating plants, where Captive Generating Plant (CGP) and its Captive User(s) are located in more than one location on 1<sup>st</sup> September, 2023". The key highlights of this draft is mentioned below:

**Objective:** To rigorously assess and determine the captive status of generating plants and their captive users scattered across various states. In this context, (CGPs) and their users must adhere to certain specific criteria to preserve their captive status as per the requirements of Rule 3 of the Electricity Rules, 2005.

#### Procedure to determine captive status:

- 1. CGP and captive users to submit applications and documents/ affidavits to CEA by 30<sup>th</sup> September each year.
- 2. The following criteria are to be verified:
  - a) Ownership criteria 26% equity shareholding with voting rights.
  - b) Consumption criteria 51% of gross annual generation consumed by captive users.
  - c) Open access quantum permitted and utilised for captive consumption.
- 3. Captive status gets communicated within 2 months of receipt of a complete application.
- 4. Non-compliance in any year leads to loss of captive benefits for that specific year.

#### Consumption Criteria for different entities for achieving the Captive Status:

- Single Entity: Captive consumption must be at least 51% of the net electricity generated annually.
- Cooperative Societies: Members collectively must consume not less than 51% of the net electricity generated annually.
- **Association of Persons (AoP):** Captive users must consume at least 51% of the electricity generated based on their ownership shares, with a variation not exceeding 10%.

#### **Non-compliance Consequences:**

- Failure to meet conditions may result in CGPs losing captive status, with users forfeiting concessions.
- Non-defaulting captive users meeting ownership criteria retain their status in cases of defaulting shareholders.

#### **CER Opinion**

**CER** Calculation of Equity for Special Purpose Vehicle (SPV): In accordance with Clauses 6(6.7, 6.8, 6.9) and 9(9.1)(9.1.4), the following suggestions may be implemented for the specified SPV.

An SPV may have multiple units, which may have multiple with some common users across units. Under such circumstances, calculation of equity at the corporate level SPV or for the respective units would present different results.

In case of different units are set up across time, a captive user may have right proportion of equity holding as per the investment undertaken at that time.

A subsequent investment in another unit at a higher/lower investment cost, would alter the proportional ownership of the captive users having capacity share in the first unit. The issue would get further complicated in case a captive user has share of capacity in both the units.

Such differentiation would require unit specific data, which may have certain challenges.

#### This can be illustrated in the following example:

Consider the allocation of entities denoted as A, B, C and D each having captive shares in 250 MW units 1 and 2 respectively. It is assumed that the unit 2 is set up after unit 1, say after 3 years. Both units are owned by the same SPV. It is further assumed, for simplification, that both units have 100% equity investment. The arguments would remain the same in case of differential debt components.

• For **unit 1** the overall equity share and proportional equity share of captive users is as per the Electricity Rules (see table below).

Table 2: Calculation of Equity share for Unit-1

Assumption of Capital Cost = Rs. 1000 Cr. & Equity = 26%							
Entities	Captive Capacity Shares (MW)	Captive Share (%)	Equity Share (Cr.)	Equity Share (%)	:1		
A	100	40	104	10.4	Unit		
В	120	48	124.8	12.48	ר		
С	30	12	31.2	3.12			

Note: Equity share for A = (100/250\*1000\*26%) = Rs. 104 Cr.

• For **Unit 2** is set up, after 3 years, with an investment of Rs. 1200 Cr. Captive user C has share in the second unit as well. The overall equity share and proportional equity share of captive users in unit 2 is as per the Electricity Rules (see table below).

Table 3: Calculation of Equity share for Unit-2

Assumption Capital Cost = Rs. 1200 Cr. & Equity = 26%						
Entities	es Captive Captive Share Equity Share Equity Share					
	Capacity Shares	(%)	(Cr.)	(%)	7	
	(MW)				nit	
С	50	20	62.4	5.2	Ď	
D	200	80	249.6	20.8		

- If we look at the SPV as a single entity, the calculated equity share is as tabulated below. The monetary value of equity investment is the same as in the case of individual units tabulated above. Equity investment of C in unit 1 (Rs. 31.2 Cr.) and in unit 2 (Rs. 62.4 Cr.) totals Rs. 93.6 Cr.
- While **unit 3** is set up, after 3 years, with an investment of Rs. 2200 Cr. Here, Captive user C 'both' has share in the third unit. The overall equity share and proportional equity share of captive users in unit 3 is as per the Electricity Rules (see table below).

Table 4: Calculation of Equity share for Unit-3

Entities	Captive Capacity Shares (MW)	Captive Share (%)	Equity Share (Cr.)	Equity Share (%)	
A	100	20	114.4	5.2	
В	120	24	137.28	6.24	6
C	30	6	34.32	1.56	Unit
С	50	10	57.2	2.6	ū
D	200	40	228.8	10.4	

Note: Equity share for A = (100/500\*2200\*26%) = Rs. 114.4 Cr. Equity share for C = (80/500\*2200\*26%) = Rs. 91.52 Cr.

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The respective clauses can thus be modified to provide for calculation of the 'historical equity holding in the respective units'. The absolute investment in equity required for the respective units should be the qualification criteria for equity holding, not for the SPV as a whole.

Note that the amount of equity held by respective entities while considering SPV as a whole is either higher or lower than in the case of the same being determined separately for the two units. For example, it is Rs. 114.4 Cr. vs Rs. 104 Cr. is Rs. 93.6 Cr. Whereas that at the SPV level is Rs. 91.52 Cr. This clearly demonstrates that equity proportions under an SPV umbrella would change depending on the sequencing of investments at different costs. Hence, verification for equity should ideally be done with respect to each generating unit.

Such anomaly would not arise in case of capacity shares.

Clarification of ownership and energy consumption for captive users: In accordance with Clauses 6(6.8) and 9.1(9.1.3), the following modification may be implemented for Captive Power Ownership.

The clause may be modified (by including explanation) as, "The captive users shall consume not less than 51% of the net electricity generated on an annual basis for captive use in proportion to their respective share in the power plant within the variation not exceeding <u>one percentage point</u>. For example, a captive user, whose share in ownership of the CPP is 10%, should have a share in the net electricity generation within the range of 9% and 11% on an annual basis". (emphasis added)

The differentiation percent and percentage point is important for such cases. To ensure that the intended clause is not misunderstood, the suggested change with the example would provide necessary clarity.

Similar changes to be adopted across clauses identified herein.

Verification of equity ownership and captive consumption for CGP to be done on quarterly basis: In accordance with Clauses "7. Procedure for verification of Status of CGP and Captive users: 7.1 Verification of status of CGP and Captive users shall be on annual basis. (emphasis added)

Annualised basis to verify equity ownership does not account for change in ownership within a year. It is suggested that the verification of ownership and Consumption of energy for Captive Generating Plants (CGP) should be done on quarterly basis.

The below example illustrates the suggested approach:

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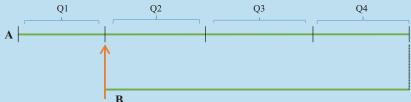


Figure 2: Timeline for A & B ownership

- Let us consider a scenario where entity **A** maintains its equity holding for the entire year across all the four quarters. Entity **B** joins at the beginning of the 2<sup>nd</sup> quarter, satisfying all criteria for the three remaining quarters but not for the full year basis as explained below.
- In such case, captive user B fails to comply with the requirements of captive status on 'annual basis' and thus becomes ineligible as a captive user.
- Since each investments are not expected to take place at the beginning of each financial year, quarterly basis for equity verification would be more suitable.
- "Captive Generating Unit" to be used instead of "Captive Generating Plant": In accordance with Clauses 4.2 of 3(3), "The Electricity Rules, 2005 provides the following requirements for a Captive Generating Plant: 3. Requirements of Captive Generating Plant..... (3) The captive status of such generating plants, where captive generating plant and its captive user(s)...". (emphasis added)

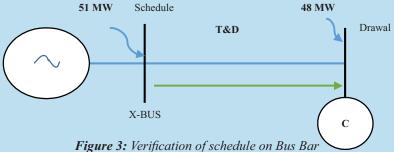
The "Captive generating plant" is being referred everywhere in the draft instead of "Captive generating unit(s)". Interchangeability of the two may be clarified as per applicability.

Verification of End use by Captive users: In accordance with Clauses 4.2 (3) (1)(b), "4.2 The Electricity Rules, 2005 ...: 3. Requirements of Captive Generating Plant: Explanation: - (1) For the purpose of this rule. - (b) "captive user" shall mean the end user of the electricity generated in a Captive Generating Plant and the term "captive use" shall be construed accordingly:". (emphasis added)

The Electricity Rules, 2005 qualifies a user as a captive user on the basis of it being the 'end user'. A variety of cases would highlight that generation side scheduling is more appropriate than 'end use' measured at the consumer end.

The calculation for 'end use' for a consumer should be recorded on the basis of the <u>energy scheduled from the captive unit</u> rather than that recorded at the end of the user, which would exclude transmission loss.

The below example illustrates the suggested approach: Difference between drawal and schedule may influence qualification of a CPP.



- To ensure that pseudo schedules are not generated, analysis of block-wise data of captive plants/ units may help reveal such a behavior.
- Low Deviation Settlement Mechanism (DSM) charges applicable for the renewable energy based captive plants, may incentivise such a behavior. Gradual alignment of the applicable DSM for RE would address the same.

**Captive consumer with Open Access (OA) Consumption (Non-captive):** Verification from plant schedule, further illustrated with the example below.

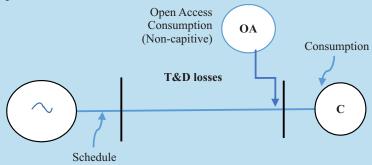


Figure 4: Non-captive open access consumption

- A captive user may also import electricity through OA from non-captive sources (e.g. trading or PXs) and/or from the local distribution company using the same import meter. In such cases, apportionment of consumption to a captive source is not feasible. This further strengthens the argument in favour of use of schedule of captive plant for calculation of proportional consumption of electricity.
- Do note that in case of multiple captive users, the captive unit would report scendule with respect to each such user and can hence be apportioned accordingly.
- Applicability of DSM, if any, would be subject to the regulation of the respective SERC.
- **Clauses** 6(6.1)(6.2) and (6.3), the given suggestion may be implemented for the holding company.
  - Based on the above comment, schedule from energy storage system and that towards a subsidiary to be accounted for calculation of energy share.
  - Verification of subsidiary and holding company also needs to be undertaken on a quarterly basis to ensure eligible 'consumption' by such related party users.
- **CER Paid-up equity capital to be considered for verification of captive status:** In accordance with Clause No. 6(6.7), "...26% of the proportionate paid up **equity share capital** with voting rights as per illustration given at clause...". (emphasis added)

Criteria for equity ownership should be on the basis of the equity capital 'subscribed to' and 'fully paid for'.

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#### Above suggestions are illustrated below:

Fully paid equity ensures actual ownership right of a captive user. The data formats attached do refer to 'paid for' data. The same should be incorporated in the respective identified clauses as well.

**CER** Ownership criteria to be verified quarterly: In accordance with Clauses 8(8.2.1)(a)(c)(d) and 8(8.2.2)(a)(i)(iv), the suggestion may be implemented for ownership of captive users.

Requirement of ownership on an annual basis, or throughout the year does not account for change in ownership affected for part of the year. As explained earlier, quarterly basis for ownership verification would be more suitable.

**CER** Verification of captive status of SPVs with plants located in multiple states: In accordance with Clause No. 5(5.2), "5.2 The Verifying Authority shall verify the captive status where CGP is located in one State and at least one of its Captive users....". (emphasis added)

Verification of CGPs located in multiple states under same ownership (AOP, cooperative or SPV) should be provided for.

#### Above suggestion is illustrated below:

**An SPV may have plants located in more than one state** in which CGP can be located in two or three different places. While the clause refers to 'its captive users located in another state', it does not provide for captive plant units located across multiple states.

**CER Pure Holding Company may not have its end use:** In accordance with Clause No. 6(6.3), "The consumption of electricity by a **holding company** of a company which is a Captive user shall also be admissible as captive consumption by the Captive use". (emphasis added)

The holding company may not have any 'end use'. It is often noted that such holding company are mere financial structure for ownership of multiple companies within a group.

The clause should clarify that such consumption by the holding company should be on its own account and can not be traded further.

**CER Registrar of company (ROC) to be notified in verification of captive status:** In accordance with Clause 6(6.4) states that, ".... a statement having the details of change in the ownership structure along with the relevant documentary evidence shall be submitted to the Verifying Authority along with the submission of application for verification of the status of CGP and Captive users".

#### This Illustrates below:

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For better cross-verification, information "as filed with the supporting documents to the Registrar of the company (ROC)" may be sought. Specifically, for changes in ownership, it is crucial to verify whether such changes have been duly informed to the ROC.

**CER Deadline for submission of affidavit for data of CGP and captive users:** In accordance with Clause 7(7.3) states that, "....The CGP and Captive users shall furnish an affidavit not after 30<sup>th</sup> September as per format enclosed at Schedule I to the Verifying Authority enclosing....".

The statement in clause 7.3 can be modified as "The CGP and Captive users shall furnish an affidavit **on or before 30**<sup>th</sup> **September**, as per format enclosed at **Schedule I**, to the Verifying Authority enclosing therewith the details as specified in the format(s) regarding their annual electricity generation, captive user-wise consumption and equity share holding during the previous year."

Need to add "Subsidiary Ownership" under the definitions: In accordance with Clause No. 3(3.1), "In this procedure, unless the context otherwise requires...."

This would also need to be verified on a quarterly basis.

#### Hence the following may be added in the draft clause:

Data formats also need to provide for the data related to subsidiary status as well.

**Uniform Reporting of Ownership changes 'Quarterly Obligation':** In accordance with Clause 8(8.2.2)(b)(v), "8. Verification of the ownership criteria of CGP, as ...: 8.2.2. Required documents for verification of ownership: (b) Where the generating plant is owned by a Co-operative Society: (v) A copy of the Resolution passed by the General Body authorizing....."

There needs to be a uniformity for reporting material change in ownership for all forms of ownership including cooperative plants, AOP and SPV, as well as for subsidiary and holding company status.

Such reporting should be obligated at the end of each quarter to align with the quarterly verification of data for other purposes.

#### The above suggestion Illustrates below:

As, all the formats (Format-I & Format-II) that are included in the draft document are going to be inferred either at the end of the year or end of the quarter (in case the suggestion provided herein is accepted).

- **CER Uniform Definition for 'Net Electricity Generation':** In accordance with Clauses No. 8(9.1.2), "8. Verification of the ownership criteria of CGP, ...: 9.1.2 In respect of Cooperative Society, the Members of society shall collectively consume not less than 51% of the **net electricity generated** on annual basis".
  - "Net Electricity Generation" may mean electricity generated net of auxiliary consumption or net of energy drawn from the grid.
  - Furthermore, need to clarify if **banked energy** would be netted and energy drawn against that would be added back to arrive at net generation.
  - For uniformity, similar provision should be incorporated for all forms of ownerships

#### The above suggestion further Illustrated by a figure below:

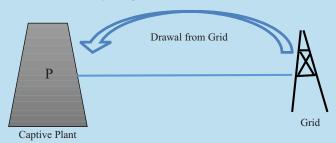


Figure 5: Net Electricity generation after drawal

A plant may draw electricity from the grid for startup or other purposes, thus affecting net generation.

**CER** Accounting of banked energy while verification of captive status: The procedure should clarify how Energy Banking would be accounted for. It is suggested to either ensure that banked energy be properly recognised and accounted for in the procedure.

#### The above suggestion illustrates below:

Captive plants are allowed to bank limited amount of energy (as per the prevailing regulation of the respective SERC) with the local distribution utility. Energy banked in a month is generally expected to be utilised with a month or at most a financial year.

Consumption by captive consumers from energy banked with a distribution utility within a financial year may not across a financial year, in general. However, in case of quarterly accounting, one quarter may witness lower 'net generation' while the other one may witness higher net generation (see above comment).

Since energy drawn against banked energy faces deduction of losses, it is suggested that the energy banked should be accounted towards the same.

**Portal for CGP Verification and data sharing:** CEA may create an online portal providing login facility to CGP applicants to upload necessary details and documentation in a structured manner and be archived there. A quarterly summary report on verification status providing key information be shared in the public domain by the portal.

#### The above suggestion Illustrates below with example:

There should be an online portal for timely reporting on captive status of plant. This transparency would also ensure that there are no inadvertant delays in the process and that any delay can be identified to the respective party. Some of the key information may include:

- 1. Identification of the applicant.
- 3. Grounds or reasons associated with acceptance/rejection, and
- 5. Total capcity being monitored statewise.

- 2. Current status of the application.
- 4. Grant of captive status to consumer.
- 6. Energy generated/consumed etc.





#### **Regulatory Updates**

#### Tariff



UERC has approved margins for UJVN Ltd. and other government organizations above tariff bids with a ceiling set by the Commission for the working year. The approved margins are 8% up to 100 MW, 6% up to 200 MW and 4% above 200

MW of cumulative capacity of solar power procured by an intermediary procurer and sold to UPCL. It suggested that the intermediary procurer must adhere to Standard Bidding Guidelines issued by theGoI, following MNRE's advice for tenders related to RE projects.

UERC granted in-principle approval to the UPCL for the Uttarakhand Climate Resilient Power Sector Development Project (UCRPSDP) funded by Asian Development Bank (ADB).

UERC approved capital investment for the Supply Installation Testing & Commissioning (SITC) of generator transformer (75 MVA, 11/220 kV) & dismantling of existing transformer at 4 x 60 MW Chibro Powerhouse.

UERC allowed UPCL ltd. to recover additional security deposits against the credit sale of electricity in a maximum of 12 equated monthly installments from consumers. Further ,the office memorandum submitted by UPCL in its instant petition was also approved by UERC with certain revisions.

UERC directed UPCL to collaborate with M/s Uttar Bharat Hydro Power (P) Ltd. in framing a detailed monthly reconciliation procedure for deemed generation bills & must be submitted to the Commission for approval before 16<sup>th</sup> November, 2023.



OERC directed to TPWODL that CSS to be re-calculated and the bill of M/s Vedanta Ltd. shall be raised accordingly. Any payment made by the M/s. Vedanta Ltd. towards the CSS including Rs. 18.28 Cr., and the Delayed Payment Surcharge

(DPS) towards loss of CGP status of (3x600 MW) Unit for the FY-16, shall be adjusted against the claims/billed amount.



RERC approved the power procurement of 490 MW from a hybrid source (solar + PSP) by RUVNL through tariff-based competitive bidding, stating that this procurement will not only help Discoms in meeting their statuary RPO but firm power

with associated higher operational flexibility will become available to the Discoms which, in turn, will help them to serve the end consumers in a more efficient manner.

RERC approved RUVNL for purchase of additional 105.4 MW power from power plants having existing PPAs to fulfil the shortfall of 3,939 MUs to be fulfilled from the purchase of energy from biomass from FY-12 to FY-22 as per the RERC (Renewable Purchase Obligations) Regulations as amended from time to time.



UPERC as in case of non-payment of interest on security by UPPCL, DVVNL, MVVNL, PVVNL, PuVVNL, KESCO and NPCL, had decided to form a Committee & directed Shri Rama Shankar Awasthi to submit the Terms of

Reference as per order dated 19<sup>th</sup> June, 2023 along with the details of his representative, within 15 days.

UPERC approved UPPCL PPA dated 31<sup>st</sup> Dec, 2010 of 1,843.68 MW Power from Ghatampur TPS (3X660 MW) against 1,683 MW previously approved, which works out to 75.11% of the project capacity.



PSERC allowed PSPCL's proposal for procurement of 9.8 MW from PGL's MHPs for an extended period of 15 years without any escalation of tariff as under:

Sr. No.	Name of MHP	Capacity	Rate				
	Abohar Branch Canal						
1.	MHP-Chupki	1.5 MW					
2.	MHP- Narangwal	1.5 MW	D 2.75/1.WI				
3.	MHP- Tugal	1.5 MW	Rs.3.75/ kWh				
4.	MHP- Dalla	1.0 MW					
	Bathinda	Branch Canal					
5.	MHP- Bowani	1.0 MW					
6.	MHP-Khatra	1.0 MW	Rs.3.75/ kWh				
7.	MHP-Kanganwal	1.3 MW					
8.	MHP-Jagera	1.0 MW	Rs.3.65/ kWh				

It also wishes to point out that it does not approve the detailed terms and conditions of the 'PPA/ SPPA', which are to be decided by the contracting parties with mutual consent.



WBERC approved the realizable revenue for WBSETCL in APR for FY-21 to be Rs. 1,45,696.10 lakhs against Rs. 1,63,041.08 lakhs. WBSETCL has a over recovery of Rs. 17,344.98 lakhs or part thereof to be adjusted with the amount of ARR for the

subsequent period or through a separate order.



KERC fixed the tariff of all the generators supplying power to BESCOM, CESC, MESCOM, GESCOM and HESCOM, at the rate of Rs. 5.08/kWh u/s 11 of the EA, 2003.

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#### **Regulatory Updates**

KERC instructed M/s TPREL as not entitled for any incremental tariff on the energy supplied in excess of the minimum contracted energy. For the purpose of claiming incremental tariff,  $1/12^{th}$  of the contracted capacity corresponding to the minimum CUF of 20% shall be considered in the monthly bills subject to reconciliation at the end of the year. And M/s TPREL is entitled to raise the supplementary bills for the arrears of the incremental tariff with carrying cost at 10% p.a.

KERC directed that M/s TPREL is not entitled for incremental tariff on the energy supplied in excess of the minimum contracted energy but is entitled to raise the supplementary bills for the arrears of the incremental tariff with carrying cost at 10% p.a . For the purpose of claiming incremental tariff,  $1/12^{\text{th}}$  of the contracted capacity corresponding to the minimum CUF of 20% shall be considered in the monthly bills subject to reconciliation at the end of the year.



WBERC after examining the details submitted by WBSETCL, reviewed its decision in compliance to the order of the APTEL & reached at decision that disallowance of Rs. 4,471.26 lakhs, normative debt and allowable

depreciation were an inadvertent mistake/ omission on the part of the Commission and have already been addressed in the APR order of WBSETCL for FY-15, FY-16, FY-17.



PSERC ordered PSPCL that additional surcharge Rs. 0.92/kWh shall be leviable on the consumers situated within their area of supply on the actual OA power brought by them from sources other than own sources, which will be subject to the

condition that the contracted capacity continues to remain stranded during the period. Further, this order shall have an overriding effect on the earlier orders.



GERC granted the extension of 57 days in Scheduled Commercial Operation Date (SCOD) from 19<sup>th</sup> April, 2021 to 06<sup>th</sup> December, 2022 to Pasithea Infrastructure Limited, Vector Green New Energies Private Limited, Vector

Green New Solar Private Limited, Vector Green Sunrise Limited on account of Force Majeure Events.

GERC allowed Juniper Green Sigma Pvt. Ltd. for compensation towards Safeguard Duty (SGD) and IGST paid and interest on it worked out as Rs. 0.16/kWh as Change in Law amount.



AERC approved a tariff of Rs. 3.92/kWh for APDCL's procurement of 70 MW AC power from SGEL's Grid Connected Ground Mounted solar project. The Commission allowed flexibility in the project, with APDCL to utilize land

received from the State Government and pay a lease rent of Rs. 25 lakhs/ MW for 25 years, without imposing penalties on the developer.



WBERC allowed HEL Rs. 8,761.44 lakhs against Rs. 11,083.10 lakhs and Rs. 8,821.21 lakhs against Rs. 11,108.40 lakhs during during FY-19 and FY-20 respectively. Further, the Commission directed HEL to refund of Rs. 2,975.87

lakhs & Rs. 2,952.14 lakhs and thereof to be adjusted with the amount of ARR for the subsequent period or through a separate order. The revenue recoverable including the incentive is as per following table:

Sr. No.	Particulars	Claimed (Rs. Lakh)	Admitted (Rs. Lakh)
1.	Net Fixed Charge	10,836.90	8,740.41
2.	Add: Incentive	26.10	21.03
3.	Add: Adjustment of Transmission Charge in terms of regulation 6.16.3 of the Tariff Regulations		
4.	Revenue Recoverable	11,083.10	8,761.44

Sr. No.	Particulars	Amount (Rs. Lakh)
1.	Revenue realized from operation for the FY-19, as per account.	11,401.00
2.	A roved realizable revenue admitted in APR for the FY-19	8,761.44
3.	Over-recovery for the FY-19	2,639.56
4.	Add: Interest benefit passed on to the beneficiary	336.34
5.	Net amount refundable	2,975.87

#### Power Procurement



CSERC approved the draft PPA of CSPDCL for procuring scheduled power from CCP in Chhattisgarh on a day-ahead basis, with conditions including optimizing PPC, limiting the maximum power to 200 MW, determining rates

based on IEX rates minus transmission charges, setting a ceiling power purchase rate of Rs. 10.00/ kWh and applying relevant regulations for deviations from the schedule.

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#### Regulatory Updates



OERC approved the PPA to be executed between PTC India Ltd. and GRIDCO Ltd. from Kurichu Hydro Electric Project, Bhutan (60 MW) by GRIDCO Ltd. As per sharing of un-allocated quota of central generating stations by the

Eastern Region Power Committee (ERPC), GoI.

OERC allowed M/s SAIL RSP to avail power supply at 132 kV level from Tarkera Grid Sub-station of the OPTCL through the existing idle charged 132 kV feeders for a period of maximum 2 months from 28<sup>th</sup> November, 2023 subject to condition that at any point of time, power supply from Tarakera Grid Sub-station will be available at one voltage level (220 kV or 132 kV) only and required full proof interlocking scheme shall be in place along with required metering arrangement restricting the drawal to 60 MW through 132 kV feeder during emergent situation.



JSERC approved the provisional PPA between JBVNL and SECI for a 100 MW grid-connected floating solar PV plant, to be Commissioned by SECI at Getalsud Dam in Ranchi, at the ceiling price of Rs. 3.50/kWh.

JSERC approved PPA between JBVNL and TVNL, for 420 MW coal based thermal power station at Lalpania for a period of 10 years.



MPERC approved the draft supplementary PPA dated 05<sup>th</sup> January, 2011 executed between MPPMCL and M/s Jaiprakash Power Ventures Ltd. for procurement of 65% power generated from Bina Thermal Power Plant.

MPERC approved the draft supplementary PPA u/s 86(1)(b) of the EA, 2003 read with Regulation 8.8 of the Madhya Pradesh Electricity Grid Code, 2019 and the detailed operating procedure issued thereunder read with Regulation 32 of MPERC (Power Purchase and Procurement Process) Regulations, 2006.

# Renewable Energy, RPO and REC

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

TERC allowed Mr. Debasish Swami (consumer) to install 80 kWp instead of 120 kWp solar-based power at

his premises. TERC also ordered DISCOM to monitor the performance of the initial 80 kWp capacity.

HPERC ordered Himachalies Hydro Power Developers Association, to promote RE generation, in agreement of principle to fix the normative O&M charges of bays for the SHPs (upto 25 MW) and other RE generator which are owned & operated by HPSEBL. The maximum nominal voltage level at any point in such Sub-station should not exceed 33 kV. But these normative charges shall not be applicable for Sub-stations owned and operated by the transmission licensee/STU or for the Sub-stations having GIS.

GERC allowed Integrated Coal Mining Ltd. (ICML) to replace only defective/ damaged solar PV modules at its 9 MW solar power plant and the total replacement of solar modules capacity shall not exceed 8,696 x 230 Wp working out to 2,000 kWp. GERC also directed ICML to provide the details of replaced solar modules intended with new modules specifying the Sr. no of the modules, R.F.I.D details or capacity of modules, manufacturer technical details etc. to Gujarat Urja Vikas Nigam Ltd.

APERC instructed Hetero Wind Power Ltd., Danu Wind Parks Private Ltd., Dindore Wind Parks Private Ltd. and others to perform calculation within six weeks on actual Capacity Utilization Factor (CUF) at the rate of of Rs. 0.50/ kWh for power generated beyond the stipulated CUF. Any amounts found payable were disbursed within four weeks. Consequently, the Orders of Proceedings (OPs) were disposed of without imposing any costs on either party.

APERC concluded that tariff conditions did not allow for netting off energy or exempt any existing Power Purchase Agreements (PPAs) for the drawl of power by solar power generating stations for their auxiliary consumption. However, APERC's demands for security deposits were deemed invalid and any collected amounts must be refunded within a month. The billing of auxiliary consumption by 'The Southern Power Distribution Company of AP Limited' was considered legal by the Commission.

APERC granted approval for continued power procurement by SPDCL, EPDCL and CPDCL from Neyveli Lignite Corporation, NTPC Ltd. and NPCIL even after the expiration of PPAs. For specific cases, the Commission had allowed PPAs until their respective terms conclude and for expired terms, approval extended up to 31<sup>st</sup> March, 2030. However, the Commission refuses consent in certain instances due to concerns about long-term costs, unreliability and previous disapprovals.





#### Regulatory Updates

APERC directed that the M/s Alufluoride Limited, Mulagada is entitled to the benefit of deemed banking from 21<sup>st</sup> Sept, 2020 to 10<sup>th</sup> Jan, 2021 and the energy injected during this period qualifies for payment at 50% of the Pooled Cost for the relevant year and AP Eastern Power Distribution Company of A.P. Ltd is instructed to make the specified payment to the M/s Alufluoride Limited within 30 days.

MPERC directed MPPTCL to consult with M/s Birla Corporation Limited and based on their concurrence may apply power factor for conversion of MW capacity of solar based captive generating plants to mva capacity, uniformly across all the solar based captive generating plants, for the purpose of recovery of parallel operation/grid support charges.

MPERC directed MPUVNL to approach Commission for adoption of tariff for grid connected solar PV systems if such tariff has been determined through competitive bidding process for sale of power within the State in accordance with the Guidelines for Implementation of Feeder Level Solarization under Component-C of PM-KUSUM Scheme.

MPERC directed MPUVNL to submit a comprehensive proposal for determination of feed-in-tariff for the next CP effective from 01<sup>st</sup> April, 2024 as per the provisions of Component -A of PM KUSUM scheme, not later than 45 days from 09<sup>th</sup> Oct, 2023 so that the tariff may be determined by the Commission up front and beneficiaries under PM KUSUM scheme be aware of the ceiling/ feed-in-tariff well in advance of the subsequent CP.

#### Others

JSERC granted approval to JUSNL for the development of a transmission system at an estimated cost of Rs. 2,107.95 Cr., facilitating the evacuation of power from PVUNL.

JSERC allowed H.T. connection service to the Swarnrekha Rice Mill Pvt. Ltd. & the Aadhar Rice Mill Pvt. Ltd to supply voltage of 33 kV with a contract demand of 800 kVA and 600 kVA after ensuring proper arrangement of metering, billing and network system protection.

UERC directed UPCL to collaborate with M/s Uttar Bharat Hydro Power (P) Ltd. in framing a detailed monthly reconciliation procedure for deemed generation bills & must be submitted to the Commission for approval before 16<sup>th</sup> November, 2023. Failure to do so may result in action under Section 142 of the Electricity Act, 2003. Subsequently, both parties must engage in monthly reconciliation within two months.

UERC approved the Complaint Handling Procedure (CHP) and directed UPCL to implement it statewide within two months. Automatic compensation for such will be effective from 01<sup>st</sup> April, 2024 but for effect it necessitates the completion of work.

UERC granted in-principle approval for UPCL to proceed with Smart Metering Works, Loss Reduction Works, and Project Management under RDSS, subject to conditions including competitive bidding, adherence to RDSS Guidelines, quality assurance, compliance with PFC conditions, equity funding verification, and adherence to relevant regulations. post-completion, UPCL must submit cost details for inclusion in the annual revenue requirement, subject to a prudence check.

HERC directed in the conflict between DHBVNL and Vatika Ltd for civil work that since the developer had already initiated the process of removing inadequacies and undertaken to complete the work within 6-9 months. The monthly progress report will be submitted to DHBVNL as well as HERC.

HERC observed that DHBVNL & UHBVNL to improve their operational parameters & to comply with the HERC Standards of Performance Regulations for the distribution licensees.

HERC allowed UHBVNL the relaxation of replacement of a stolen transformer, for replacement of a stolen transformer and also it directed to bring out draft paper for amendment in the supply code.

APERC directed Southern Power Distribution Company of Andhra Pradesh Ltd. to release the withheld amount of Rs. 110,52,21,525/- for Credit Card (CC) charges related to existing DC panels as of the COD.

APERC approved the payment entitlement for M/s Hetero Wind Power (Pennar) Pvt Ltd. till February, 2023 in accordance with the Commission's directive that the recovery of amounts will be subject to a three-year limitation period.

APERC has directed that power generated through the Waste Heat Recovery System (WHRS) process is exempted from Renewable Purchase Obligation (RPO). Further, it stated that if the RPO exceeds the power generated by the M/s. Apple Industries Ltd. through the WHRS process, the Apple Industries Limited will be liable to comply with RPO to the extent of the shortfall.

AERC directed APGCL to revise the DPR for the 25 MW Namrup Solar PV Project in a joint venture mode between APGCL and OIL, setting a ceiling tariff of Rs. 3.90/kWh.





#### **Regulatory Updates**

APERC directed APSPDCL to pay the Late Payment Surcharge (LPS) to MPPL as per PPA Article 5.6, citing the illegal withholding of amounts for claimed DC panel installation. APERC further stated 'APSPDCL, APSLDC & APPCC' to include the interest (calculated at the prevailing SBI bank rate or the reduced rate from the date of withholding to the date of reimbursement) for the payment within 30 days.

AERC approved a tariff of Rs. 3.92/kWh for APDCL's procurement of 50 MW AC power from a grid connected ground mounted solar project by SJVN Green Energy Ltd.and allowed flexibility in project capacity without penalties, hence, directed to prepare a resource adequacy plan for the next 10 years, considering projected demand and incorporating RE sources, including storage.

AERC directed APDCL and SGEL to secure land promptly for the 200 MW AC grid connected ground mounted solar pv project, emphasizing no delays in project execution in adherence to revenue rules during land procurement and approved the tariff at Rs. 3.90/kWh.

AERC has directed the M/s Brahmaputra Valley Fertilizer Corporation to submit the generation data from their CPP and energy consumption data from APDCL separately within 2 weeks, further, Commission admitted the petition on 16<sup>th</sup> October, 2003, with the next hearing date to be communicated later.

AERC has ordered APDCL to submit a detailed analysis of the prospects and implications of granting OA in a mixed industrial feeder in the State that included outlining of necessary terms, conditions and procedures to avoid any technical or financial challenges on the system and stakeholders.

MPERC adopted the levelised transmission charges of Rs. 147.46 Cr. in terms of u/s 63 of the EA, 2003 for the transmission system to be constructed/implemented by M. P. Power Transmission Package-I Limited on Built, Own, Operate and Transfer (BOOT) basis as per Transmission Service Agreement (TSA) Guidelines.

MPERC directed MPMKVVCL to comply with application dated 30<sup>th</sup> August, 2022 for reduction of contract demand from 8400 kVA to 6400 kVA & application dated 13<sup>th</sup> March, 2023 for restoration of its load from 7000 kVA to 8400 kVA be considered under force majeure from effective date and accordingly, the impugned Electricity Bills be revised from September, 2022 to December, 2022, such that period of reduced supply is as per Supply Code, 2021.

MPERC directed MPPKVVCL not to levy additional surcharge from 10<sup>th</sup> December, 2021 onwards and refund the amount deposited by M/s Vippy Industries Ltd. on account of additional surcharge on captive power consumption from 10<sup>th</sup> December, 2021 onwards by way of monthly adjustments in electricity bills starting from the ensuing bill.

MPERC approved commercial leasing of spare dark fibers from MPPTCL's OPGW Network under specific conditions. Additionally, MPPTCL must ensure that the leased assets do not compromise its licensed transmission business, and any revenues generated should be used to reduce transmission and wheeling charges, with proper accounting and reporting to the Commission.







### Tariff Orders

SERC/ JERC	Licensee/ Utility	True-up	APR	ARR	Tariff
MSERC	MePDCL, MePGCL, MePTCL	2020-21, 2021-22	-	-	-
APSERC	APDoP	-	-	2019-20 to 2023-24	-
KERC	BESCOM, HESCOM, MESCOM, GESCOM, CESC, AEQUS SEZ, MSEZ, KTPCL, HRECS	-	2021-22	2023-24	2023-24
JSERC	APNRL, IPL	-	-	-	2021-22 to 2025-26
	TVNL	2012-13 to 2015-16	-	-	2021-22 to 2025-26
	TSUISL	2021-22	2022-23	2023-24	2023-24
	DVC	-	-	-	2006-07 to 2011-12
HPERC	HPPTCL	-	-	-	2023-24
JERC (JK & L)	JPDCL, KPDCL	-	2022-23	2023-24 to 2025-26	2023-24
	J&KPTCL	-	-	-	2023-24 to 2025-26
	LPDDL	2019-20, 2020-21, 2021-22	2022-23	2023-24	2023-24

### Regulations

Title	Date of Approval/Notification
GERC (Standard of performance of Distribution Licensee) Regulations, 2023	05 <sup>th</sup> December, 2023
APSERC (Term and Conditions for Green Energy Open Access and Methodology for calculations of charges) Regulations, 2023	29 <sup>th</sup> November, 2023
KERC (Terms and Conditions for Open Access) Regulations, 2023	06 <sup>th</sup> October, 2023
KSERC (Consumer Grievance Redressal Forum and Electricity Ombudsman) Regulations, 2023	14 <sup>th</sup> November, 2023
KERC(Sharing of Revenue From Other Business of Transmission and/or Distribution Licensee(S)) (1st Amendment) Regulations, 2023	06 <sup>th</sup> December, 2023
MPERC (Terms and Conditions for Determination of Tariff for Supply and Wheeling of Electricity and Methods and Principles for Fixation of Charges) (2 <sup>nd</sup> Amendment) Regulations, 2023	08 <sup>th</sup> December, 2023
HPERC (Multi Year Wheeling Tariff & Retail Supply Tariff) Regulations, 2023	29 <sup>th</sup> November, 2023
MPERC (Madhya Pradesh Electricity Supply Code (1st Amendment), 2023	08 <sup>th</sup> December, 2023
MPERC (Power Purchase and Other Matters with respect to conventional fuel based Captive Power Plants) (Revision-I) (1st Amendment) Regulations, 2023	08 <sup>th</sup> December, 2023
UERC (Green Energy Open Access) Regulations, 2023	18 <sup>th</sup> October, 2023
APERC (Conduct of Business) (8th Amendment) Regulation, 2023	11 <sup>th</sup> October, 2023
APERC (Terms and Conditions for Determination of Transmission Tariff) (2 <sup>nd</sup> Amendment) Regulation, 2023	11 <sup>th</sup> October, 2023
UPERC (Rooftop Solar PV Grid Interactive System Gross/ Net Metering) (2 <sup>nd</sup> Amendment) Regulation, 2023	17 <sup>th</sup> November, 2023
TERC (Compensation to Victims of Electrical Accidents) Regulation, 2023	07 <sup>th</sup> October, 2023
PSERC (Electricity Supply Code and Related Matters) (13th Amendment) Regulations, 2023	12 <sup>th</sup> October, 2023
PSERC (Terms and Conditions for Intra-State Open Access) (11th Amendment) Regulations, 2023	12 <sup>th</sup> October, 2023
JERC( JK & L) (Guidelines for Load Forecasts, Resources Plans and Power Procurement Process) Regulations, 2023	09 <sup>th</sup> November, 2023





### Regulations

JERC( JK & L) (Procedure for filing Appeal before the Appellate Authority) Regulations, 2023	23 <sup>rd</sup> November, 2023
JERC( JK & L) (Compliance Audit) Regulations, 2023	08 <sup>th</sup> December, 2023
JERC (JK& L) (Transmission Performance Standards) Regulations, 2023	11 <sup>th</sup> December, 2023
JERC (JK& L) (Demand Side Management) Regulations, 2023	11 <sup>th</sup> December, 2023
JERC (JK& L) (Distribution Code) Regulations, 2023	11 <sup>th</sup> December, 2023
JERC (JK& L) (State Grid Code) Regulations, 2023	12 <sup>th</sup> December, 2023
JERC( JK & L) (Terms and Conditions for Determination of Multi Year Generation, Transmission, Distribution Tariff) Regulations, 2023	10 <sup>th</sup> December, 2023
JSERC (Terms and Conditions for Determination of Generation Tariff) (1st Amendment) Regulations, 2023	03 <sup>rd</sup> November, 2023





# **CER News**



#### 4th Global Regulatory Perspectives Program





CER on behalf of the Forum of Regulators (FOR), organized the 4<sup>th</sup> Global Regulatory Perspectives Program for Members of State Electricity Regulatory Commissions from 20th November to 22nd November, 2023 at Sydney, Australia. The program was designed to help all SERCs members to understand the regulatory governance, implementing retail competition, regulatory and policy framework, consumer protection and grievance redressal for the Electricity Sector in Australia. The key speakers were Mr. Jesse Price (Director, Australian Energy Regulator), Mr. Carl Hutchinson (Head, Enel X Australia), Dr. Anoop Singh (Founder & Coordinator, CER, IIT Kanpur), Mr. Charles Popple (Commissioner, Australian Energy Market Commission), Ms. Sarah Sheppard (Chief Executive Officer, Essential Services Commission, Australia), Ms. Helen Ford (Deputy Ombudsman, Energy & Water Ombudsman NSW), Mr. John Kettle (Head, International and Energy at Gadens, Australia) & Ms. Stephanie McDougall (General Manager Regulation, Transgrid, Australia). For further program details including program duration, key topics,

please visit: https://cer.iitk.ac.in/Grpp\_4

# Regulatory Certification Program on "Power Sector Regulation: Theory and Practice"



CER in association with EAL, is pleased to announce the 4<sup>th</sup> Regulatory Certification Program on "Power Sector Regulation: Theory and Practice" commencing from 17<sup>th</sup> February to 03<sup>rd</sup> March, 2024. The program would help to understand and analyze the key issues in the power sector from economic, legal and regulatory prospective. It builds upon economic rationale for regulatory and policy changes in the power sector, and engage in informed discussions on the regulatory framework, particularly those governing determination of tariff. The Program would be conducted under the aegis of Centre for Continuing Education, IIT Kanpur. The last date for registration is 16<sup>th</sup> February, 2024. For further program details including program duration, key topics, schedule, admission process and fee, please visit:

https://cer.iitk.ac.in/olet/rcp.

We invite readers to register at CER's web portal to access CER's publications and resource material. This would also help us design CER's activities and deliver a more relevant output by engaging with stakeholders. We also request your inputs on the newsletter and the activities of the Centre.

Regulatory Insights Team

**Disclaimer:** The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavour to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

#### Other Initiatives



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Note: Additional information can be accessed through the hyperlinks provided in the online version of this newsletter.



# **CER News**



# Identifying Key Risks and Risk Hedging Avenues in the Indian Power Market

The Indian power sector is experiencing significant changes, transitioning from long-term Power Purchase Agreements (PPAs) to short-term contracts traded on power exchanges. However, this transition has exacerbated existing risks.

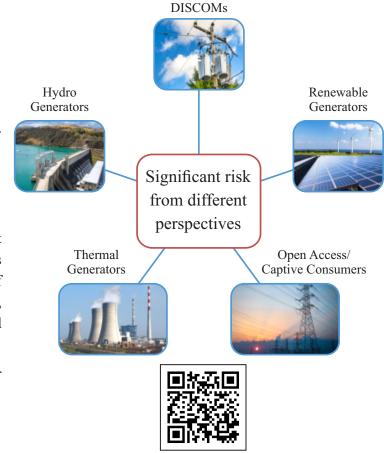
The Centre for Energy Regulation (CER), IIT Kanpur, as part of ongoing research invites you to participate in an online expert survey on **Identifying Key Risks and Risk Hedging Avenues in the Power Market** from the perspective of the following key stakeholders:

- Distribution Companies
- Open Access/Captive Consumers
- Renewable Generators having long-term PPA
- Merchant Renewable Generators
- Conventional (Thermal) Generators with longterm PPA
- Merchant Conventional (Thermal) Generators
- Hydro Generators

This study aims to identify key risks and relevant avenues to hedge their risk. The key identified risks include DSM, Payment risk, price volatility, lack of visibility of resource inadequacy, penalty concerns, transmission congestion, RPO shortfalls and disapproval of short-term power purchase costs etc.

As a significant stakeholder in the Indian Power Sector, you are invited to share your valuable insights by completing the survey:

https://cer.iitk.ac.in/Survey\_PMD



Scan to participate in survey

We invite readers to register at CER's web portal to access CER's publications and resource material. This would also help us design CER's activities and deliver a more relevant output by engaging with stakeholders. We also request your inputs on the newsletter and the activities of the Centre.

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**Other Initiatives** 





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