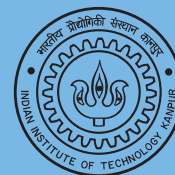




# REGULATORY INSIGHTS



## Regulatory Outlook

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## Editorial

The Indian power sector is witnessing transformation due to dynamic policy and regulatory environment, and the evolving market structure. This influences the underlying risk of the projects and, returns thereof. Regulatory benchmarking of financial parameters needs to respond to dynamism in the macroeconomic environment and capital markets. Return on equity (RoE) and interest components are the key parameters regulated under the respective terms and conditions for tariff.

The return on equity for renewable energy projects referred to in the recent draft CERC regulation, ascertained using the Capital Asset Pricing Model (CAPM), is essentially a post-tax measure. However, it continues to be deemed as pre-tax RoE, thus, allowing further grossing up of the same. A recent study at CER estimates, using CAPM, post-tax cost of equity for conventional and renewable energy generation to be 12.86% and 12.87%, respectively. In light of these observations, the rate of return framework across the sector needs to be realigned to ensure that it follows economic and financial principles.

Policy and regulatory environment for the power sector needs to evolve to address the current issues facing the sector and, also pave a path for a competitive, sustainable and efficient power sector in the future. Regulatory uncertainty, political interventions, poor governance structure within DISCOMs and weak regulatory compliance framework remain some of the key issues that need attention while amending the Electricity Act, 2003. If implemented through a set of transparent guidelines for its award and compliance thereafter, the proposal for distribution sub-licensee can help improve governance in the distribution business and also help attract private capital. The current draft leaves a number of regulatory concerns that need attention. While creation of ECEA would need to justify its value given the available legal infrastructure, the unified selection committee needs to strive for a consensus for greater political acceptability. Some of the key suggestions on the draft amendments and, some additional ones are highlighted in this newsletter.

RESCO model for implementing off-grid projects can consider combining multiple sites. This would provide economies of scale, reduce risk for developers and also enhance competition. Data from remote monitoring of such projects should be made available on a publicly accessible portal, allowing assessment of benefits from such projects. This would ensure that project's operational performance is given priority. This would also assist future course of policy direction and program design.

Fungibility for RPO compliance (across solar and non-solar RPO), as proposed by WBERC, is a welcome flexibility step that has been oft-highlighted by CER.

**Anoop Singh**

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



**UK Government**

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## CERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2020 [Draft]

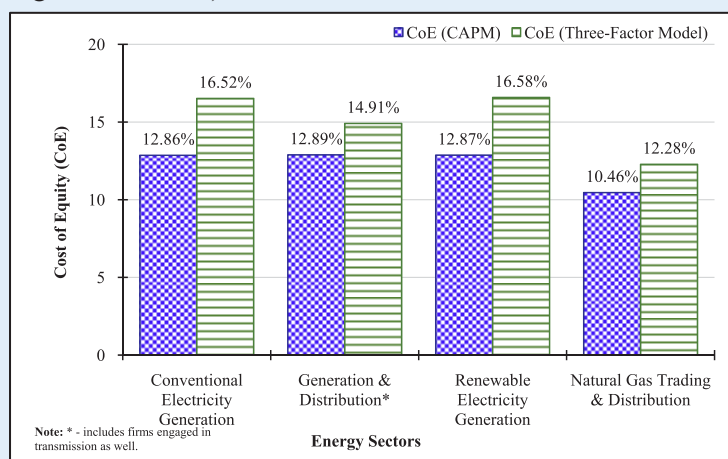
CERC issued draft for Terms and Conditions for Tariff determination from Renewable Energy Sources (RES) Regulation, 2020 for the control period 2020-21 to 2022-23. Highlights of the proposed regulations are given below:

- ❖ 'Floating solar project', 'Grid Code', 'Pumped storage hydro project', 'State Nodal Agency', and 'Storage' have now been defined. Further, the regulations also provides for the 'treatment for over generation'.
- ❖ Loan tenure is proposed to be increased from 13 years to 15 years.
- ❖ Depreciation rate from 5.28% for 13 years to be changed to 4.67% for 15 years. The concept of 10% salvage value is also proposed to be removed, and remaining depreciation, after 15 years, to be evenly spread year over the remaining useful life of the project.
- ❖ For the calculation of Interest on Working Capital (IoWC), receivables equivalent to 45 days to be considered instead of 60 days.
- ❖ To consider IoWC, interest rate equivalent to the normative interest rate of 350 basis points (previously 300 basis points) above the average SBI MCLR (one-year tenure) prevalent during the last available six months is to be adopted.
- ❖ Normative O&M expenses to be allowed during the first year of the control period at an escalation rate of 3.84% (previously 5.72%) per annum.
- ❖ For payment made within 5 days of presentation of bill, a rebate of 1.5% is proposed. Further, LPS of 1.50% (1.25% earlier) can be levied for bills due beyond 45 days.

## CER Opinion

### ❖ RoE: Pre-tax vs Post-tax (Section 19):

- Clause 2 of Section 16 should be modified as – “*The normative Return on Equity shall be 14%, to be grossed up by prevailing rate of Minimum Alternate Tax (MAT), as on 1<sup>st</sup> April preceding the CoD, for the entire Tariff Period*”. (underlined text to be included)
- The cost on equity estimated by the CAPM approach is a post-tax estimate. A recent study at CER, IITK using CAPM and multi-factor models using a comprehensive data for over 125 infrastructure companies between 1998-2018, estimates the cost on equity for RE sector to range between 12.87-16.58%, on a post-tax basis. The estimate referred to in the Statement of Reasons (SoR) is also a post-tax estimate. Against the estimated post-tax cost of equity of 12.87% (using CAPM), the proposed RoE works out to 16.96% (after grossing up with 15% MAT plus 12% surcharge, and 4% cess).



Cost of Equity – CAPM and Three-factor Model

So: Kewal Singh, Anoop Singh and Puneet Prakash (2020) – Draft Paper

- ❖ **IoWC vs IoL:** Difference between Interest on Working Capital (IoWC) and Interest on Loan (IoL) is 150 bp. Given the observed difference in yield of short-term and long-term government securities, the interest rate differential may be made dynamic and linked to the prevailing short-term and long-term yields.
- ❖ **Rebate on Early/Advance Payment:** Given the dynamics in the financial markets, rebate on early payment may also be linked to SBI MCLR. Additionally, provision for 'advance' payment may also be incorporated.
- ❖ **Hybrid RE Projects:** Clarification regarding scope of Hybrid RE projects vis-a-vis their definition in case of more than two technologies is needed. Further, mentioning if Co-generation with Hybrid RE technology would also fall within the scope.
- ❖ **Storage in RE and Hybrid RE Projects Scope:** It will be useful to clarify scope of storage based RE (Hybrid) projects vis-a-vis minimum storage capacity with respect to the rated 'energy' capacity of the RE plants. Further, it should be clarified if co-generation with storage technology would also fall within the scope would be useful.

## Electricity Act, 2003 Amendment 2020 [Draft]

The Ministry of Power on 17<sup>th</sup> Apr, 2020 issued draft for amendment to the Electricity Act, 2003. A brief summary of the proposed Amendments are given below:

### Key Amendments:

- Section 2: Introduction of distribution sub-licensee.
- Section 62 & 65: Direct Benefit Transfer (DBT)
- Section 109: Setting up of Electricity Contract Enforcement Authority (ECEA)
- Section 78: 'Unified' selection committee for appointment of Members and Chairpersons of ERCs, APTEL, and ECEA.
- Section 3A: Proposal to have minimum percentage to be purchased from hydro energy.
- Section 26: NLDC to monitor grid operations and ensure grid stability.
- Section 26 & 28: Payment Security for scheduling or dispatching of electricity.
- Section 82: State Commission to have up to four, and APTEL to have minimum seven members.

- ❖ **National Renewable Energy Policy (NREP) (Section 3A):** Central Government, in consultation with State Governments, will prepare NREP to promote RE generation, and prescribe RPO for renewable and hydro energy.
- ❖ **Cross Border Trade of Electricity (CBTE) (Section 49A):** Central Government to frame rules and guidelines, and CERC will formulate regulations to facilitate CBTE.
- ❖ **Tariff Subsidies (Section 62 & 65):** Tariff to be calculated without accounting for subsidies, and government to provide subsidies directly to the consumers.
- ❖ **Selection Committee to Recommend Members (Section 78):**
  - A single committee, consisting of five members to recommend members of Commissions (Central and State), Appellate Tribunal, and ECEA.
  - The Committee to finalise the selection of the Chairperson or the Member within three months of the receipt for every recommendation for vacancy.
- ❖ **ECEA (PART XA):**
  - The ECEA to have “sole authority and jurisdiction to adjudicate upon matters regarding performance of obligations under a contract related to sale, purchase or transmission of electricity” (Section 109A).
  - ECEA to dispose-off any application within 120 days of receipt of application (Section 109B).
  - ECEA to consist of a Chairperson, two or more Judicial Members, and three or more Technical Members (Section 109C).
- ❖ **Appellate Tribunal (Section 110 & 112):**
  - A person can appeal against the order of ECEA at Appellate Tribunal.

- The Appellate Tribunal to have a Chairperson and minimum seven members.

## ❖ **Punishment for Non-compliance of Directions by Appropriate Commission (Section 142):**

- In case of contravention against the provisions of the Act, max. ₹1 crore for each contravention, and in case of a continuing failure to meet directives, an additional penalty of max. ₹1 lakh/day.
- In case of non-compliance of RPO, ₹0.50/kWh for shortfall in first year, ₹1/kWh for the second year, and ₹2/kWh for non-compliance continuing after the second year.

## CER Opinion

### 1) **Standard Guidelines for Distribution sub-licensee (DSL) and franchisee**

- ❖ The set of standard guidelines for award of DSL and franchisee should be formulated by the Central Government in consultation with State Government and the SERCs. These guidelines should define the mode of award for DSL (outright sale, lease, etc.), role of competitive bidding, duration, commercial arrangements, sharing of risk and regulatory provisions thereof.
- ❖ Visibility of operations and regulatory purview for franchisee also needs to be enhanced.
- ❖ SERCs would need to amend distribution license and the relevant regulations to segregate the provisions applicable to the distribution licensee and the distribution sub-licensee. For example, the provisions related to the sub-licensed areas would now need to be excluded from the original licensed areas to avoid multiplicity of accountability.
- ❖ Will the respective SERC be able to cancel DSL in case of its failure to meet the provisions of the Act and regulations of the respective SERC?

### 2) **PPA allocation to DSL**

- ❖ Commercial arrangement for award of DSL should also specify if the sub-licensee would be allocated the existing PPAs, or provided electricity at pooled price by the existing holding/bulk supply company of the state or would be allowed to make own arrangement for power purchase.
- ❖ As the DSL would not require a license for power trading, would it be allowed to make its own power procurement? If so, the existing distribution licensee will be saddled with expensive PPAs unless the same is allocated to the DSL.

### 3) **National Renewable Energy Policy**

- ❖ National Renewable Energy Policy (Section 3A), should be formulated after consultation with the State Governments as their active participation in policy formulation can help in achieving the RE target.

### 4) **Large Hydro as RE**

- ❖ MoP notification dated 8<sup>th</sup> March, 2019 “Large-Hydro” (>25 MW) has been declared as “Renewable”. This expanded definition for renewable energy can be enshrined in the Act itself. Draft Amendment differentiates between 'Renewable' and 'Large Hydro'. Further, Hydro Purchase Obligation (HPO) is notified to be a part of non-solar RPO.

### 5) **RPO**

- ❖ The Act does not specifically provide for separate categorization (and hence differential treatment) - 'solar' and 'non-solar RPO'. Given that, cost of solar energy has declined significantly, the two sub-category should be merged together to enhance liquidity and economic efficiency.
- ❖ The NREP should provide for differential RPO across states due to disparity of RE resources, generation mix as well as consumer mix.
- ❖ Section 3A - NREP “prescribing” RPO, Section 86 (1) (e) - SERCs “**specifying**” RPO, as **prescribed by the Central Government**, Section 86 (4) - SERC to be **guided** by the NREP, and Section 61 (i) - Tariff regulations to be guided by the National Electricity Policy and tariff policy by NREP, thus, needs to be appropriately amended.

### 6) **Renewable Generation Obligation (RGO)**

- ❖ Section 176 (2) empowers the Central Government to specify RGO. The Act should also provide for RGO



compliance framework, penalty for shortfall in RGO and applicability of RECs. Further, the concurrence of RPO and RGO requires that these targets to be set in coordination so as to synchronize the overall RE target for the country.

- ❖ RGO should be specified within the framework of NREP as it impacts the whole power system as well as its economics.

## 7) Integrated Resource Planning for Capacity Adequacy

The provision for specifying adequate capacity resources (Section 176 (2) (ae)) should be part of the National Electricity Policy (NEP). While this will enhance system reliability, it can significantly influence overall cost burden for the consumers. The NEP should provide for adequate reserve at the regional level considering coincidental peak demand growth and growing share of VRE across the constituent states.

## 8) Storage as Generator or Licensee

- ❖ Economic storage can address variability associated with RE generation, and can also play along the arbitrage opportunities across time of the day. The Act should identify a role for storage services and its regulations
- ❖ If storage is a part of 'generation' or 'distribution' business, separate license should not be required.
- ❖ In case of stand-alone storage or operation of storage asset for arbitrage by a generator, the same should be a licensed activity as it can influence market outcome as well as system operation.

## 9) RPO Compliance

- ❖ A new proviso in Section 86 (1) (e) can be inserted to allow for banking/roll-over of the non-complied RPO quantum to offer flexibility to the obligated entities.
- ❖ The proposed penalty for non-compliance of RPO creates a perverse incentive not to comply and pay penalty if REC equivalent price is more than penalty for the respective year of non-compliance. Hence, the penalty should be set at the forbearance price of REC.

### Further Reading:

- *Anoop Singh, A market for renewable energy credits in the Indian power sector; Renewable and Sustainable Energy Reviews, 13(3), April (2009).*
- *Anoop Singh, Economics, Regulation, and Implementation Strategy for Renewable Energy Certificates, in India Infrastructure Report OUP (2010).*

- ❖ RPO penalties imposed on and paid for by the DISCOMs/obligated entities should not be passed through the ARR, or included in other charges. The RPO shortfall penalty collected should be deposited in a new fund, may be called RPO Fund, which may be utilized for promotion/adoption of RES, particularly to enable creation of monitoring and forecasting infrastructure for Rooftop PV.

## 10) Development of REC and Ecerts Market

- ❖ Section 66 may be amended as follows “The Appropriate Commission shall endeavor to promote the development of a market (including trading) in power, REC, Energy Efficiency, and Energy Futures in such manner as may be specified and shall be guided by the National Electricity Policy and National Renewable Energy Policy referred to in Section 3 and 3A respectively in this regard.”
- ❖ NEP and NREP should be included reference to REC and Ecerts as well.

## 11) Tariff Design

- ❖ To enable design of economically efficient tariffs, which evolve with the technological and market developments in the sector, Section 62 (3) may be amended as follows:

“The Appropriate Commission shall not, while determining the tariff under this Act, show undue preference to any consumer of electricity but may differentiate according to the consumer's load factor, power factor, voltage, reliability, total load/sanctioned load/maximum demand, pre-payment, total consumption of electricity during any specified period or the time ~~at which the supply is required~~ of consumption of electricity or the geographical position of ~~any area~~ supply, the nature of supply and the purpose for which the supply is required.”

- ❖ To provide for effective implementation of demand response program, a provision for reliability-differentiated tariff is suggested to be incorporated above.

Further, this should also provide for unbundling of distribution tariff in network and energy related charges.

- ❖ **Only Max. Tariff during Shortage (Section 62 (1) (a))** - Provided that the Appropriate Commission may, in case of shortage of supply of electricity, fix the ~~minimum and~~ maximum ceiling of tariff for sale or purchase of electricity in pursuance of an agreement, entered into between a generating company and a licensee or between licensees, for a period not exceeding one year to ensure reasonable prices of electricity;

## 12) Carriage and Content Separation for Phased Retail Competition

- ❖ Separate provision can be mandated for carriage and content separation, with flexibility to the state governments in phasing it across the identified license/sub-license areas. Further, the appropriate tariff regulation should also provide for unbundling of distribution and retail supply tariff.

## 13) Open Access - Cross Subsidy Surcharge

- ❖ While amendment to Section 42 (2) (3<sup>rd</sup> Proviso) lets the state commission be guided by the tariff policy for progressive reduction of CS and CSS, state-level flexibility (within a framework) should be provided to account for current status of CS, consumer mix, cost structure etc. across states.

## 14) Open Access (OA)

- ❖ Given the limited progress on grant of OA in some of the states, an OA registry mandating publication of the application status and retail, and standardization of the procedures will significantly improve the competitive environment thereof.
- ❖ The procedure and modalities to obtain open access for any consumer/generator connected within an area of franchisee/DSL should be clarified.

## 15) Market Destination

- ❖ Section 26 (Section 28) provides for optimum scheduling and despatch of electricity across (within) RLDC. The Security Constrained Economic Despatch optimizes schedule across entities embedded within the RLDC. An amendment to Section 26, enabling optimized scheduling across the country (including intra-state entities) by the NLDC would strengthen countrywide deployment of Security Constrained Economic Despatch, and ultimate migration towards Market Based Economic Despatch.

## 16) Cross Border Trade of Electricity (CBTE)

- ❖ The CBTE is currently restricted to the nodal agencies identified by the ministry, thus limiting competition in such transactions. Given this barrier to market entry, Section 79 should provide for setting trading margins for import/export of electricity.
- ❖ Development of a regional power market would not only benefit the participating countries but also enhance competition in the market. Addition of new market areas on the Indian power exchanges to represent interconnected neighboring countries would enable regional participation. It can be clarified if the CBTE provisions may be guided by bilateral/regional policy.

### Further Reading:

- Anoop Singh, Tooraj Jamasb, Rabindra Nepal & Michael Toman, *Electricity Cooperation in South Asia: Barriers to Cross-Border Trade, Energy Policy* (2018)
- Anoop Singh, Tooraj Jamasb, Rabindra Nepal & Michael Toman, *Cross-border electricity cooperation in South Asia, Policy Research Working Paper Series 7328, The World Bank* (2015).
- Anoop Singh, Priyantha Wijayatunga and P. N. Fernando, *Improving Regulatory Environment for a Regional Power Market in South Asia, South Asia Working Paper No. 44, Aug 2016, Asian Development Bank, Manila* (2016).
- Anoop Singh, Jyoti Parikh, K.K. Agrawal, Dipti Khare, Rajiv Ratna Panda and Pallavi Mohla, *Prospects for Regional Cooperation on Cross-Border Electricity Trade in South Asia, IRADe, New Delhi* (2013).

- ❖ The word 'our country' should be replaced with 'territory of India' or 'a license area' in the Section 2 (15a).

## 17) Direct Benefit Transfer (DBT) (Section 62 & 65)

- ❖ The proposed scheme of billing the consumer by the DISCOM on the basis of subsidized tariff, and subsequent claim of subsidy from the government would pose cash-flow challenge to the DISCOMs. For such consumers, prepaid meters financed through prepaid subsidy under DBT would address this hardship.
- ❖ Similar to DBT scheme implemented for LPG, a DBT scheme for the electricity sector (may be called eDBT) can also ensure targeted delivery of subsidy. Unique identification of the 'beneficiary consumer', in case different from the premise owner, would be required for its effective implementation. To avoid cash-flow hardship to Kutir Jyoti/Lifeline consumers and small farmers, subsidy should be reflected in the bill against normal tariff and the same should be directly payable to the DISCOMs.
- ❖ Along with introduction of DBT, flat rate tariff should be withdrawn. This would promote efficient consumption and would make DBT more beneficial for small consumers.

## 18) Unified Selection Committee

The proposed Single Selection Committee may face political economy constraints while also presenting its own implementation challenges. Clarification regarding the tenure of selection committee members (especially CS of states by rotation), and its nature being a standing committee should be provided (Section 78).

## 19) Electricity Contract Enforcement Authority

- ❖ Creation of a new institutional layer (ECEA) for redressing contract related disputes would face the challenge of consensus across states, and may also face challenge to outline the scope of jurisdiction and its power. Barring this, ECEA may address the investor's concern for variety of PPA related disputes.
- ❖ It needs to be clarified if ECEA's jurisdiction will also cover matters related to REC mechanism, solar rooftop projects etc.
- ❖ Since commercial disputes handled by ECEA can significantly influence tariff payable by the consumers, a mechanism for participation of consumer/associations in the ECEA proceedings would help safeguard consumer interests.
- ❖ The alternate usage of words such as non-performance/violation/breach of contract/non-fulfilment of obligation etc. across the draft needs to be standardized (Section 109B).
- ❖ The proviso regarding eligibility for reappointment of Chairperson (Member) as Member (Chairperson) of ECEA is ambiguous, and needs to be clarified (Section 109E).

## 20) Regulatory Independence

A cooling-off period for regulatory appointments would help strengthen the virtue of regulatory independence in the sector. Concerns about regulatory capture, adversely influencing the consumer's interest, can be addressed by enhancing transparency of regulatory processes and consumer participation thereof.

## 21) National Regulatory Certification Program

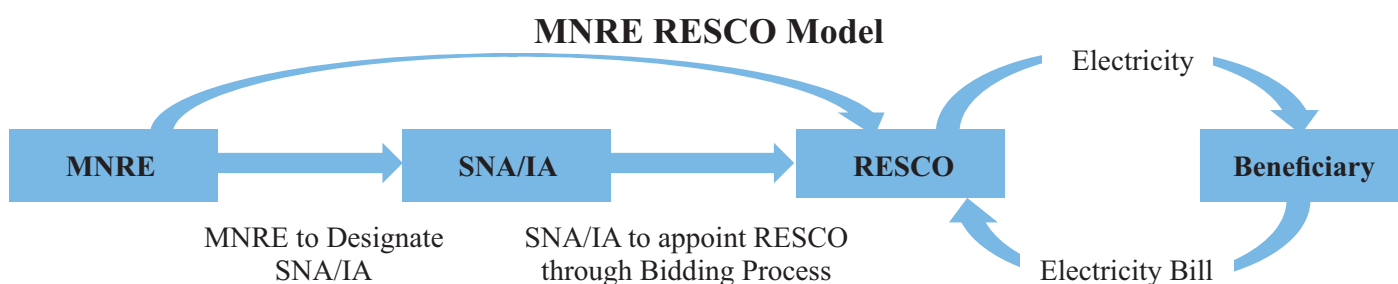
Electricity/Energy Sector Regulation is a specialized skill that has limited pool of human resources. Identification of such 'certified' pool of officers across the overall organizational structure of the power sector and their deployment for regulatory responsibilities can address this limitation. Institutes of national importance can develop appropriate certification/eMasters program for the same.

\* Note : *Underlined text is additional and strikethrough is suggested to be deleted.*

## MNRE: Draft Guidelines for Implementation of Off-Grid Solar Power Plants in RESCO model under MNRE Programme

The Ministry of New and Renewable Energy (MNRE) on 18<sup>th</sup> May, 2020 released draft guidelines for implementation of off-grid solar power plants under RESCO model. Key highlights are given below:

- ❖ The scheme is applicable only for North-eastern States and extended till 31<sup>st</sup> Mar, 2021.
- ❖ Off-grid solar power plants up to 25 kWp can be installed in areas without or unreliable electricity access.
- ❖ Vendor will install and operate project up to 10 kW (above 10 kW) for atleast 10 (15) years.
- ❖ RESCO will sign PPA with power purchaser (beneficiary), who will supply daily min. guaranteed power to the beneficiary, who in-turn will pay for the electricity used on a monthly basis.
- ❖ Two types of systems are proposed: Isolated off-grid systems and Grid connected system (including net metering).
- ❖ Upfront payment of 90% CFA after successful commissioning, or 50% CFA at commissioning and rest at the end of 5 years.
- ❖ The company needs to submit bank guarantee for an amount equivalent to 50% of the eligible MNRE CFA.
- ❖ State Nodal Agency (SNA)/Implementing agency (IA) will select RESCO through competitive bidding.
- ❖ If subsidy is paid upfront, tariff will be ₹5.96/kWh. Tariff would be ₹9.55/kWh, if 50% subsidy is paid upfront and rest after completion of 5 years.
- ❖ Projects to have remote monitoring systems accessible to implementing agency and MNRE.



## CER Opinion

- ❖ The guidelines should provide a framework to identify the size/number of such projects from a list of pre-identified districts having under electrified/unreliable supply.
- ❖ A transparent and fair process for the '**Swiss Challenge**' approach, which allows for identification for prospective sites by a developer, may be adopted for procurement under this scheme.
- ❖ To reduce risk for developers and to enhance competition, numerous small project sites can be identified and bundled, thus, enhancing economies of scale for investment.
- ❖ The data captured from remote monitoring system (block-wise energy generated, consumed and injected to the grid), along with basic technical parameters like installed capacity, panel/module efficiency, storage capacity, source of funding and location should be publicly available through MNRE/dedicated portal for enabling research thereof.
- ❖ The implementing agency should make the quarterly reports, incorporating details such as generation profile, consumption, etc., publicly available through the above mentioned portal.
- ❖ To safeguard against future operational risk, proposed upfront CFA of 90% at time of commissioning should be limited to 70%, and the remaining be sanctioned in equal installments of 10% each.
- ❖ Given that benchmark cost of MNRE are often significantly higher than the dynamically changing market costs, investors while anticipating 90% CFA a lucrative offer, might be willing to participate even at negative bids. Therefore, the competitive bidding must account for such cases to deter any gaming by the bidders/investors.



## RERC: Charging Infrastructure, Tariff and Other Regulatory Issues for Electric Vehicles

The RERC has issued draft for charging infrastructure and other regulatory issues for electric vehicles in Rajasthan. A summary of the proposed draft is given below:

- ❖ Public charging stations in Rajasthan can be either DISCOM owned (on its own or through franchisee agreement), or privately owned.
- ❖ Authorized official of the DISCOM to inspect/examine the procedures/protocols of charging stations, and grant clearance certificate to DISCOMs or privately-owned charging stations.
- ❖ The DISCOMs will setup separate EV cell for monitoring and facilitation of the functioning, operations, safety standards, etc. adopted by charging station operator. For this, DISCOM can charge a fee fixed by the Commission.
- ❖ The charging stations can source power through OA route, or setup with rooftop solar facility, or set up battery swapping stations.
- ❖ Tariff for the charging stations will be as given below :

Category	Energy Charges	Fixed Charges
Public charging station (LT-8)	₹6.00/kWh	₹40/HP/Month
Public charging station (HT-6)	₹6.00/kWh	₹135/VA/Month

- ❖ A rebate of 15% for off-peak hours (23:00 hours to 06:00 hours) to be given to public charging station.
- ❖ Other consumer installing charging stations will be charged as per their respective tariffs.

## CER Opinion

- ❖ **Load Visibility for EV Charging:** Setting up of a separate category for EV charging infrastructure would help identify pattern of load profile and its growth. Adequate provision should be there to ensure that such new connections are given only through ToD enabled smart meters, and are monitored to provide an assessment of growth of this load and its impact on the system over the years.

As per Amendment in the revised Guidelines and Standards for Charging Infrastructure for EVs wide MoP order dated 8<sup>th</sup> Jun, 2020, a category of "Captive Charging Station" has been specified. This category, given relatively large load, should be metered and monitored separately for load visibility.

- ❖ **Inspection by Authorised DISCOMs Official:** There are existing provisions for electricity inspector assigned to inspect adherence to Electricity Rules as per Section (53, 162) of EA, 2003. An additional layer of inspection by authorised official designated by DISCOM for the technical requirement for charging infrastructure as defined by MoP/CEA, in the absence of a clear set of "procedures and protocols", there would be subjectivity in carrying out inspection. Further, from the ease of business point of view, such clarity in advance would help attract private investment in charging infrastructure. Absence of such guidelines, procedures and protocols for EV charging infrastructure are needed otherwise the proposed examination by the officer of the DISCOM may lead to additional administrative burden on DISCOM and potential harassment thereof.
- ❖ **Formation of Separate EV Monitoring Cell:** The task of monitoring charging stations may be assigned to the existing monitoring cell of the DISCOM, with clear and separate provision for monitoring EV load and consumption. In case of significant growth, this may evolve into a separate EV cell. However, creation of a dedicated EV cell, at this moment, may not be administratively feasible due to limited manpower with the DISCOMs. Further, this may also impose significant cost burden incommensurate with the margin generated by this new consumer category over the next two-three years. Alternatively, this task can be handed over to independent agencies who or may be able to develop suitable monitoring applications without much costs to the DISCOM. **Energy Analytics Lab (EAL) at IIT Kanpur would be willing to contribute towards this endeavor.**
- ❖ **Separate Metering/Tariff for Private Charging above 5 kW:** Given that EV charging is a new load, visibility of its growth at the premises of the existing consumer categories would allow the DISCOM to follow behaviour of this

new load. Towards this end, EV charging needs above 5 kW (primarily for 4 wheelers) should be metered separately with a ToD based tariff for the same. This would also ensure that EV charging is undertaken by the consumer in the off-peak hours.

Provision for separate metering/tariff category for private charging above 5 kW would also ensure that such additional load is identified and, the associated connection charges are paid for by the consumer.

In case a separate tariff category is not created for EV charging (above 5 kW), a sampling-based monitoring of EV charging (through separate smart meter) at the premises of domestic/nondomestic/commercial/industrial consumers should be provided to bring visibility to load profile for EV charging.

- ❖ **Defining Service Charges for EV Charging:** Given that EV charging has been defined as a service, the applicable service charges should be left to be decided by the service providers with adequate oversight of the relevant nodal agencies.
- ❖ **Tariff for EV Charging Infrastructure:** As per MoP order dated 8<sup>th</sup> June, 2020, tariff for EV charging Infrastructure shall not be more than 15% above ACoS, Tariff for EV charging should not be subsidised but should be attractive enough for the new business to take off.

## WBERC Draft Amendment to Co-generation and Generation of Electricity from Renewable Sources of Energy Regulations

The WBERC issued draft for the amendment to Co-generation and Generation of Electricity from Renewable Sources of Energy Regulations, 2013. The details of the proposed amendment are given below:

### Proposed Changes in RPO:

- ❖ The proposed RPO targets:

Year	Minimum RPO (in %)	
	Solar	Non-solar
2020-21	3.0	9.0
2021-22	4.5	10.0
2022-23	6.0	11.0

- ❖ DISCOMs will have to procure 100% of energy from Waste to Energy plants in their respective areas.
- ❖ Unmet solar RPO obligation above the 85% of total RPO can be met by non-solar energy, and vice-versa.
- ❖ RE drawl by an OA consumer above its RPO can be considered towards RPO of DISCOM.
- ❖ Energy generation from rooftop generators who are not obligated entities, to be counted towards RPO of DISCOMs.

### Proposed Changes for Rooftop Regulations:

- ❖ Consumer can install rooftop system of 1 kW or above capacity (up to total sanctioned load or contract demand) and can claim net-metering/net-billing benefits.
- ❖ Domestic consumer can avail net-metering benefits for load up to 6 kW, above 6 kW net billing arrangement will be applicable.
- ❖ Electricity consumption in peak hours/off-peak hours to be adjusted against peak hour/off-peak hour generation, respectively. Further, excess electricity injection beyond 90% of the consumer's consumption to be carried forward to next month.
- ❖ At the end of the year, any excess energy injection above 90% of the total consumption, shall be treated as unwanted/inadvertent electricity and will not be payable by the licensee.
- ❖ For net-billing scheme, licensee to sign PPA with rooftop owner, and licensee to raise bill after adjusting for consumer credit from energy injection. At the end of the year, the licensee is not obligated to pay for any credits due to rooftop owner (consumer).

## CER Opinion

- ❖ **Planning for RPO Compliance (3.1):** It is suggested that the RPO trajectory for the state be specified in advance for a medium to long-term basis so as to provide opportunity to obligated entities to make appropriate investments or plan to procure RE/REC.
- ❖ **Fungibility for RPO Compliance (3.1):** Fungibility (substitutability) provided between solar and non-solar RPO to ensure their respective compliance (beyond 85%) would provide much needed flexibility to the obligated entities, and is a welcome proposal. Full fungibility across RE sources would enhance economic efficiency of adoption of clean energy options.
- ❖ **REC by Location? (3.4 (iii)):** As per clause (iii) of regulation 3.4 of the principal regulation, purchase of RECs seems to be limited to plants located within the area of supply of the licensee. The procurement of REC from exchanges is anonymous in nature and cannot be traced to any location. Hence, this proviso may be modified appropriately.
- ❖ **'Renewable Energy' Procurement through Power Exchanges (PXs) (3.4 (iv)):** Procurement of energy through PXs is anonymous in nature and cannot be identified with the source/technology of the generator. Hence, such procurement cannot be attributed to RE energy for accounting towards RPO compliance, until a RE specific contracts are available on PXs.
- ❖ **Price Cap (6.0):** It is not clear if a constant price cap, as per Regulation 6.0 of the principal regulation, is applicable for all three years. The regulation may provide for subsequent revision (based on an escalation factor) of the same in the subsequent years.
- ❖ **Price Cap for Tariff Discovered through Competitive Bidding (6.0):** In case the tariff for RE has been discovered under section 63 of EA, 2003 and be adopted by the commission, the same should not be subjected to the price cap under regulation 6.0.
- ❖ **RPO Compliance Reporting (3.8):** Regulations 3.8 should also provide for reporting of necessary details regarding quantum of solar and non-solar RPO compliance including any quantum of RPO shortfall in solar/non-solar RPO met through non-solar/solar energy, respectively. Further, RPO compliance met through REC procurement should be separately identified.
- ❖ **RPO Compliance Framework:** An RPO compliance framework, supported with penalty in proportion to the shortfall, would help ensure that obligated entities take adequate steps to meet their RPO target including through purchase of RECs. A mechanism akin to the buyout price may be implemented by the Commission. The Commission may like to refer to some of the relevant research papers on the subject.
- ❖ **Banking and Rollover of RPO (3.10):** RE sources are subjected to uncertainty, thus exposing the obligated entities to fall short or exceed the RPO target. Provision for limited banking and rollover of RPO would provide necessary flexibility to the obligated entities towards their RPO compliance. A shortfall of 0.25-0.50 percentage points may be allowed to be banked (in case of exceeding RPO target)/rolled (in case of shortfall to RPO target).
- ❖ **Accounting of Excess RE by OA Consumer/Captive Generators (3.10):** Excess RE procurement by OA consumer/captive generators has economic value, which can be traded as RECs, or can be banked (if permitted) to adjust towards RPO compliance in the later years. The OA consumer/captive generators should firstly be allowed to derive benefit of such excess RPO (in REC equivalent terms), and thereafter, with their consent, any remaining excess RE can be allowed for accounting towards distribution licensee's RPO.
- ❖ **Distribution/Wheeling losses (3.10):** Accounting of wheeling losses of procured RE to the distribution network should not be accounted towards RPO, which is defined (as per Section 86(e) of the Act) with respect to the consumption in the area of the distribution licensee. Further, calculation of wheeling losses embedded 'in kind' for RE procurement may be complex on account of differential contractual provisions entered into by different procuring agencies for individual contracts. Thus, this provision may be excluded or suitably modified.
- ❖ **Competitive Bidding vs Negotiated Tariff (3.11):** Removal of regulation 3.11, abrogating the preference for the negotiated tariff over the competitive bidding for procurement of RE power, is a welcome step. In line with the spirit of EA, 2003, preference for RE procured through competitive bidding may also be specified.

## Regulatory Updates

### Tariff



CERC approved annual fixed charges (in ₹lakh) for tariff period 2019-24 for transmission assets of PGCIL's Dehri-Karamnasa transmission system in eastern region as following:

2019-20	2020-21	2021-22	2022-23	2023-24
142.87	144.76	146.89	148.95	151.16

CERC approved transmission charges for PGCIL's asset 1×500 MVA, 400/220/33 kV ICT along with associated bays at Trichy substation as given below:

Particulars	2017-18 (pro-rata)	2018-19
Amount (in ₹lakh)	336.19	452.51

CERC directed Jhabua Power Limited to issue revised invoices to KSEB by considering SHR of 2347.9 kCal/kWh for payment of fixed charges and SHR of 2465.2 kCal/kWh for payment of fuel charges.



KSERC approved recovery of fuel surcharge amounting ₹52.68 crore for Jul, 2019 to Sep, 2019.



KERC extended applicability of wind tariff of ₹3.26/kWh (order dated 27<sup>th</sup> Feb, 2019) from 1<sup>st</sup> Apr, 2020 to 31<sup>st</sup> Mar, 2021, which will be considered as ceiling tariff for the purpose of reverse bidding. The

tariff will also be applicable for surplus banked energy purchased by the DISCOMs.



MERC adopted generic tariff of grid scale solar projects at ₹2.83/kWh for procurement and settlement of surplus power from rooftop PV projects for 2020-21. Additionally, MERC extended existing variable charges for biomass and

non-fossil fuel-based co-generation projects for 2020-21 at ₹5.55/kWh and ₹4.38/kWh, respectively.

MERC agreed to compensate ACSEPL and RSPPL due to imposition of safeguard duty (including additional GST) under 'Change in Law' provisions of PPA for capacity of 319.16 MW and 362.50 MW, respectively, and assured the completion of process within 15 days by MSEDCL after verification.

MERC on petition of TPC-T, approved removal of ₹3.65 crore and ₹2.43 crore from non-tariff income (amortisation of service line contributions) for 2017-18 and 2018-19, respectively. Further, the Commission also approved capitalisation of ₹0.43 crores in 2017-18

towards merged DPR scheme "Replacement of 22 kV and 33 kV Bus Sections at Carnac Receiving Station."



MPERC extended the date of filing MYT petitions for the control period 2019-20 to 2023-24 by GENCOs and TRANSCO up to 30<sup>th</sup> Jun, 2020 from 14<sup>th</sup> Apr and 28<sup>th</sup> Apr, 2020, respectively.



RERC extended tariff order dated 1<sup>st</sup> May, 2020 for lignite-based power plant of M/s JSW Energy (Barmer) Ltd. (Unit 1 to 8) on interim basis w.e.f. 1<sup>st</sup> Apr, 2020. The applicable tariff will be ₹4.20/kWh (FC ₹2.50/kWh, VC ₹1.70/kWh).

RERC approved true up for 2013-14 to 2017-18 for Chabara Thermal Power Project (CTPP) (Units 3 & 4) as given below in ₹crore:

Particulars	2013-14	2014-15	
	U-3	U-3	U-4
AFC	72.14	266.65	60.47
Total Energy Charges	48.76	251.44	59.44
Revenue Gap/(Surplus)	24.12	5.2	1.6
Particulars	2015-16	2016-17	2017-18
	U-3 & 4	U-3 & 4	U-3 & 4
AFC	539.18	596.72	557.79
Total Energy Charges	539.33	731.01	672.5
Revenue Gap/(Surplus)	19.77	37.73	55.8

RERC provisionally extended tariff order dated 6<sup>th</sup> Jan, 2020 for CSCTPP Units 5 & 6 (2×660 MW) for 2020-21 w.e.f. from 1<sup>st</sup> Apr, 2020 as given below:

Particulars	Unit-5	Unit-6
Fixed Charges (₹/kWh)	1.96	1.56
Energy Charges (₹/kWh)	2.16	2.16
Total Tariff (₹/kWh)	4.13	3.73

RERC finalized capital cost of ₹8215.73 crore for 2014-15 to 2019-20 for Kalisindh Thermal Power Project (Units 1 & 2). Further, also approved tariff for 2014-15 to 2019-20 as given below in ₹/kWh:

Particulars	2014-15 (329 days)	2015-16 (251 days)		2016-17
	U-1	U-1	U-2	U-1 & 2
Energy Charges	2.24	2.34	2.34	2.54
Total Tariff	4.16	4.3	3.95	4.55
Particulars	2017-18	2018-19	2019-20	
	U-1 & 2	U-1 & 2	U-1 & 2	
Energy Charges	2.6	2.75	2.76	
Total Tariff	4.52	4.58	4.55	



TNERC approved provisional subsidy of ₹8413.98 crore payable by Tamil Nadu Govt. to TANGEDCO for 2020-21.

TSERC fixed tariff for refuse derived fuel (RDF) based projects at ₹7.84/kWh (FC and VC at ₹3.42 and ₹4.42, respectively) for project



## Regulatory Updates

achieving COD during 2019-20 to 2023-24. Further, it also determined VC for the existing biomass, bagasse and industrial waste-based (IWB) projects for 2019-20 as following:

Parameter	Biomass Projects	Bagasse Projects	IWB Projects
Variable Cost (₹/kWh)	4.77	3.14	4.77



UERC extended the applicability of solar tariff order dated 7<sup>th</sup> Jun, 2019 till 30<sup>th</sup> Sep, 2020.



UPERC allowed additional expenditure of ₹38.43 crore on account of increase in landed price of FSA grade coal due to 'Change in Law' events.

UPERC extended the applicability of provisional tariff for next six months (1<sup>st</sup> Apr, 2020 to 31<sup>st</sup> Oct, 2020) subject to adjustment with any applicable interest due to COVID-19.



WBERC specified fixed charge and energy charge for Unit-5 and Units 1 & 2 of BTPS, which will be effective from 1<sup>st</sup> Apr, 2020 onwards. The detail of charges is below:

Particulars	Unit-5 (210 MW)	Unit-1&2 (60 MW each)
Annual Capacity Cost (₹crore)	112.58	44.27
Energy Charge (₹/kWh)	2.38	3.05

power supply by RIPL, or MSEDCL allows additional procurement, otherwise SWPGCL will reduce 240 MW to 210 MW.

MERC approved 25-year LTPP for 100 MW and 250 MW solar power from Tata Power Renewable Energy Ltd. and Aavaada Energy Pvt. Ltd., respectively, at ₹2.90/kWh (discovered through competitive bidding).



MPERC confirmed tariff at ₹4.79/kWh discovered through competitive bidding as per the PSA executed between M.P. Power Management Company Ltd., Bhopal and M/s Pench Thermal Energy (MP) Ltd. for LTPP of 1230 MW from 1320 MW thermal power station to be set up on Design, Build, Finance, Own and Operate (DBFOO) basis.



TNERC approved procurement of RTC power up to 500 MW through medium-term contract of three years initiated by MoP/GoI under pilot scheme-II at ₹3.26/kWh to meet additional power requirement.

TNERC approved procurement of 500 MW solar power by TANGEDCO through SECI for 25 years at the rate of ₹2.78/kWh (including ₹0.07/kWh as trading margin).



UPERC approved UPPCL's request for procuring 24 MW power and executing the PPA with THDC India Ltd. at a tariff of ₹4.87/kWh.

## Power Procurement



BERC approved proposal for procurement of 300 MW and 150 MW solar power from NTPC and SECI for 25 years at tariff of ₹2.60/KWh and ₹2.44/KWh, respectively.



CSERC approved Power Sale Agreement (PSA) between SECI and CSPDCL at ₹2.77/kWh (including trading margin of ₹0.07/kWh) for 400 MW hybrid project (solar and wind).



GERC approved procurement of 45 MW RTC power at ₹3.67/kWh (at GETCO periphery) from Adani Enterprises Ltd. from 1<sup>st</sup> Apr, 2020 to 31<sup>st</sup> Mar, 2021.



MERC accepted 25-year PPA between MSEDCL and SWPGCL for 240 MW power procurement at levelised tariff of ₹3.28/kWh till the commencement of

## Renewable Energy, RPO and REC



MNRE directed all RE implementing agencies to treat lockdown as 'Force Majeure' and may grant extensions to RE projects for time equivalent to period of lockdown (25<sup>th</sup> Mar, 2020 to 31<sup>st</sup> May, 2020) and an additional 30 days.

MNRE released 100% solarization schemes of Konark Sun-temple and Konark town with ₹25 crore as CFA provision for installation of 10 MW grid connected solar project and various other off-grid solar applications.



CERC extended validity of RECs, which expired/due to expire between 1<sup>st</sup> Apr - 30<sup>th</sup> Sep, 2020 till 31<sup>st</sup> October, 2020.

## Regulatory Updates



BERC allowed NBPDCCL & SBPDCL to carry forward the shortfall in RPO compliance of 2019-20 to 2020-21, which is to be met by purchasing either solar power or solar REC in 2020-21.



HERC adopted tariff of ₹2.73/kWh for procuring 240 MW solar power from M/s Avaada Energy Pvt. Ltd. for 25 years.



JSERC extended validity of RPO regulations, 2016 until 31<sup>st</sup> Mar, 2021 and defined RPO target of 2019-20 as RPO for 2020-21, on account of postponement of the public hearing on draft RPO regulations due to COVID-19 outbreak.



KERC allowed carrying forward unutilized banked energy on 31<sup>st</sup> May, 2020 up to 31<sup>st</sup> Jul, 2020 for mini hydel generators with wheeling and banking agreement.



MERC approved the following projects and tariffs under 'Mukhyamantri Saur Krishi Vahini Yojana' towards fulfilment of MSEDCL's solar RPO:

- For projects to be developed by EESL in Maharashtra, tariff of ₹3.11/kWh for 100 MW grid interactive solar PV for 25-year LTPP through MSPGCL.

- Tariff ranging from ₹3.28 to ₹3.30/kWh discovered through competitive bidding conducted by MSEDCL for 283 MW solar power procurement for 25 years.

MERC extended EPA between TPC-D and TPC-W for 13 years from COD for wind power procurement until 7<sup>th</sup> May, 2020 from Bramanwel and till 14<sup>th</sup> Dec, 2020 from Khandke. After expiry of the EPA, TPC-D can procure power through competitive bidding route only.



KSERC approved a tripartite (INOX Renewables Ltd, M/s D.J. Malpani and KSEB Ltd.) 25-year PPA for 16 MW wind energy from the COD.

infrastructure for Electric Vehicles (EV) to include tariff for EV as "The tariff shall not be more than the average cost of supply plus 15 (fifteen) percent unless otherwise specified by the Tariff policy."

MoP clarified that during the lockdown period, DISCOMs need to pay 50% of cost of power as LC for scheduling power and remaining 50% should be paid within the period given in the PPA (or 45 days), failing which LPS would be applied.

CERC approved Business Rules for RTM contracts to be incorporated on IEX & PXIL platforms, and further directed IEX & PXIL to follow the "Detailed Procedures for Scheduling of Collective Transactions through RTM" issued by POSOCO from time to time.

CEA created Standardization Cell, which will be envisaged to act as a channel of communication among the Government, Industry and Bureau of Indian Standards to facilitate the identification of new subjects and relevant experts for standardization and enhance implementation of standard.

CEA constituted a committee under the chairmanship of Chairperson (CEA) and other members from different institutes and stakeholders of the power sector, in order to prepare National Electricity Plan (NEP) for the period 2022 to 2027.

CEA constituted the 20th Electric Power Survey Committee (EPSC) consisting Chairman with 31 Members from power sector and other stakeholders. The committee will submit its report in a period of 15 months. Main objectives of the committee are as follows:

- To finalize the methodology of load forecast.
- To forecast the year wise electricity demand projection for each State, Union Territory, Region and All India in detail for the years 2021-22 to 2031-32.
- To project the electricity demand for terminal year 2036-37 & 2041-42.

BERC reduced LPS to 0.75%/month (against existing 1.25%) for delayed payment beyond 60 days from the date of presentation of bills, falling between lockdown period. The Commission also relaxed DPS for delay in payment beyond 10-day grace period (by the consumers), falling in between lockdown, to 0.75%/month (against existing 1.25%).

CSERC ordered CSPDCL to grant HT power connection to the M/s Solbridge Energy Pvt. Ltd. at 132 kV level for a contract demand of 500 kVA.

JERC Goa clarified that no LPS would be levied on fixed charges of industrial and commercial consumers for the

## Other

Ministry of Power advised the GENCOs to replace imported coal for blending, in thermal power plant, with domestic coal to reduce the coal imports.

MoP amended guidelines and standards for charging

## Regulatory Updates

lockdown period.

JERC Manipur and Mizoram clarified that **LPS on any pending bill amount** for which payment falls between lockdown period will be waived-off fully.

JSERC ordered to reduce the rate of LPS to 6% per annum for the delayed payments with due date during the lockdown period payable by **DISCOMs to the GENCOs and TRANSCOs**.

MERC extended the **SCoD and financial closures timeline for AHPPL** for the period of lockdown plus thirty days as per the MNRE order and directed AHPPL to fix exact period of relief needed after ending of the lockdown period.

MERC issued practice directions to allow revision in contract demand up to 3 occasions to HT Industrial and HT Commercial consumers subject to curtailment of load factor incentive for 3<sup>rd</sup> revision, and up to 2 occasions to **LT Industrial and LT Commercial** consumers in a billing cycle till 31<sup>st</sup> Jul, 2020.

MERC permitted **TPC-D** for bidding towards 25-year procurement of wind-solar hybrid power from grid connected wind-solar hybrid power projects with due corrections in the bidding document.

TSERC directed DISCOMs to collect electricity bills during lockdown for actual consumption only from

industries and ordered deferment of fixed charges until 31<sup>st</sup> May, 2020 without any penalty or interest. Further, 1% rebate will be offered to industries for payment of bill within due date.

TNERC ordered **TANGEDCO** to recover 20% of the contracted demand or recorded demand, whichever is higher from HT consumers during lockdown period.

UERC approved the Implementation of Real Time Data Acquisition System for **SAIFI/SAIDI** measurement at 11 kV feeder level of 66 non-SCADA towns of UPCL under IPDS amounting ₹5.92 crore.

UPERC modified the adopted CERC DSM Regulations and brought all renewable plants, which are equal to or less than 400 MW capacity, by modifying applicable Regulations, to take care of state specific requirement. The Commission decided that the prevailing provisions of these Regulations shall continue to be in force till State specific DSM Regulations are notified.

UPERC acknowledged the request of UPPCL to modify the adopted CERC DSM Regulations and bring all renewable plants, which are equal to or less than 400 MW capacity.

WBERC approved investment proposal (capital expenditure) of WBSETCL for ₹333.42 crore to implement five new transmission schemes.

## Tariff Orders

State/Union Territory (SERC)	Licensee/Utility	True-up	Annual Performance Review (APR)	Aggregate Revenue Requirement (ARR)	Tariff
Chhattisgarh (CSERC)	CSPDCL	FY 17-18 FY 18-19			FY 20-21
	CSPGCL, CSPTCL, CSLDC	FY 17-18, FY 18-19 FY 20-21			
Goa and UTs (JERC)	EWEDC, DNHPDCL, EDDD, EDTD-DNH	FY 18-19	FY 19-20	FY 20-21	FY 20-21
	LED	FY 15-16 FY 16-17	FY 19-20	FY 20-21	FY 20-21
	PPCL	FY 17-18		FY 20-21	FY 20-21
	EDA&N	FY 16-17	FY 19-20	FY 20-21	FY 20-21
	PED	FY 17-18 FY 18-19	FY 19-20	FY 20-21	FY 20-21
	EDG	FY 15-16		FY 20-21	FY 20-21
Gujarat (GERC)	AIVPL, MUPL	FY 18-19	FY 18-19		FY 20-21
Haryana (HERC)	UHBVNL, DHBVNL	FY 18-19	FY 19-20	FY 20-21 to FY 24-25	FY 20-21
Himachal Pradesh (HPERC)	HPSEBL	FY 17-18	FY 20-21		FY 20-21
Jharkhand (JSERC)	TSL, JUSCO	FY 16-17 FY 17-18			
Kerala (KSERC)	CoPT, KDHPCL	FY 18-19			
	TCED	FY 17-18			
	Technopark	FY 16-17		FY 18-19 to FY 21-22	

**Note:** 'Other Notifications' can be accessed through the online version of this issue.



State/Union Territory (SERC)	Licensee/Utility	True-up	Annual Performance Review (APR)	Aggregate Revenue Requirement (ARR)	Tariff
Manipur and Mizoram (JERC)	P&ED	FY 18-19	FY 19-20	FY 20-21	FY 20-21
Punjab (PSERC)	PSTCL	FY 18-19	FY 19-20	FY 20-21 to FY 22-23	FY 20-21
Telangana (TSERC)	TSSPDCL, TSNPDCL			FY 19-20 to FY 23-24	
Uttarakhand (UERC)	UPCL	FY 18-19		FY 20-21	FY 20-21
	PTCUL, UJVN	FY 18-19			FY 20-21

## Regulations

Title	Date of Approval/Notification
<b>Tariff</b>	
Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (First Amendment) Regulations, 2020 [Draft]	1 <sup>st</sup> April 2020
Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (Second Amendment) Regulations, 2020 [Draft]	1 <sup>st</sup> June 2020
<b>Renewable Energy (including RPO and REC)</b>	
Central Electricity Regulatory Commission (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2020	23 <sup>rd</sup> June 2020
Chhattisgarh State Electricity Regulatory Commission (Renewable Purchase Obligation and REC Framework Implementation) (First Amendment) Regulations, 2020 [Draft]	6 <sup>th</sup> May 2020
West Bengal Electricity Regulatory Commission (Cogeneration and Generation of Electricity from Renewal Sources of Energy) (First Amendment) Regulations, 2020 [Draft]	11 <sup>th</sup> June 2020
Ministry of New and Renewable Energy (Guidelines and model PPA for Implementation of Off-grid Solar Power Plants in RESCO model under MNRE Programme) [Draft]	18 <sup>th</sup> May, 2020
<b>Codes</b>	
Chhattisgarh State Electricity Regulatory Commission (Standards of Performance in Distribution of Electricity) Regulations, 2020	15 <sup>th</sup> May 2020
Haryana Electricity Regulatory Commission (Standards of Performance of Distribution Licensees and Determination of Compensation) Regulations, 2020	24 <sup>th</sup> April 2020
Madhya Pradesh Electricity Balancing and Settlement Code 2015 (First Amendment)	2 <sup>nd</sup> June 2020
Tamil Nadu Electricity Supply Code, 2004 (Amendment), 2020 [Draft]	28 <sup>th</sup> April 2020
<b>Others</b>	
Central Electricity Regulatory Commission (Payment of Fees) (Second Amendment) Regulations, 2020	13 <sup>th</sup> April 2020
Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020	4 <sup>th</sup> May 2020
Haryana Electricity Regulatory Commission (Single Point Supply to Employers' Colonies, Group Housing Societies and Residential or Residential cum Commercial/ Commercial Complexes of Developers and Industrial Estates/ IT parks/SEZ) Regulations, 2020	22 <sup>nd</sup> April 2020
Haryana Electricity Regulatory Commission (Communication System for Intra-State transmission of electricity) Regulations, 2020 [Draft]	20 <sup>th</sup> April 2020
Himachal Pradesh Electricity Regulatory Commission (Power System Development Fund) Regulations, 2020 [Draft]	17 <sup>th</sup> June 2020
Rajasthan Electricity Regulatory Commission (Service) (Sixth Amendment) Regulations, 2020	8 <sup>th</sup> May 2020
CERC (Deviation Settlement Mechanism and related matters) (Fifth Amendment) Regulations, 2014	29 <sup>th</sup> May 2020
Power System Operation Corporation Limited (Procedure for Scheduling of Collective Transactions through Real Time Market) (RTM)	31 <sup>st</sup> May, 2020
Power System Operation Corporation Limited (Guideline-on-Interface-Requirement) [Draft]	23 <sup>rd</sup> Apr, 2020
Ministry of Power Electricity Act (Amendment), 2020 [Draft]	27 <sup>th</sup> Apr, 2020
Ministry of Coal (Standard Operating Procedure (SoP) of National Coal Index)	6 <sup>th</sup> May, 2020
Central Electricity Authority National Electricity Plan (NEP) (2022-2027)	16 <sup>th</sup> June, 2020



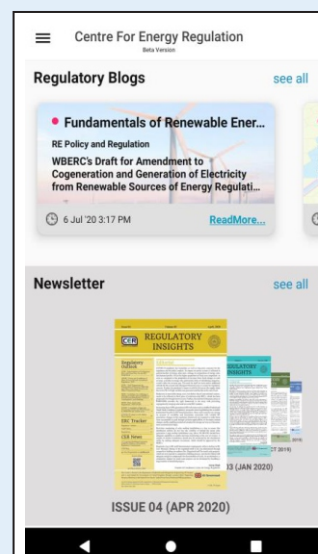
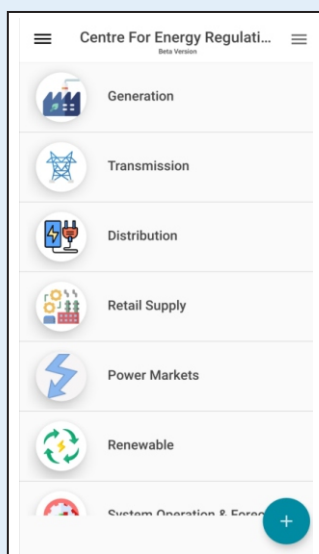
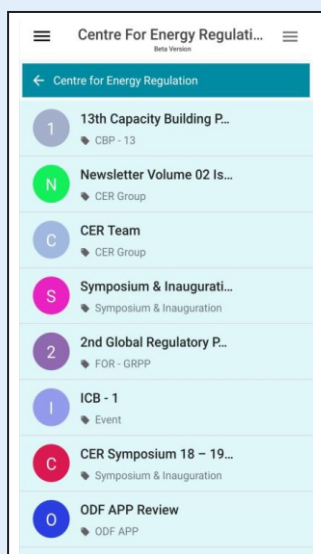


## 1<sup>st</sup> Regulatory Conclave (Online) on Draft Electricity Act (Amendment), 2020

Centre for Energy Regulation (CER), organized the 1<sup>st</sup> Regulatory Conclave Online on 30<sup>th</sup> Apr 2020 to discuss the 'Draft Electricity Act (Amendment), 2020. The conclave was attended by Mr. Arun Goyal (Member, CERC), Mr. Subhash Chandra Das (Chairperson, AERC), Mr. D. S. Misra (Chairperson, CSERC), Mr. A. K. Singhal (Member, DERC), Mr. P. J. Thakkar (Member, GERC), Mr. D. S. Dhesi (Chairperson, HERC), Mr. Pravindra Singh Chauhan (Member, HERC), Mr. S. K. B. S. Negi (Chairperson, HPERC), Er. Maneesh Mahajan (Executive Director (Technical), HPERC), Mr. M. K. Goel (Chairperson, JERC Goa & UTs), Mr. Arbind Prasad (Chairperson, JSERC), Mr. Pravas Kumar Singh (Member, JSERC), Mr. Rabindra Narayan Singh (Member, JSERC), Mr. U. N. Behera (Chairperson, OERC), Ms. Anjali Chandra (Member, PSERC), Mr. M. Chandrasekar (Chairperson, TNERC) and Mr. Raj Pratap Singh (Chairperson, UPERC). The session offered a wide range of views on multiple sections of the proposed Act. The key discussion points were - distribution sub-licensee, provisions enabling Direct Benefit Transfer (DBT) scheme, selection process for commissioners of ERCs, reduction in cross subsidy, RE purchase obligation, renewable generation obligation, setting up of ECEA etc. CER later presented key outcomes of 1<sup>st</sup> Regulatory Conclave & CER's opinion to Ministry of Power.

## CER App

CER launched a newer version of its App, which is available as "CER App" on the play store. The new App provides access to our Blog (CER's Regulatory Blog), Newsletter, Discussion Forum, and Updates on CER's activities.



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. This material has been funded by the Government of UK. However, the views expressed herein do not necessarily reflect the UK Government's official policies.



### Other Initiatives



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