

**VIEWS OF GRIDCO**

**ON**

**DRAFT**

**CERC (INDIAN ELECTRICITY GRID CODE)**

**REGULATIONS, 2022**

## Draft Regulation 5(2): Demand Forecasting

As per Regulation 5(2) of the draft IEGC Regulations, 2022:

- Distribution licensee within a State shall estimate the demand in its control area for the next five (5) years starting from 1st April of the next year and submit the same to the STU by 31st July every year and Forum of Regulators (FoR) may develop guidelines for demand estimation by distribution licensees.
- STU in co-ordination with all distribution licensees shall estimate the demand for the entire State by 30th August every year duly considering the diversity for the next five (5) years starting from 1st April of the next year.

*“(iii) Forum of Regulators may develop guidelines for demand estimation by the distribution licensees for achieving consistency and statistical accuracy by taking into consideration the factors such as economic parameters, historical data and sensitivity and probability analysis.”*

### Proposal

- ❑ Forum of Regulators (FOR) in the first implementation year may develop guidelines for demand estimation, based on which the distribution licensees will estimate the demand in their respective control area so also STU for the State.
- ❑ No timeline for distribution licensee & STU should be prescribed for the first year of implementation without stipulating the timeline for Forum of Regulators to develop the said guidelines.
- ❑ After successful execution of demand forecasting for first year in accordance with prescribed guidelines by FOR, the timeline may be specified for distribution licensee and STU for demand estimation.

## Draft Regulation 5 (3): Generation Resource Adequacy Planning

- As per Regulation 5 (3) of the draft IEGC Regulations, 2022, distribution licensee shall assess the existing generation resources, identify the additional generation resource requirement to meet the estimated demand in different time horizons and prepare generation resource procurement plan.
- FOR may develop a model Regulation stipulating inter alia the methodology for generation resource adequacy assessment, generation resource procurement planning and compliance of resource adequacy target by the distribution licensee

*“(f).....Failure of a distribution licensee to meet the generation resource adequacy target approved by the SERC shall render the concerned distribution licensee liable for payment of resource adequacy non-compliance charge as may be specified by the respective SERC.*

*(g) For the sake of uniformity in approach and in the interest of optimality in generation resource adequacy in the States, FOR may develop a model Regulation stipulating inter alia the methodology for generation resource adequacy assessment, generation resource procurement planning and compliance of resource adequacy target by the distribution licensee.”*

### Proposal

- In the first implementation year no timeline should be prescribed for distribution licensee, STU and NLDC for Generation Resource Adequacy Planning.
- After development of a model regulation by FOR timeline may be fixed for distribution licensee, STU and NLDC.
- If a distribution licensee fails to meet the generation resource adequacy target approved by SERC, then the distribution licensee may be liable for payment of resource adequacy non-compliance charge, provided that it has not followed the model regulation of FOR.
- In case of non-availability of adequate Generation Resources due to any Force Majeure conditions, natural disasters and the factors not within the control of the distribution licensee, resource adequacy non-compliance charge should not be imposed.

## Draft Regulation 5 (4) (a)

*“5(4) Transmission resource adequacy assessment:*

*(a) CTU shall undertake assessment and planning of the inter-State transmission system as per the provisions of the Act and shall inter alia take into account:*

*(i) adequate power transfer capability across each flow-gate;*

*(ii) import and export capability for each control area;*

*(iii) import and export capability between regions; and*

*(iv) cross-border import and export capability*

### Proposal

- Penal provision on CTU may be prescribed in the above Grid Code for their failure to provide adequate power transfer capability across each flow-gate, import and export capability for each control area, import and export capability between regions and cross-border import and export capability.

## Draft Regulation 5(4)(b)

*“b) STU shall undertake assessment and planning of the intra-State transmission system as per the provisions of the Act and shall inter alia take into account:*

- i) import and export capability across ISTS and STU interface; and*
- ii) adequate power transfer capability across each flow-gate.”*

### Proposal

- There should be penal provision on STU in the above Grid Code for their failure to provide adequate import and export capability across ISTS and STU interface and adequate power transfer capability across each flow gate.

## Draft Regulation 21 (3)

*“(3) The transmission licensee proposing its transmission system or an element thereof for trial run shall give a notice of not less than seven days to the concerned RLDC and CTU.”*

### Proposal

- Notice should also be given to the concerned stakeholders of the transmission system or an element thereof, undergoing trial run for witnessing such trial run.
- Therefore, the above Regulation should be modified accordingly

*“(3) The transmission licensee proposing its transmission system or an element thereof for trial run shall give a notice of not less than seven days to the concerned RLDC, CTU and the concerned Stakeholders”*

## Draft Regulation 23 (1)

*“23(1) Trial run of a transmission system or an element thereof shall mean successful energisation of the transmission system or the element thereof at its nominal system voltage through interconnection with the grid for continuous twenty-four (24) hours flow of power and communication signal from the sending end to the receiving end and with requisite metering system, telemetry and protection system:*

*Provided that under exceptional circumstances and with the prior approval of CEA, a transmission element can be energized at lower nominal system voltage level.”*

### Proposal

- Maintaining nominal system voltage 24 hours continuously may not be possible always.
- Modification may be taken up in line with Clause No.3 (b) (Standards for Operation and Maintenance of Transmission Lines) of the CEA (Grid Standards) Regulations, 2010, specifying the limits for variation in nominal system voltage .

## Draft Regulation 29 (2) (a)

*“29(2) Isolation, Taking out of service and Switching off of an element of the grid*

*a) No element(s) of the grid shall be isolated from the grid, except (i) during emergency as per the Detailed Operating Procedure(s) of NLDC or RLDC or SLDC, as the case may be, where such isolation would prevent a total grid collapse or would enable early restoration of power supply; (ii) for safety of human life; (iii) when serious damage to a costly equipment is imminent and such isolation would prevent it; and (iv) when such isolation is specifically instructed by NLDC or RLDC or SLDC, as the case may be.”*

### Proposal

Isolation of the element (s) of the grid is necessary for safety of animals also and following modification may be made:

*“No element(s) of the grid shall be isolated from the grid, except (i) during emergency as per the Detailed Operating Procedure(s) of NLDC or RLDC or SLDC, as the case may be, where such isolation would prevent a total grid collapse or would enable early restoration of power supply; (ii) for safety of human **and animal life**; (iii) when serious damage to a costly equipment is imminent and such isolation would prevent it; and (iv) when such isolation is specifically instructed by NLDC or RLDC or SLDC, as the case may be.”*



## Draft Regulation 31 (2) (b)

*“(b) Each SLDC shall develop methodology for daily, weekly, monthly, yearly demand estimation in MW and MWh for operational analysis as well as resource adequacy purposes .....*”

### Proposal

- ❑ Guidelines may be prescribed by Forum of Regulators (FOR) for SLDCs to develop daily, weekly, monthly, yearly demand uniformly across the country with better accuracy for estimation in MW and MWh for operation analysis as well as resource adequacy purposes.

## Draft Regulation 43 (5)

*“(5)Entities connected to both inter-State transmission system and intra-State transmission system shall be under control area jurisdiction of RLDC, if more than 50% of quantum of connectivity is with ISTS, and if more than 50% of the quantum of connectivity is with intra-State transmission system, then it shall be under control area jurisdiction of SLDC.”*

### Proposal

- ❑ The IEGC has not stipulated the control area jurisdiction in case of 50% quantum of connectivity with inter-State transmission system and other 50% with intra-State transmission system.



## Draft Regulation 46 (4) (h) (ii)

*“(ii) In case a generating station, or unit thereof, opts to go under unit shut down (USD), the generating company owning such generating station or unit thereof shall fulfil its obligation to supply electricity to its beneficiaries who had made requisition from the said generating station prior to it going under USD, by entering into a contract(s) covered under the Power Market Regulation or by arranging supply from any other generating station or unit thereof owned by such generating company subject to honouring of rights of the original beneficiaries of the said generating station or unit thereof from which supply is arranged.”*

### Proposal

- ❑ In the event of non-supply of power to the beneficiaries under unit shut down (USD), a mechanism for compensation to the affected beneficiaries may be suitably prescribed in the Grid Code.

## Draft Regulation 47 (9) (a) & (b)

“(9) *Energy Metering and Accounting:*

- (a) *The CTU shall be responsible for installation, operation and periodic calibration of Interface Energy Meters (IEMs).....*
- (b) *The installation, operation, calibration and maintenance of Interface Energy Meters (IEMs) with automatic remote meter reading (AMR) facility shall be in accordance with CEA (Installation and Operation of Meters) Regulations, 2006, as amended from time to time.”*

### Proposal

- The CTU shall also be responsible for Time-Synchronisation of Interface Energy Meters;
- To conform to designated accuracy class i.e. 0.2s for metering core(s)/winding (s) of Instrument Transformers (Current Transformers & Voltage Transformers)in accordance with CEA Metering Regulations.

### Modification suggested:

“47 (9) *Energy Metering and Accounting:*

- (a) *The CTU shall be responsible for installation, operation, periodic calibration, **time-synchronization** of Interface Energy Meters (IEMs) and confirmation on designated accuracy class i.e. 0.2s for metering core(s)/winding(s) of current transformers & voltage transformers through periodical determination of ratio error and phase angle error, covering all the ISTS interface points, points of connections between the regional entities, cross border entities and other identified points for recording of actual active and reactive energy interchanged in each time-block through those points.”*

THANK YOU