



TAMIL NADU ELECTRICITY REGULATORY COMMISSION

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(Comments/suggestions are invited on or before 01-11-2024)

DRAFT TAMIL NADU ELECTRICITY REGULATORY COMMISSION (DEVIATION SETTLEMENT MECHANISM AND RELATED MATTERS) REGULATIONS, 2019.

The following draft amendment to the Tamil Nadu Electricity Regulatory Commission (Deviation settlement mechanism and related matters) Regulations, 2019 (hereafter referred to as "the Principal Regulations") in exercise of the powers conferred by Sections 86(1) and 181(2)(zp) read with Sections 32 and 33 of the Electricity Act, 2003 (Central Act 36 of 2003) and all other powers enabling it in this behalf is hereby published for information of the stakeholders as required under subsection (3) of section 181 of the Electricity Act, 2003.

2. Notice is hereby given that the draft Regulations will be taken into consideration after the expiry of 30 days from the date of publication of this notification in the TNERC website and that any objection or suggestion, which may be received from any person before the expiry of the aforesaid period, will be considered by the Commission.

3. Objection or suggestion, if any, should be addressed in duplicate to the Secretary, Tamil Nadu Electricity Regulatory Commission, 4th floor, SIDCO Corporate Office Building, Thiru-Vi-Ka Industrial Estate, Guindy, Chennai – 600 032.

REGULATIONS

1. Short Title, Commencement and Extent

(i) These Regulations may be called the "Tamil Nadu Electricity Regulatory Commission (Deviation settlement mechanism and related matters) Amendment Regulations, 2024".

(ii) These Regulations shall come into force from 01-04-2024 as ordered by the Commission in its Order No. 1 of 2024, dated 22-01-2024 and Order dated 13-08-2024 in M.P. No. 22 of 2024.

2. Amendment to the Regulation 4 of the Principal Regulations:

(i) These Regulations shall apply to applicable to all buyer(s) and seller(s) involved in the transactions of conveyance of electricity facilitated through Open Access using intra-state transmission system and/or distribution system of electricity (including inter-state wheeling of power), subject to the following conditions:

(a) Deviation Settlement Mechanism under this Regulation shall be applicable to all seller(s) including Open Access Generating Station(s), State owned Generating Station(s), but excluding wind, solar and State owned hydro Generating Station(s) including run of river projects connected to intra-state transmission system or distribution system and

(b) Deviation Settlement Mechanism under this Regulation shall be applicable to all buyers i.e. Distribution Licensee(s), deemed Distribution Licensee(s) and full Open Access Consumers connected to intra-state transmission system or distribution system;

Provided that these Regulations shall be made applicable to all Open Access consumers connected to the intra-state transmission system or distribution system on later date as may be notified by the Commission.

3. Amendment to the Regulation 7 of the Principal Regulations:

(i) The clause (C) of sub-regulation (1) shall be replaced as below:

“Operating Range of Frequency: The normal operating range for average grid frequency for time block shall be in line with range stipulated under IEGC from time to time and no deviation shall be allowed beyond such operating range of frequency.”

Note:- The system frequency = f and $f_{\text{band}} = [49.90 \text{ Hz} \leq f \leq 50.05 \text{ Hz}]$ and this frequency band shall be applied in this Regulation, wherever applicable.

(ii) The clause (E) of sub-regulation (1) shall be replaced as below:

“Settlement Period: Preparation and settlement of ‘State Deviation Pool Accounts’ shall be undertaken on weekly basis and the same shall be published in the website of the SLDC on weekly basis”

(iii) The clause (I) of sub-regulation (1) shall be replaced as below:

“Premise for Allocation of Losses: For scheduling purpose, the transmission and distribution losses as specified in the Commission’s tariff order issued from time to time shall be made applicable amongst the State Entities to the scheduled drawal by each State Entity in the respective time block;

Provided that the SLDC shall maintain accounts of actual intra-state transmission system losses of each time block and publish on its website”

4. Amendment to Regulation 9 of the Principal Regulations:

(i) The sub-regulation (2) shall be replaced as below:

“If in the proceeding initiated by the Commission or in the enquiry made in this regard under sub regulation (1), it is proved that any seller or any Buyer has indulged in gaming, the

Commission may without prejudice to any other action under the Act or Regulation made there under, levy penal charges for deviation to such seller or buyer during the period of such gaming”

5. Amendment to Regulation 10 of the Principal Regulations:

(i) The provisos to the sub-clause (1) of clause (A) shall be replaced as below:

“Provided the seller/buyer shall stick on to their schedule at each time block and any deviation shall not exist for more than 6 continuous blocks i.e. a change in sign of the deviation shall be made once every 6 time blocks, failing which additional charges @ 20% over and above the deviation charges applicable shall be levied for the duration of continuance of violation i.e. from 7th block;

Provided further that the applicability of above prescribed additional charges for such failure by seller(s) / buyer(s) shall be applicable from the date of notification of this amendment”

(ii) The sub-clauses (2) and (3) in clause (A) shall be deleted.

(iii) The sub-clause (9) in clause (A) shall be replaced as below:

“The charges for deviation by way of injection of infirm power prior to COD shall be zero”

6. Amendment to Regulation 11 of the Principal Regulations:

(i) The Proviso to clause (A) shall be modified as below:

Provided that the total deviation from schedule in energy terms during a day shall not be in excess of 3% of the total schedule for the drawee entities and 1% for the generators and additional charge of 20% over and above the daily base DSM payable / receivable shall be applicable in case of said violation.

(ii) The proviso to clause (B) shall be modified as below:

“Provided that no over-drawal of electricity by any Buyer and under-injection of electricity by the seller shall be permissible when the grid frequency is “below 49.90” and no under-drawal of

electricity by any Buyer and over-injection of electricity by the seller shall be permissible when grid frequency is “50.05 Hz and above””

(iii) The clause (D) shall be replaced as below:

“In addition to Charges for Deviation as stipulated under Regulation 10 of these Regulations, Additional Charge for Deviation shall be applicable for over-drawal as well as under-injection of electricity for each time block in excess of the volume limit specified in Clause (B) and (C) of this regulation when average grid frequency of the time block is “49.90 Hz and above” at the rates specified in the Table I of Annexure II in accordance with the methodology specified in clause (M) of this regulation:”

(iv) The clause (E) shall be replaced as below:

“Additional charge for deviation for under-injection of electricity shall be the same to all type of sellers irrespective of the fuel type and whether the tariff of such generating station is regulated by the Commission or not”

(v) The proviso clause to the clause (L) shall be deleted.

(vi) The clause (M) shall be replaced as below:

“The Additional Charge for Deviation for over-drawals and under-injection of electricity for each time block in excess of the volume limit specified in clause (B) and (C) of this Regulation when grid frequency is “49.90 Hz and above” shall be levied as per the Table - I of Annexure – II of this Regulation. This additional charge shall be levied over and above the deviation charges as specified in the Annexure – I & III of this Regulation”

(vii) The clause (N) shall be replaced as below:

“The additional Charge for Deviation for over-drawals and under-injection of electricity for each time block when grid frequency is “below 49.90 Hz” shall be equivalent to 100% of Charge for Deviation corresponding to average grid frequency of the time-block. This additional charge shall be levied over and above the deviation charges as specified in the Annexure – I & III of this Regulation”

(viii) The clause (o) shall be deleted

(ix) The clause (Q) shall be replaced as below:

“The additional charges @ 20% of the deviation charges applicable on daily base DSM payable/receivable as the case may be shall be levied for the duration of continuance of violation of sign change stipulation for each such violation during a day from the date of notification of this amendment.

To illustrate, the change of sign should take place at least once after every six time blocks. Accordingly, the entity, starting from time block t1, should change the sign after time block t6. In case, sign change does not take place immediately after time block t6, but takes place from time block t7 upto time block t12, additional charge shall be levied equivalent to one violation. In case, sign change does not take place immediately after time block t12, but takes place from time block t13 upto time block t18, additional charge shall be levied equivalent to two violations.”

(x) The clause (T) shall be replaced as below:

“The State Load Despatch Centre shall, on weekly basis, prepare and publish on its website the records of the Deviation Accounts, specifying the quantum of over-drawal/ under-injection and corresponding amount of Charges for Deviation payable/receivable for each Buyer and Seller.”

7. Amendment to Regulation 13 of the Principal Regulations:

(i) The clause (iii) of sub-regulation (2) shall be replaced as below:

“The State entities shall comply with statutory requirements for payment of applicable statutory levies, if any”

8. Amendment to Annexure-I of the Principal Regulations:

(i) The sub-clause (vi) of clause 1 shall be removed.

9. Amendment to Annexure-II of the Principal Regulations:

(i) The Table –II shall be removed.

10. Amendment to Annexure-III of the Principal Regulations:

(i) The last sentence shall be replaced as below:

“Where P is the Weighted average Area Clearing Price in paisa per kWh discovered in the Day Ahead Market segments of all the power exchanges. The weighted average ACP of the Day Ahead Market segments shall be computed by considering the block wise, area wise price and cleared volume for Day Ahead Market in all the operational Power Exchanges.”

(By order of the Tamil Nadu Electricity Regulatory Commission)



Secretary
Tamil Nadu Electricity Regulatory Commission

Explanatory Statement

1. The Tamil Nadu Electricity Regulatory Commission (Deviation settlement mechanism and related matters) Regulations, 2019 was notified by the Commission vide Notification No. TNERC/DSM&RM/22-1, dated 01-03-2019 and the same was published in the Tamil Nadu Government Gazette on 20-03-2019. The whole purpose of this Regulation is to bring grid discipline by maintaining the schedule and drawal by the sellers (conventional generators) and the buyers (excluding direct customers of the Distribution Licensee (including partial and full open access consumers)) connected to the intra-state transmission system or distribution system.
2. The rising Renewable Energy (RE) penetration and associated uncertainty of generation along with uncertainty of electricity demand remains key challenges in ensuring power system stability. Power system stability is influenced by two critical and dynamic parameters – (i) system frequency and (ii) market prices. To ensure that the Deviation Settlement Mechanism is able to provide appropriate signal to minimize power system imbalance thus ensuring power system stability.
3. The Commercial operation of imposing penal actions for the deviations which should have come into force six months after notification of this Regulation commenced only on 01-04-2024, since the licensee was not ready in various aspects especially in communicating and transfer of energy data from the meters. Necessary order was issued by the Commission in this regard vide Order No. 1 of 2024, dated 22-01-2024.
4. Meanwhile, the Commission in its order dated 13-08-2024 in M.P.No. 22 of 2024 filed by the TANGEDCO has inter-alia passed the following orders in consultation with the stakeholders concerned:

“..... 2.7.2. The charges for deviation as per the TNERC (Deviation Settlement Mechanism and related matters) Regulations, 2019 is applicable to all the Generators in respect of transactions of conveyance of electricity through short- term open access or medium-term open access or long-term open access using intra-State transmission system or distribution system of electricity (including inter-state wheeling of power). However, the cap rate prescribed in the Regulation 10(A)(2) and 10(A)(3) of TNERC (Deviation Settlement Mechanism and related matters) Regulations, 2019 is removed and necessary amendment to this effect will be issued by the Commission in due course.”

5. In view of the above order, this draft amendment is issued duly considering the interest of all the stakeholders, safe, secure and reliable operation of the grid. It is also to be stated that the grid separation/failure is reduced drastically after implementation of inter-state Availability Based Tariff (ABT) in phases during the years 2002-2003 in the Country. In the similar line, the intra-state deviation settlement mechanism (modified version of intra-state ABT) will also help the state grid for better performance. By linking DSM with market price, there will be more discipline in the grid as well as frequency band can be narrowed.
6. Further, it is necessary to remove the cap rate for the charges for deviation of the generating stations as prescribed in the Regulation 10(A)(2) and 10(A)(3) of TNERC (Deviation Settlement Mechanism and related matters) Regulations, 2019 in order to protect the interest of the Distribution Licensee and other stakeholders especially consumers of the Distribution Licensee. DSM interventions have helped utility not only to reduce the peak electricity demands and also to defer high investments in generation, transmission and distribution networks. The reasons for decisions of the Commission for proposing this amendments are given in succeeding paragraphs:
 - a. The DISCOM pays the charges for deviations to the Regional Pool Account at the rate prescribed by the CERC, which does not commensurate the Cap Rate prescribed in the Regulation 10(A)(2) and 10(A)(3) of TNERC (Deviation Settlement Mechanism and related matters) Regulations, 2019, viz. 311 paise/unit (Generating stations for which Commission decides the tariff) and

- 303.04 paise/unit (Generating stations for which Commission does not decides the tariff). Whereas, the generators pays only the capped rates, and the difference between the payment made by the DISCOM for the State deviation and the deviation charges received by the DISCOM from these State generators have to be borne by the DISCOM only and in turn falls under the head of common consumers through tariff hike.
- b. The objective definition of "Gaming" should clearly identify the basis for assessing "intentional misdeclaration" of the schedule. As there is a possibility that the Generator may involve in gaming by under injecting over his committed schedule since the deviation charge is capped and the consumer especially captive consumer will get the benefit of adjusting his consumption over scheduled generation (lesser than the actual injection of power) thereby making undue commercial gain through DSM charges.
 - c. Also, there is no cap limit of levy for the deviation by the generators in respect of inter-state transaction.
7. The Commission in its order No. 1-1 of 2024, dated 20-02-2024 had exempted the Hydro Generating Stations including the Pumped storage power plant of the TANGEDCO under the purview of the Deviation Settlement Mechanism notified vide TNERC (Deviation Settlement Mechanism and related matters) Regulations, 2019 since the hydro generating stations are irrigation linked and are being utilised as spinning reserve and operated fully as per the directions of the SLDC. Accordingly, this amendment excludes the hydro generating stations including run of river hydro projects under the purview of the Deviation Settlement Mechanism.
8. The very objective of proposed amendments is to maintain grid discipline and grid security as envisaged under the Grid Code through the commercial mechanism for Deviation Settlement through drawal and injection of electricity by

users of the Grid. Also, Commission is in the process of amending the State Grid Code to align with the recent developments in the Power market.

9. Based on the implementation experiences of the above Regulation in the State, review of the Tamil Nadu Electricity Regulatory Commission (Deviation Settlement Mechanism and related matters) Regulations, 2019 to tune with the CERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2024 will be undertaken by the Commission duly after consulting the views of all the stakeholders.

(By order of the Tamil Nadu Electricity Regulatory Commission)



Secretary
Tamil Nadu Electricity Regulatory Commission