



# Uttar Pradesh Electricity Regulatory Commission

Vidyut Niyamak Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow-226010 Phone 2720426 Fax 2720423 E-mail secretary@uperc.org

Dr. Sanjay K. Singh  
Secretary

Ref: UPERC/D(T&S)/JD(T)-

Dated: /10/2021

To,

Secretary

Central Electricity Regulatory Commission

3rd & 4th Floor, Chanderlok Building

36, Janpath, New Delhi- 110001

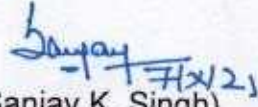
**Sub: Regarding comments on Draft CERC (Deviation Settlement Mechanism and related matters) Regulations, 2021.**

Sir,

This is with reference to Public Notice dated 07.09.2021 seeking comments on Draft CERC (Deviation Settlement Mechanism and related matters) Regulations, 2021. In this regard, kindly find enclosed herewith comments on behalf of Uttar Pradesh Electricity Regulatory Commission for your kind consideration.

Encl: As above.

Yours faithfully

  
(Sanjay K. Singh)

The power sector, globally as well as in India, is undergoing a sea change. This can be looked in the context of drastic increase in renewable energy capacity addition, rising prevalence of grid connected distributed generation and development of wholesale/retail electricity market.

In India, this transition is more challenging because of the unsatisfactory operational and poor financial condition of the distribution sector. The distribution sector is always on high risk due to various State/consumer specific factors because of direct dealing with vast number of different category consumers mix having dynamic behaviour located in the entire boundary of State. Deviation from schedule either over or under drawal is inevitable in case of distribution sector. The generators have much better control over their generation compared to the load of distribution licensees as the Discom load of the day would always vary with day ahead schedule, being a function of consumer load, weather, consumer mix etc.. Therefore, issues associated with distribution sector is not only significant but massive/ humongous than any other entity like generator etc. The condition of plagued distribution sector is also relevant in the context of DSM Regulations as the distribution licensees bear the ultimate financial implication.

Therefore, in the present context it is pertinent to mention that the electricity demand is governed by a set of different variables or "electricity demand determinants". These demand determinants depend on forecasting horizons (long term, medium term, short term and real time), the load aggregation level, climate, socio-economic activities, GDP, number of households, population, economic growth, domestic consumption trends, income growth etc. However, due to continuous evolution of power sector in India, there are more variables which have been added like renewable energy generation, distributed generation, prosumers (under net metering/ banking), energy storage, electric vehicles etc.

Discoms has to accommodate an increasing amount of renewable energy (RE), from generators as well as prosumers and to promote and increase RE power in its power procurement portfolio, it need to reduce power procurement costs and not only integrate the same but efficiently maintain the network and power supply. Therefore, as the primary offtaker of RE and given the concentrated generation and localised consumption, discoms remain critical in RE integration. As RE generators are deemed with a 'must-run' status, inaccurate forecasting of RE generation can disturb the merit order dispatch of power plants for the discom which can increase the overall cost of power procured and simultaneously add the charge of deviation DSM Regulations. As more the demand of the State, more will be the quantum of Renewable Energy in the portfolio and more will be complexities and issues associated with distribution network and load pattern. Therefore, it would be imperative to provide flexibilities in the draft Regulations. The DSM mechanism will require flexibility throughout the power sector till the forecasting and distribution network is strengthened. Considering above, following comments may be looked upon for consideration: -

- (i) The draft Regulations provides for normal rate of charges for deviation for a time block which is equal to the weighted average Ancillary Service Charges in vogue. The computation methodology of Average Ancillary Service charges is not indicated as the same has not been clearly brought out in the Regulations or Explanatory Memorandum. To bring more transparency, the methodology along with sample calculations and implication may be provided before finalization of the Regulations such that well thought comments may be provided. Also, the study of parameters of already implemented Ancillary Service Regulations 2015 in past need to be analysed and published.
- (ii) As per Draft Regulations, the normal rate is computed based on the total quantum of Ancillary Services deployed and the total charges payable to the Ancillary Service Providers for all the

Regions for that time block. It is pertinent to mention that the Pool should work on the concept of "Zero Sum" principle as envisaged under the draft Regulations such that huge penalties are avoided considering the load being dynamic and not under the control of distribution licensee. Therefore, it is proposed that the normal rate should be the "Net" charges payable to the Ancillary Service Providers instead of "Total" charges payable. As payment for certain block is made from the Pool for UP Services to the provider and payment is received into the Pool for "Down Service" in different regions. Therefore, the normal rate for deviation needs to be computed based on net of this cash inflow and outflow. This would not only be prudent but also would be reasonable.

- (iii) The exchange prices are presently highly volatile and therefore the charges considered as highest of the weighted average of ACP [DAM or RTM segments] or the weighted average Ancillary Service Charge of all the regions seems to be on higher side. Moreover, as per the past trend, the prices in Real time market are observed to be on higher side. Therefore, it is not fair to burden the States with such higher charges considering the financial condition of distribution licensees and the issues highlighted above. Therefore the normal rate for deviation for the interim period should be lowest instead of highest of all the three.
- (iv) As per proposed draft, three different categories are considered for which buyers are liable to pay for deviation in case of over drawal. The same are as below: -
- 12% of deviation or 150 MW deviation whichever is lower in case of the Buyer (other than the buyer with schedule less than 400 MW and the RE rich State);
  - 12% of deviation in case of the Buyer (with schedule up to 400 MW); or
  - 12% of deviation or 250 MW deviation whichever is lower in case of the Buyer (being an RE Rich State).

In this regard, it is pertinent to mention that the categories of buyers on which charges are proposed may further divided into based upon the schedule of the states. The states having schedule of more than 5000 MW along with higher installed capacity RE, needs to be provided with more flexibility as the same have more complexity associated with them. Therefore, it is proposed that a fourth category may be created as follows: -

*"12% of deviation or 500 MW deviation whichever is lower in case of the Buyer (with schedule of more than 5000 MW and being an RE Rich State)."*

Accordingly, the existing categories may be redrafted considering the above proposed clause.

- (v) The proposed Regulations propose to stop regional entities from deviating from schedule for grid security and reliability. Therefore, before shifting to centralised one side approach, grid security impact assessment needs to be conducted and published first in view of numerous inter-regional links & strengthening schemes built over last 7 years, design criterion change.
- (vi) Further, draft Regulations envisaged that the buyer/ entities will not be entitled for any support to the grid as in earlier Regulations, if a State drew less power than scheduled, it was paid back for the energy not drawn. On the other hand, during high-frequency conditions, a State could draw extra power at a low rate, and thus helped them to back down its own costlier generating stations. Therefore, moving completely in one go to centralised approach where system operator will manage grid instead of decentralised approach where users of the grid also received incentive for providing support, may not be reasonable. It may not be appreciated to move to centralised approach completely instead it should be considered in phased and hybrid manner in respect of

intra state entities. Moreover, it would not be easy for system operator also to completely shift to a methodology where, it has to manage the grid alone, leading to threat to grid and system. Therefore, it must be considered for the time being that the State entities as a buyer must be given the incentive to support the grid.

- (vii) Furthermore, it is important to mention that since the mechanism of computation of Ancillary Service charges would be known after finalization of CERC Ancillary Services Regulations, 2021. Therefore, it may not be possible to envisage the implication of the same on DSM charges. Therefore, it is imperative that the Ancillary Service Regulations, 2021 needs to be finalized along with the methodology and calculation. Thereafter, comments may be invited on draft DSM Regulations which would be prudent, transparent and practical.