# पावर ग्रिंड कारपोरेशन ऑफ इंडिया लिमिटेड

भारत सरकार का उद्यम)



# POWER GRID CORPORATION OF INDIA LIMITED

(A Government of India Enterprise)

केन्द्रीय कार्यालय: ''सौदामिनी'' प्लॉट सं. 2, सैक्टर-29 गुडगाँव-122 001, हरियाणा फोन: 0124-2571700-719, फैक्स: 0124-2571760, 2571761 तार 'नेटग्रिड' Corporate Office: "Saudamini" Plot No. 2, Sector-29, Gurgaon-122 001. Haryana Tel.: 0124-2571700-719, Fax: 0124-2571760, 0124-2571761 Gram: 'NATGRID'

सदर्भ सख्या / Ref No

Ref No: CC/RC/DSM/4<sup>th</sup> Amend Date: 14/08/2018

The Secretary, Central Electricity Regulatory Commission, 3<sup>rd</sup> & 4<sup>th</sup> Floor, Chandralok Building, 36 Janpath, New Delhi-110001

Sub: Draft CERC (Deviation Settlement Mechanism and related matters) (Fourth Amendment) Regulations, 2018

- Submission of comments/suggestions thereof.

Dear Sir,

This has reference to public notice ref. L-1/132/2013-CERC dated 29<sup>th</sup> June, 2018 vide which comments/ suggestions were sought on the subject draft amendment Regulation.

In this regard, please find enclosed three copies (03) of comments/suggestions of POWERGRID.

Thanking you,

Yours faithfully,

(Abhay Choudhary) ED (Commercial & Reg. Cell)

Encl: As above

# Comments on Proposed Fourth Amendments in CERC (Deviation Settlement Mechanism and related matters) Regulations, 2018

The proposed amendments are a welcome step as it provides solution to issues required for keeping grid frequency, which is a primary indicator of the health of the grid, within permissible limits.

The comments on the proposed amendments are as below -

#### Proviso

1. At Sl no 4.4 of amendment, following regulation is proposed to be added

After the existing proviso to clause (1) of Regulation 7 of the Principal Regulations, a
new proviso shall be added as under:

"Provided also 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% of the daily base DSM payable/ receivable shall be applicable in case of said violation."

## **POWERGRID Comments:**

POWERGRID has taken allocation from Central Sector Generating Stations as per GOI orders for auxiliary power consumption of its HVDC station. Here it needs to mention that theses allocations are in the range of 1-2 MW per HVDC stations. Practically, it is not possible, for such a small allocation, to keeping total deviation from schedule energy terms with in the range of 3% inline with above proposed proviso.

Further, auxiliary power consumption of HVDC station is dependent mainly on following loads-

## **Essential Loads:**

- (i) Valve cooling System
- (ii) Converter Transformer Cooling System
- (iii) Air conditioning System for C&P Equipment
- (iv) Valve Hall Ventilation System
- (v) UPS System
- (vi) Battery and Battery charger System

#### **Normal Loads:**

- (i) Lighting system in the switchyard and control building
- (ii) Air conditioning system of areas other than control room
- (iii) Air compressors, fire-fighting water pumps, oil treatment system etc

Essential Loads are the loads whose failure affects the transmission capability of the HVDC system. Almost 60 % of this auxiliary power requirement is due to the valve cooling and converter transformer cooling when converter is normally operating at full power. The auxiliary power consumed by these systems is dependent on large no of fans and pumps which are turned on/off depending upon the power transferred by the HVDC system. Accordingly, the quantum of power transferred by the HVDC system determines the auxiliary power requirement of HVDC System to a large extent.

The power transferred by HVDC System is varying as per instruction from POSOCO and therefore, POWERGRID does not have control over the auxiliary power consumption of HVDC station.

In view of the above, it is requested that Power allocation for HVDC stations of POWERGRID may be exempted from proposed clause (1) of Regulation 7 of the Principal Regulations.

2. At SI no 4.19 of amendment, following regulation is proposed to be added Clause (10) of Regulation 7 of the Principal Regulations shall be substituted as under:

"In the event of sustained deviation from schedule in one direction (positive or negative) by any regional entity, such regional entity (buyer or seller) shall have to make sign of their deviation from schedule changed, at least once, after every 6 time blocks. To illustrate, if a regional entity has positive deviation from schedule from 07.30 hrs to 09.00 hrs, sign of its deviation from schedule shall be changed in the 7th time block i.e. 09.00 hrs to 09.15 hrs from positive to negative or negative to positive as the case may be.

Provided that violation of the requirement under this clause shall attract an additional surcharge of 20% on the daily base DSM payable / receivable as the case may be."

#### **POWERGRID Comments:**

As explained above, POWERGRID has taken power allocation from Central Sector Generating Stations for auxiliary power requirement at HVDC stations. Auxiliary power requirement of a particular HVDC station mainly depends upon power flowing through corresponding HVDC line. Scheduling of power on a HVDC line is controlled by POSOCO and hence it is not in POWERGRID control to change sign of deviation w.r.t. schedule.

In view of the above, it is requested that Power allocation for HVDC stations of POWERGRID may be exempted from proposed clause (10) of Regulation 7 of the Principal Regulations.

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