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Enterprise)  
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Lr.No. NLCIL/Comml/2200-3F/2021-152

Dt:13.10.2021

To  
The Secretary,  
Central Electricity Regulatory Commission,  
3rd & 4th floor, Chanderlok Building,  
36, Janpath Marg,  
NEW DELHI - 110 001.

Sir,

Sub: Draft Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2021- NLCIL comments -submission - Reg.

Ref: Public Notice No. L-1/260/2021/CERC, Dated 07.09.2021 & 08-10-2021

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Pursuant to the communication of Draft Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2021 vide ref cited above, seeking comments of the stakeholders, NLCIL is hereby submitting its comments.

The comments have also been mailed to, secy@cercind.gov.in and rashmi@cercind.gov.in.

Thanking you,

Yours faithfully,

for NLC India Limited

Chief General Manager / Commercial

Encl : As above

**Comments on Draft Central Electricity Regulatory Commission**  
**(Deviation Settlement Mechanism and Related Matters)**  
**Regulations,2021**

**1. Regulation No. 7. Normal Rate of Charges for Deviations**

*(1) The normal rate of charges for deviation for a time block shall be equal to the Weighted Average Ancillary Service Charge (in paise/kWh) 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:*

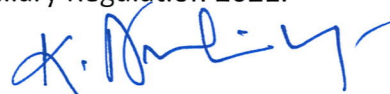
*Provided that for a period of one year from the date of effect of these regulations or such further period as may be notified by the Commission, the normal rate of charges for deviation for a time block shall be equal to the highest of [the weighted average ACP of the Day Ahead Market segments of all the Power Exchanges; or the weighted average ACP of the Real Time Market segments of all the Power Exchanges; or the Weighted Average Ancillary Service Charge of all the regions] for that time block:*

**NLCIL'S Comment:**

- **It is requested to adopt normal rate of charges for deviation with a cap of energy cost of respective plant or at the rate of 303.04 Paise/unit as per the existing DSM regulations.**
- **It is also requested to publish the block wise normal DSM charge by NLDC / any other Nodal agency beforehand.**

The detailed justification for the above comments is summarized below: -

1. The normal DSM charge is linked to Ancillary Market, Day Ahead Market (DAM) & Real Time Market (RTM). Currently DAM & RTM are contributing only around 5% & 2% of total electricity transactions in India.
2. Due to power surplus condition of the country, currently prices in power market are primarily driven by buyers only. Top 5 buyers share in DAM is around 73% & same in case of RTM is around 53%. With limited concentric participants; currently DAM & RTM does not represent the entire supply-demand scenario in the country and thus the price.
3. Being prices in Power Markets are highly volatile with limited participants, & only a few generators are participating in Ancillary services. Instead of taking block wise market price, it is suggested to retain existing mechanism of Normal DSM charge calculation till full-fledged implementation of Ancillary Regulation 2021.





4. For thermal stations under Section 62 of EA 2003, Gain arriving from different scenarios are narrowed down due to more stringent regulations & during gain sharing with beneficiaries also, share for generators have come down drastically.
5. In case of URS power sale in DAM / RTM generators are entitled for maximum gain of 7 Paise/unit only. On eve of URS power sale whatever benefits a generator is getting is almost passed through to beneficiaries without sharing of any loss. So, it is suggested that it will be more appropriate to adopt Normal DSM charge with a cap of energy cost of respective plant or at the rate of 303.04 Paise/unit as per the existing DSM regulations.
6. When all units in a station are under Shutdown, then there will be continuous power drawal from grid. At this condition, Normal DSM charge may be applied with Capping.
7. It is also requested to publish the block wise normal DSM charge by NLDC / any other Nodal agency beforehand for easy understanding by utilities and better transparency.

### Example:

For power delivery in a particular time block; a generator under section 62 of EA 2003 got consent from beneficiaries to sell 50MW of surplus power in Day Ahead Market (DAM) of power exchange.

Energy Charge Rate (ECR) of the generator: 3.0 Rs/unit

ACP discovered in DAM: 10.0 Rs/unit

Net receivable for Generator in DAM: 9.5 Rs/unit (After reduction of incidental expenses of about 0.5 Rs/unit)

Gain for Generator: 6.5 Rs/unit (9.5 – 3.0)

Gain shared with beneficiary as per CERC (Indian Electricity Grid Code) (Sixth Amendment) Regulations, 2019: 6.43 Rs/unit

Net Gain for generator after gain sharing: 0.07 Rs/unit only!!!

In case of unit tripping or forced outage of any other equipment, generator won't be in a position to deliver same power traded in DAM. Such type of forced outage is beyond control of generator and an unintentional deed.

Price in RTM for delivery time: 15Rs/unit. Then in this case it won't be economically viable for generator to buy power in RTM to compensate its under generation.

As per Draft DSM regulation 2021, Normal DSM charge will be 15 Rs/unit (Ancillary charge is assumed to be lesser). Then Generator will go under a higher financial burden to pay such heavy penalty after sharing all gains earned under DAM.

So, it will be more appropriate to consider a cap amount on Normal DSM charge at least for Generators under section 62 of EA 2003 whose tariffs are being determined by honourable commission after prudence check and there will be always gain sharing with beneficiaries for better performance.



**2. Regulation No 8. Charges for Deviation**

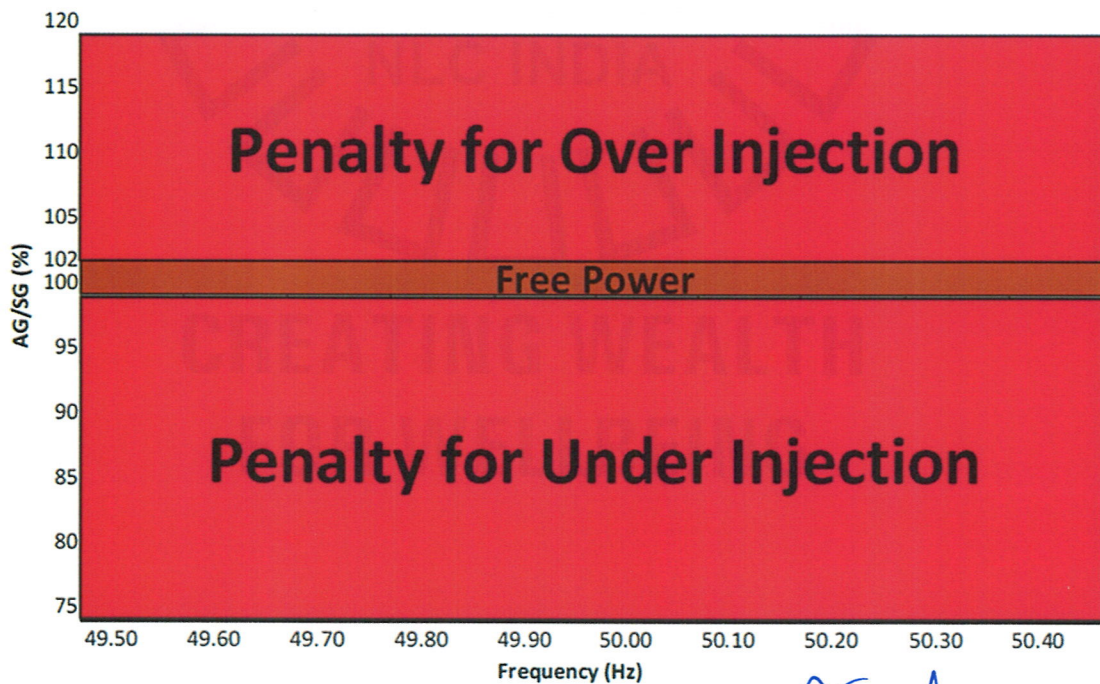
(1) Charges for deviation in a time block by a seller shall be payable by such seller as under:

<b>Entity</b>	<b>Charges for deviation payable to Deviation and Ancillary Service Pool Account</b>	
<b>Seller</b>	<b>Deviation by way of over injection</b>	<b>Deviation by way of under injection</b>
<i>For a general seller other than an RoR generating station or a generating station based on municipal solid waste</i>	<i>(i) Zero up to 2% Deviation-general seller (in %); (ii) @ 10% of the normal rate of charges for deviation beyond 2% Deviation-general seller (in %)</i>	<i>(i) @ normal rate of charges for deviation up to 2% Deviation-general seller (in %); (ii) @ 110% of the normal rate of charges for deviation beyond 2% Deviation-general seller (in %).</i>

**NLCIL'S Comment:**

- It is requested to provide the required volume relaxation by taking into consideration the impact of Ramp Rate on block wise actual energy export, Primary Reserve Ancillary Service (PRAS), Secondary Reserve Ancillary Service (SRAS) & Tertiary Reserve Ancillary Service (TRAS) operations.

The detailed justification for the above comments is summarized below: -



*[Handwritten signature]*



1. As per this Draft DSM Regulation 2021. Thermal Generators are penalized at any point of time except when AG/SG is 100% which is very difficult due to technical and commercial factors. For over injection up to 2% although there is no receivable/ payable for a generator, but indirect penalty will be in form of Energy cost as generator is not going to get any compensation for such over injection although it is unintentional.
2. In the era of Renewable energy, any fluctuation in grid is primarily supported by thermal generators whose schedules are being changed frequently from Full Load to Technical Minimum & Vice – versa.
3. Under dynamic scheduling of Ancillary Service, Revisions by Beneficiaries, SCED, URS power sale in volatile power market. Currently Station schedule changes very frequently. Under this circumstance this stringent regulation will further financially burden the stressed plants.
4. So, it is humbly requested that deviation limits may be suitably modified to protect the interest of thermal generators along with grid security especially during lower frequency.
5. Apart from change in schedule, actual generation of a generator varies also due to Primary ancillary service like FGMO / RGMO (Free or Restricted Governor Mode of Operation). As this is beyond control of a generator and in the interest of grid stability so necessary volume relaxation should be provided and revenue loss for generator providing such facility should be avoided.

**Example:**

For a particular time, block,

Station DC: 385MW

Station Schedule: 300MW

Generation Set Point: 300MW

RGMO Impact: +10MW

Final Actual Generation: 310MW

Primary Reserve Ancillary Service (PRAS) is the mandatory control function in individual power generator which automatically increases or decreases the active power output in order to limit the changes of frequency to maintain the stability of the grid and it is not remunerated.

So, in this case generator will lose Energy cost for 10MW after performing well for grid stability.

6. During constant schedule; Actual Generation/Scheduled Generation (AG/SG) may be maintained around 100% but it is not practically possible especially in blocks where change in schedule is available.

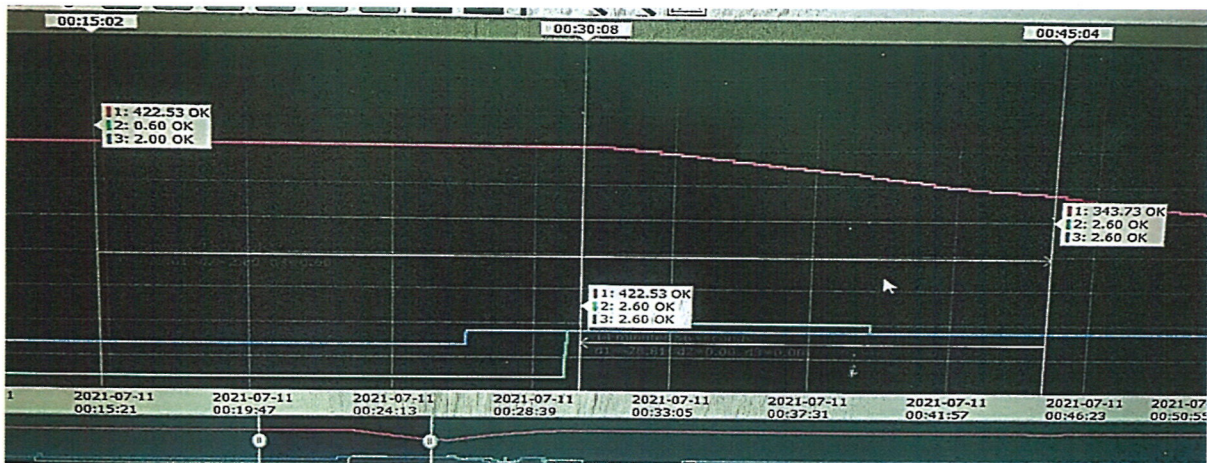


7. DSM calculation method need to be modified suitably with a proper analysis by considering Ramp Rate assessment guidelines & Secondary Reserve Ancillary Service (SRAS), Tertiary Reserve Ancillary Service (TRAS) operations under Ancillary Service Regulation.

**Example-1:**

Station scheduling Vs Actual Generation/ Export for NLCIL's TPS1EXPN station is shown here for power delivery date 11.07.2021.

Time Block	Delivery Time	DC (MW)	Schedule (MW)	Actual Export (MW)
1	00:00-00:15	388.00	385.00	385.57
2	00:15-00:30	388.00	385.00	385.51
3	00:30-00:45	388.00	250.30	345.84
4	00:45-01:00	388.00	250.30	286.05
5	01:00-01:15	388.00	308.00	335.69
6	01:15-01:30	388.00	365.80	380.55
7	01:30-01:45	388.00	385.00	384.63
8	01:45-02:00	388.00	385.00	386.72



Trend of Actual Power Generation for the station at Generator Output

Normative Auxiliary Power Consumption (APC) for TPS1EXPN is 8.5%.

**During 1<sup>st</sup> two-time blocks (00:00 to 00:30)**

Actual Station Schedule: 385.00 MW

Actual Generation: 422.53 MW

Actual Export: 385.57 MW (Actual APC: 8.75 %)

AG/SG almost maintained at 100%.



**During Third time blocks (00:30 to 00:45)**

Actual Station Schedule: 250.30 MW

*(Schedule suddenly reduced as URS Power of 134.70MW could not be traded in RTM which resulted a reduction in schedule more than declared Ramp MW of 58MW)*

Actual Generation: Reduced from 422.53 MW @00:30 to 343.73 MW @00:45

*(With Actual Ramp Rate > Declared Ramp Rate of 1 %)*

Change in Actual Generation: 78.8MW (422.53 – 343.73)

For DSM Calculation, Actual Export in 2<sup>nd</sup> time block: 385.57 MW

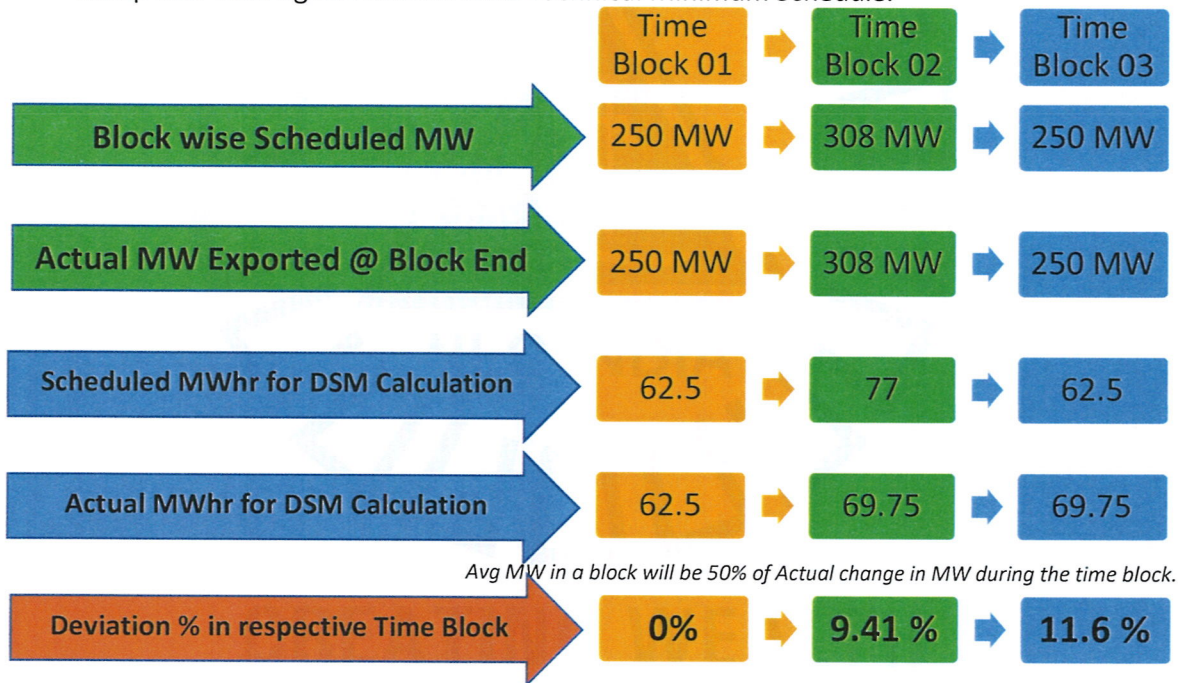
For DSM Calculation, Actual Export in 3<sup>rd</sup> time block: 345.84 MW

Change in Actual Export: 39.67 MW (385.51 – 345.84)

Although Actual generation is changed by 78.8MW or Exportable MW changed by 71.91MW after consideration of 8.75% live APC%; Change in Average load for the block which is being used for DSM purpose was changed by only 39.67MW. So, it is totally impossible to adhere to 100% of AG/SG especially when change in schedule is available for a station.

**Example-2:**

Suppose Scheduled MW for one block only increased from Technical Minimum by Ramp MW then again reverted back Technical Minimum Schedule.



It is clearly visible that when change in schedule & Actual Generation are as per Ramp MW, then also a generator won't be in a position to achieve 100% of AG/SG which will lead to heavy penalty or loss under Draft DSM Regulation – 2021. So, it is felt that Volume Cap of 12 % may be retained with Normal DSM charge Payable/ Receivable for Under-Injection/ Over-Injection quantity of power as it is out of control of generator and purely unintentional.

### **3. Regulation No.10. Schedule of Payment of charges for deviation**

*(1) The payment of charges for deviation shall have a high priority and the concerned regional entity shall pay the due amounts within 7 (seven) days of the issue of statement of charges for deviation by the Regional Power Committee, failing which late payment surcharge @0.04% shall be payable for each day of delay.*

#### **NLCIL'S Comment:**

- **It is requested to retain the existing time limit of 10 days or with time limit of 7 days excluding public holidays/National holidays with introduction of rebate scheme.**

The detailed justification for the above comments is summarized below: -

1. Time limit of 10 days may be retained as there are so many validations & internal approvals to be carried out before proceeding for payment.
2. If 7 days, then it shall be made excluding public holidays/National holidays.
3. Similar to Surcharge for late payments, Rebate scheme may also be introduced to encourage early payments by generators as payments are done on weekly basis but generators are getting their revenues through monthly billing by allowing the DISCOMs to make payment within 45 days as per CERC tariff Regulation. So, introduction of rebate scheme will be a highly motivative factor for early payments.

