# UTTARAKHAND ELECTRICITY REGULATORY COMMISSION

### **NOTIFICATION**

July: 19, 2022

Uttarakhand Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) (First Amendment) Regulations, 2022.

No. F-9(26)(i)/RG/UERC/2022/510: In exercise of the powers conferred under Section 181 of the Electricity Act, 2003 (36 of 2003) and all other powers enabling it in this behalf, the Uttarakhand Electricity Regulatory Commission hereby makes the following Amendments in Uttarakhand Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2017 (Principal Regulations), namely:

## 1. Short Title and Commencement

- These Regulations may be called the Uttarakhand Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) (First Amendment) Regulations, 2022.
- (2) These Regulations shall come into force after 6 months from the date of Gazette notification.

## 2. Amendment of Regulation 2 of the Principal Regulations:

- (1) New definition shall be added after the definition (d) of Regulation 2 of the Principal Regulations, as under:
  - "(da) "Area Clearing Price (ACP)" means the price of a time block electricity contract established on the Power Exchanges after considering all valid purchase and sale bids in particular area(s) after market splitting, i.e., dividing the market across constrained transmission corridor(s)."
- (2) New definitions shall be added after the definition (i) of Regulation 2 of the Principal Regulations, as under:
  - "(ia) "Daily Base DSM Charge" means the sum of charges for deviations for all time blocks in a day payable or receivable as the case may be, excluding the additional charges under Regulation 8."

- "(ib)" Day Ahead Market (DAM)" means a market where physical delivery of electricity occur on the next day (T+1) of the date of transaction (T) and is governed by the Central Electricity Regulatory Commission (Power Market) Regulation, 2010 (as amended from time to time), the Rules and Bye-Laws of the Power Exchanges as approved by the Central Commission."
- (3) Definition (u) of Regulation 2 of the Principal Regulations shall be substituted by the following:
  - "(u) "Time Block" means a time block of 15 minutes, for which specified electrical parameters and quantities are recorded by special energy meter, with first time block starting from 00.00 hrs; subject to revision by the commission from time to time considering the provisions in CERC (Indian Electricity Grid Code) Regulation, 2010 and any amendments in this regard."

# 3. Amendment of Regulation 5 of the Principal Regulations:

(1) In Sub-regulation (1) of Regulation 5 of the Principal Regulations the Table-1 shall be substituted by the following table along with the note, as under:

Table-1: Frequency-based Charges for Deviation

Average Frequency of the time block (Hz)  Below   Not Below		Charges for Deviation  Paise/kWh	
50.05	50.04	Slope determined by joining the price at Not Below 50.05 Hz ar identified price at 50.00 Hz, and as detailed in the note below the Regulation	
50.04	50.03		
50.03	50.02		
50.02	50.01		
50.01	50.00	Daily (simple) average Area Clearing Price discovered in the Day Ahead Market segment of power exchange*	
50.00	49.99	Slope determined by joining the price identified at 50.00 Hz price at below 49.85 Hz, and as detailed in the note below	
49.99	49.98	1 D	
49.98	49.97	Regulation	
49.97	49.96		

Table-1: Frequency-based Charges for Deviation

Average Frequency of the time block (Hz)		Charges for Deviation	
Below	Not Below	Paise/kWh	
49.96	49.95		
49.95	49.94		
49.94	49.93		
49.93	49.92		
49.92	49.91	at the state of th	
49.91	49.90		
49.90	49.89		
49.89	49.88		
49.88	49.87		
49.87	49.86		£ 2
49.86	49.85		
49.85		800.00	

\*The daily simple average Area Clearing Price (ACP) in Paisa/ kWh shall be as discovered in Day-Ahead Market Segment of Power Exchange for N2 - North Region as considered by NLDC for declaring daily DSM rates on its website.

#### Note:-

- i. The Deviation Settlement Mechanism (DSM) rate vector will have a dynamic slope determined by joining the identified price points at 50 Hz. (daily simple average ACP), frequency of 49.85 Hz (Rs. 8 per unit) and 50.05 Hz (zero) on a daily basis.
- ii. The maximum ceiling limit applicable for the average Daily ACP discovered in the DAM segment of Power Exchange at 50.00 Hz shall be 800 Paise/kWh.
- iii. Charges for deviation for each 0.01 Hz step shall be equivalent to the Slope determined by joining the price at 'Not below 50.05 Hz' and 'identified price at 50.00 Hz' in the frequency range of 50.05-50.00 Hz, and to the Slope determined by joining the 'price identified at 50,00 Hz' and price at 'below 49.85 Hz' in frequency range 'below 50 Hz' to 'below 49.85 Hz'.
- iv. The daily simple average ACP of the Power Exchange having a market share of 80% or more in energy terms on a daily basis shall be taken into consideration for linking to the DSM price vector. If no single Power Exchange is having a market share of 80% or more, the veighted average day-ahead price shall be used for linking to the DSM price.

- v. Daily simple average Area Clearing Prices (ACP) in the day-ahead market (exclusive of any transmission charges and transmission losses) shall be used as the basis for market linked DSM price at 50 Hz.
  - Provided that based on a review of the above mechanism within one year or in such time period as may be decided by the Commission, if the Commission is satisfied that the market conditions permit, the basis for market linked DSM price shall be substituted, by the time-block-wise ACP in the day ahead market or as and when the real time market is introduced, by the hourly ACP or the ACP of such periodicity as may be considered appropriate by the Commission.
  - vi. In case of non-availability of daily simple average ACP due to no-trade on a given day, daily simple average ACP of the last available day shall be considered for determining the DSM charge.
  - vii. Deviation price shall be rounded off to nearest two decimal places.
  - viii. An illustration to the DSM price vector specified in table above, is provided as Annexure-I
    - ix. The National Load Despatch Centre (NLDC) shall act as the Nodal Agency to declare the daily DSM rates and shall display all relevant information on its website."
- (2) In Sub-regulation (3) of Regulation 5 of the Principal Regulations, the words "RLNG Rs. 8.24 / kWh sent out" shall be substituted by "RLNG Rs. 8.00/kWh sent out".

# 4. Amendment of Regulation 7 of the Principal Regulations:

- (1) In Sub-regulation (1) of Regulation 7 of the Principal Regulations, the words "49.70 Hz and above and below 50.10 Hz" shall be substituted by the words "49.85 Hz and above and below 50.05 Hz".
- (2) In first proviso to Sub-regulation (1) of Regulation 7 of the Principal Regulations, the words "below 49.70 Hz" shall be substituted by the words "below 49.85 Hz" and the words "50.10 Hz and above" shall be substituted by the words "50.05 Hz and above".
- (3) In Sub-regulation (2) of Regulation 7 of the Principal Regulations, the words "49.70 Hz and above and below 50.10 Hz" shall be substituted by the words "49.85 Hz and above and below 50.05 Hz".
- (4) In first Proviso to Sub-regulation (2) of Regulation 7 of the Principal Regulations, the words "below 49.70 Hz" shall be substituted by the words "below 49.85 Hz" and the words "50.10 Hz and above" shall be substituted by the words "50.05 Hz and above".

(5) In third Proviso to Sub-regulation (2) of Regulation 7 of the Principal Regulations, the words "49.70 Hz and above" shall be substituted by the words "49.85 Hz and above".

# 5. Amendment of Regulation 8 of the Principal Regulations:

- (1) In Sub-regulation (1) of Regulation 8 of the Principal Regulations, the words "49.70 Hz and above" shall be substituted by the words "49.85 Hz and above".
- (2) In Sub-regulation (2) of Regulation 8 of the Principal Regulations, the words "50.10 Hz and above" shall be substituted by the words "50.05 Hz and above"
- (3) In Sub-regulation (4) of Regulation 8 of the Principal Regulations, the words "below 49.70 Hz in accordance with the methodology specified in sub-Regulation (6) of this regulation and the same shall be equivalent to 100% of the Charge for Deviation of 824.04 Paise / kWh corresponding to the grid frequency of 'below 49.70 Hz'" shall be substituted by the words "below 49.85 Hz in accordance with the methodology specified in sub-Regulation (6) of this regulation and the same shall be equivalent to 100% of the Charge for Deviation of 800 Paise / kWh corresponding to the grid frequency of 'below 49.85 Hz'".
- (4) In Sub-regulation (5) of Regulation 8 of the Principal Regulations, the words "49.70 Hz and above" shall be substituted by the words "49.85 Hz and above".
- (5) In Sub-regulation (6) of Regulation 8 of the Principal Regulations, the words "below 49.70 Hz" shall be substituted by the words "below 49.85 Hz".
- (6) In proviso to Sub-regulation (6) of Regulation 8 of the Principal Regulations, the words "below 49.70 Hz" shall be substituted by the words "below 49.85 Hz".
- (7) Sub-regulation (7) of Regulation 8 of the Principal Regulations shall be substituted by the following:

"In the event of sustained deviation from schedule in one direction (positive or negative) by any state entity (buyer or seller), such entity shall correct its position in the manner as specified below:

If the sustained deviation from schedule continues in one direction (positive or negative) for 6 time blocks, the state entity (buyer or seller), shall correct its position, by making the sign of its deviation from schedule changed or by remaining in the range of +/- 2% with reference to

is closed to a least once, latest by 7th time block

Provided that violation of the requirement under this Sub-regulation shall attract an additional charge as specified in the table below:

	Additional Charge Payable	
No. of Violation in Day	The region of the control of the con	
From first to fifth violation	For each violation, an additional charge @ 3% of daily base DSM charge payable or receivable	
From sixth to tenth violation	For each violation, an additional charge @ 5% of daily base DSM charge payable or receivable	
From eleventh violation onwards	For each violation, an additional charge @ 10% of daily base DSM charge payable or receivable	

Provided further that counting of number of sign change violations under this Sub-regulation shall start afresh at 00.00 Hrs for each day.

Provided also that payment of additional charge for failure to adhere to sign change requirement as specified under this Sub-regulation shall not be applicable to:

- a. renewable energy generators which are State entities.
- b. run of river projects without pondage.
- c. any infirm injection of power by a generating station prior to CoD of a unit during testing and commissioning activities.
- d. any drawal of power by a generating station for the start-up activities of a unit.

### Illustration:

A state entity having a sustained deviation from time blocks t1 to t7, shall correct its position either by changing the sign of its deviation (from positive to negative or negative to positive as the case may be) or come back in the range of +/- 2% with reference to its schedule latest by the end of time block t7. In case, such sign change does not take place or it fails to come back in the aforesaid range by the end of time block t7, but such correction of position takes place from time block t8 up to time block t12, then an additional charge shall be levied equivalent to one violation. Further, in case, the sign change does not take place or it fails to come back in the range as aforesaid latest by the end of t13, but the correction in position takes place from time block t14 upto time block t18, then the additional charge shall be levied for two violations and so on."

- 6. Amendment of Annexure-I (Methodologies for the computation of Charges of Deviation and Additional Charges for Deviation for each Buyer/Seller for crossing the volume limits specified for the over-drawal / under-injection by buyer/seller) of the Principal Regulations:
  - (1) In para 1 of Annexure-I to the Principal Regulations, the words "49.70 Hz and above" shall be substituted by the words "49.85 Hz and above".
  - (2) In para 2 of Annexure-I to the Principal Regulations, the words "below 49.70 Hz" shall be substituted by the words "below 49.85 Hz".
  - (3) In para 2 of Annexure-I to the Principal Regulations, the words "824.04 Paise / kWh" shall be substituted by the words "800 Paise / kWh".
- 7. Amendment of Annexure-II (Methodologies for the computation of Charges of Deviation and Additional Charges for Deviation for each Buyer/Seller for crossing the volume limits specified for the under-drawal / over-injection by buyer/seller) of the Principal Regulations:
  - (1) In para C of Annexure-II to the Principal Regulations, the words "50.10 Hz or above" shall be substituted by the words "50.05 Hz or above".

## Annexure-I

Illustration of the DSM Price Vector specified in Table under Regulation 3 (1) of this Regulations:

Average Fre block (Hz)	quency of the time	Charges for Deviation (Paise/kWh)	
Below	Not Below		
	50.05	0.00	
50.05	50.04	1XP/5	
50.04	50.03	2XP/5	
50.03	50.02	3XP/5	
50.02	50.01	4XP/5	
50.01	50.00	P PMC	
50.00	49.99	50.00+15xP/16	
49.99	49.98	100.00+14xP/16	
49.98	49.97	150.00+13xP/16	
49.97	49.96	200.00+12xP/16	
49.96	49.95	250.00+11xP/16	
49.95	49.94	300.00+10xP/16	
49.94	49.93	350.00+9xP/16	
	49.92	400.00+8xP/16	
49.93	49.91	450.00+7xP/16	
49.92	49.90	500.00+6xP/16	
49.91	49.89	550,00+5xP/16	
49.90	49.88	600.00+4xP/16	
49.89	49.87	650.00+3xP/16	
49.88	49.86	700.00+2xP/16	
49.87	49.85	750.00+1xP/16	
49.86	47.00	800.00	
49.85		000.00	

Where P is the Daily average Area Clearing Price in paisa per kWh discovered in the Day Ahead Market segment of power exchange for N2 – North Region as considered by NLDC for declaring daily DSM rates on its website.

By Order of the Commission,

NEERAJ SATI,

Secretary,

Uttarakhand Electricity Regulatory Commission.