

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Petition No. 1/SM/2026**

**Coram:**

**Shri Jishnu Barua, Chairperson  
Shri Ramesh Babu V., Member  
Shri Harish Dudani, Member  
Shri Ravinder Singh Dhillon, Member**

**Date of Order: 13.03.2026**

**In the Matter of:**

**Rate of Congestion charge in real-time operation in inter-state transmission of electricity.**

**ORDER**

The Commission has notified the Central Electricity Regulatory Commission (Measures to relieve congestion in real time operation) Regulations, 2009 (hereinafter "Congestion Charge Regulations") on 22.12.2009, which came into effect from 24.12.2009. The rationale behind applying a congestion charge is to ensure stability and security of the transmission system and the overall Grid. Regulation 5 of the Congestion Charge Regulations provides that the Commission may, from time to time, by Order, specify the rate of congestion charge applicable to the whole or a part of the region. Regulation 5 is quoted as under:

*"5. Rate of Congestion Charge the Commission may, from time to time, by order specify the rate of congestion charge applicable to whole or a part of the region."*

The Commission, vide its order dated 22.4.2013, approved the Detailed Procedure for relieving congestion in real-time operation under Regulation 4(2) of the Congestion Charge Regulations.

**2.** Under Regulation 5 of the Congestion Charge Regulations, vide Order dated 17.03.2010 in 1/SM/2010, the rate of congestion charges was notified as under:

*"22. In view of the discussion in the foregoing paragraphs, we find that there is no objection to the proposed rate of congestion charge. Therefore, based on the rationale given in our order dated 8.1.2010, the following directions are issued:*



(a) *The rate of congestion charge has been fixed at a rate higher than the difference between maximum UI charge and UI charge at 50 Hz which is expected to serve as deterrent against over drawl by the regional entities at a frequency below 50 Hz through a congested transmission corridor and to incentivize the utilization of all generation on liquid fuel in the over-drawing Region/State, if any, thus relieving congestion.*

(b) *The maximum UI charge is Rs.7.35 and UI charge at 50 Hz is Rs. 1.92 per kWh and the difference works out to Rs. 5.43/ kWh. Accordingly, we direct that congestion charge be fixed at Rs. 5.45/kWh which will be applicable to all regions. The levy of congestion charge shall come into force with immediate effect and shall remain in force till further order of the Commission.*

(c) *At frequency below 50 Hz, congestion charge would be levied for overdrawl in the importing control area and at frequencies above 50 Hz, congestion charge would be levied for under-drawl in the exporting control area.*

(d) *No congestion charge shall be levied for congestion in a transmission corridor, if the power flow on the corridor is as per the schedule, but the congestion has been caused by forced outages of a line in the corridor, which occurs after the drawal schedule has been fixed.*

(e) *Such contingencies would have to be tackled through emergency instructions by the concerned SLDCs/RLDCs/NLDC to the concerned regional entities in order to relieve the congestion on the considerations of grid security.”*

As per the above, the Commission, after duly considering the comments/suggestions of stakeholders, fixed the rate of congestion charges at Rs. 5.45/kWh, and it is applicable to all regions.

3. The rationale behind the congestion charge of Rs. 5.45/kWh was explained by the Commission in an order dated 08.01.2010 in Suo-motu Petition No. 1/2010 as under:

*“2. The rationale behind applying congestion charge is to ensure stability and security of the transmission system. Hence it is imperative that all possible grid conditions due to over drawl during system constraints at a frequency less than 50 Hz need to be curbed. As the Unscheduled Interchange charge at or just below 50 Hz. is low, there is no commercial deterrent for the overdrawing State at this frequency to reduce overdrawl, though congestion may exist in the transmission corridor between importing and exporting areas/regions. In order to address the situation, the charge for energy drawn from the grid at normal frequency at or just below 50 Hz. Through a congested transmission corridor should be fixed high enough to discourage over drawl from the grid.*

*3. Prima facie we are of the view that the rate of congestion charge should be kept a little higher than the difference between the maximum Unscheduled interchange (UI) charge (which also denotes the max. Energy charge on liquid fuel) and the UI price at 50.0 Hz, as specified in the Central Electricity Regulatory Commission (Unscheduled Interchange charges and related matters) Regulations, 2009. In this way the congestion charge plus the UI charge will be higher than the maximum energy charge of the liquid fuel based power plants, which will serve as deterrent for over drawl by the regional entities at a frequency below 50 Hz through a congested transmission corridor and will incentivize the utilization of all generation on liquid fuel in the over drawing Region/State, if any, thus relieving congestion. If the UI charge plus congestion charge is higher than*

*the energy charge of the liquid fuel based generation, then the overdrawing regional entity would find it commercially advantageous in increasing liquid fuel generation in the State instead of overdrawing from the grid.”*

*4. Accordingly, the Commission proposes that the congestion charge shall be equal to difference of Maximum UI charges and UI charges at 50 Hz as per prevailing CERC (Unscheduled Interchange charges and related matters) Regulations. At present the Maximum UI charge is Rs.7.35 and UI charge at 50 Hz is Rs. 1.92 per kWh and the difference between the two comes to Rs. 5.43 per kWh. Accordingly, Congestion charge is proposed to be fixed at Rs. 5.45 which will be applicable to all regions.*

*5. It is important to note that at a frequency greater than 50 Hz, the congestion would not be caused by the overdrawing utility but by the utility injecting power into the congested transmission corridor and the congestion charge would instead be applied on the injecting utility. The detailed procedure for levy of congestion charge is given in the Congestion Charge Regulations. For the injecting utility, the remedy would be to reduce injection through reduction of generation in its control area.”*

4. Further, the comments which were received on the above-said Order were addressed in the Order dated 17.03.2010 as under:

*“4. Representatives of Assam State Electricity Board (ASEB) and Tripura State Electricity Company Limited (TSECL) have submitted that the inadequate transmission development in North Eastern Region (NER) is the primary cause of congestion. Utilities in NER are not being able to draw their quota of power from the generating stations due to congestion in inter-State transmission System even if they require it. Hence congestion charge should not be applied for under-drawal on the utilities of NER as under-drawal is beyond the control of these utilities.*

*5. ASEB, TSECL and Electricity Departments of Government of Manipur and Mizoram referring to the provisions of Regulation 4(3) of the Congestion charge regulations have argued that congestion charge should not be applied on upstream entities for under-drawal. Regulation 4(3) of the Congestion charge regulations is extracted as under:*

*“(3) The congestion charge shall be payable by the overdrawing regional entity in addition to the Unscheduled Interchange charges which would be payable as per Central Electricity Regulatory Commission (Unscheduled Interchange charges and related Matters) Regulations,2009 or any re-enactment thereof.”*

*6. The purpose of the Regulation 4(3) as quoted above is to ensure that the overdrawing entity is made to pay the UI charges as well as charges for congestion, since in the normal shortage scenario, the frequency is mostly below 50 Hz. and it would mostly be the overdrawing entity on the downstream side which would be at fault. However, this does not preclude the under-drawing entity from payment of congestion charges in case the frequency is above 50 Hz.*

*7. The Commission has studied the scenario for the North Eastern Region in discussion with the North Eastern Regional Load Despatch Centre and the Eastern Regional Load Despatch Centre. It is observed that under-drawal by utilities of NER takes place only for about three months in a year and, that also, when there is good South-West monsoon in the NER. Moreover, even if there is congestion because of good monsoon, the congestion occurs in the Eastern Region transmission system and not in the ER – NER transmission system. Hence congestion charge would rarely apply on utilities of NER for under-drawal. The reason for utilities of NER not being able to draw power is mainly due the transmission and distribution constraints in the intra-State systems in the States of the region, which results in under-drawl. Since congestion charge would be applied to Unscheduled*

*Interchange (UI) charges only, utilities in NER should take steps to sell the power they are unable to draw in order to avoid UI charges and therefore, congestion charges in the season when congestion is likely to occur.*

.....

*12. It is clear that congestion would be caused by over-drawing entities in the importing region when frequency is below 50 Hz. and by the under-drawing entity in the exporting region when frequency is above 50 Hz (when it would be considered as dumping power). Granting any exemption to entities in NER would be discriminatory. However, NLDC's stand that it should be applied to both sides in the frequency range 49.2 Hz. to 50.3 Hz would be penalizing the non-guilty. Their apprehension about flip-flop situation can only happen when frequency is hovering around 50 Hz. This can be taken care of by giving notice to both the regional entities guilty of over-drawal if the frequency alternates between the range below 50 Hz and above 50 Hz within a short span of time. However, application of congestion charge is a post facto event and would be dictated by the average frequency in the 15 minute time blocks. Therefore the Commission is of the view that no change is required in the method for determination of congestion proposed in our order dated 8.1.2010.*

*13. NLDC has also submitted that if congestion is between two control areas of incomparable sizes, then the major relief would be obtained from action by the smaller control area. In such a case, the imposition of congestion charge should not be guided by the above mentioned philosophy and congestion charge may be applied only on the entities of the smaller area.*

*14. The Commission is of the view that penalty for congestion cannot be imposed on a control area, primarily because it is smaller in size, though it may have a greater effect. As stated above, the prevalent frequency would decide which side is responsible for the congestion and congestion charge shall be applied accordingly. It is therefore prudent that the size of the control area does not dictate on whom congestion charge is to be applied.*

....

*19. As far as delay in commissioning of transmission project is concerned, the schedule of drawal is given by the NLDC/RLDCs/SLDCs on the basis of Available Transfer Capability (ATC) on day-ahead basis, and therefore, this factor will not figure in the congestion occurring in real-time. Forced outages of the line cause availability of the transmission system to reduce thereby affecting recovery of fixed charges of the Central Transmission Utility (CTU) as per the relevant regulations of the Commission. However we are in agreement that congestion charge should not be levied for congestion in a transmission corridor, if the power flow on the corridor is as per the schedule, but the congestion is caused by forced outage of a line in the corridor, which occurs after the drawal schedule has been fixed. Such contingencies would have to be tackled through emergency instructions by the concerned SLDC/RLDC/NLDC to the concerned entities in order to relieve the congestion, on grid security considerations. All such instructions would have to be followed by the entities immediately, as already mandated in the Indian Electricity Grid Code.*

*20. Indian Energy Exchange (IEX) has submitted that even on imposition of congestion charge at a frequency of 50 Hz., the price of overdrawn power will be Rs. 7.37 per kWh which is still lower than the average price of power on the exchange platform i.e. Rs. 7.48 per kWh (Source: CERC Market Monitoring Cell report July, 2009). The exchange prices are a reflection of the utility of power, which is quite high and a congestion charge of Rs 5.45 per kWh may not serve as a deterrent for over drawal, especially during peak hours in summer and winters. IEX has further submitted that the congestion charge rate of Rs 5.45 per kWh does not consider the losses and charges and other operational charges which will be applicable on the power bought within the region, which when applied, would result in an even higher cost of power. Moreover, it may not be economical for a generator*

to start its operations for a small period of time during which congestion charge would remain applicable. They would support a higher rate of congestion charge or a scale of congestion charge which varies with the limit by which ATC is transgressed.

21. It may be clarified that the rate of congestion charge is based on over-drawal/ under-drawal on real-time basis. The average price in the power market is based on assessment of demand and supply on day-ahead basis and may or may not include congestion for different lengths of time. Congestion charge rate and UI charge rate are pre-fixed, whereas market clearing price is determined depending on quotes of buyers and sellers on the Power Exchanges. Besides, frequency in the case of congestion has been considered as 50 Hz by IEX for the purpose of comparison, whereas the average frequency in the Power Exchange is likely to be much lower than that. At a frequency of 49.2 Hz, the total charge for over drawal would be Rs 12.80 per kWh, which is a sufficient deterrent. “

5. Charges are applicable as per Regulation 4 of the Congestion Charge Regulations quoted as under:

*“4. Applicability of Congestion Charge.*

*(1) To relieve congestion in the real time, a congestion charge shall be applied as a commercial measure. The congestion charge will be payable by a Regional entity or entities causing congestion in the inter-regional link or intra-regional link and receivable by a Regional entity or entities relieving congestion.*

*(2) Congestion charge may be imposed on any Regional entity or entities in any Region or Regions for causing congestion and paid to any Regional entity or entities in any Region or Regions for relieving congestion as per the detailed procedure under these regulations formulated by NLDC and approved by the Commission.*

*(3) The congestion charge shall be applicable to the overdrawing/ underdrawing/ over-injecting/ under-injecting regional entity in addition to the Unscheduled Interchange charges which would be payable/receivable as per Central Electricity Regulatory Commission (Unscheduled Interchange charges and related Matters) Regulations, 2009 or any reenactment thereof.”*

6. NTPC Green Energy Limited (NGEL) vide its letter dated 07.08.2025 submitted as under:

*“(a) At any instant of time the generation from RE project depends upon solar irradiation/wind speed, therefore, in case RE project is under injecting due to weather conditions, and parallelly congestion notice is issued by NLDC, then it is not possible to ramp up the load to ease congestion in the Grid by the RE project. However, during over injection by RE projects, if required, they may back down its load to ease congestion in the system.*

*(b) Congestion charges for drawl of power during non-solar hours: During non-solar hours, solar generators are only drawing power from the Grid for its auxiliary power consumptions. Further, RE generators are already paying DSM charges and RTDA charges for such drawal during non-solar hours, therefore an additional liability of congestion charges on such consumption will make the RE projects, which are competitively won projects, commercially unviable.*

*In view of the above observation of NGEL, Hon'ble CERC is requested to undertake holistic review of CERC Regulation “Measures to relieve congestion in real time operation)*

*Regulations, 2009, and exempt the applicability of any congestion charges on RE projects.”*

As noted above, NGEL requested a review of the applicability of congestion charges on RE projects.

7. The Associated Chambers of Commerce and Industry of India (ASSOCHAM) vide its letter dated 30.09.2025 submitted as follows:

*“This is in reference to the Congestion Charges levied for 15.06.2025, 16.06.2025, 27.07.2025 and 19.08.2025 for entities in WR, NR and SR region including Renewable Energy (RE) generators, in accordance with CERC (Measures to relieve congestion in real time operation) Regulations, 2009 cited (u/r-1). ASSOCHAM respectfully submit this representation regarding the levy of congestion charges on RE generators.*

*As per the said regulations and subsequent amendments approved by CERC vide order dated 22.04.2013 cited (u/r-2), congestion charges are levied on regional entities for deviations from scheduled generation or drawal in situations where the demand for transmission capacity exceeds the Available Transmission Capability (ATC).*

*The rate of congestion charges, as determined by CERC in its order dated 17.03.2010 in Petition No. 1/2010 (Suo-moto) cited (u/r-3), is Rs. 5.45/kWh. These rates were determined in 2010 based on the UI Regulation in force at that point of time. The rate of congestion charges were fixed at a rate higher than the difference between maximum UI charge (Rs 7.35/kWh) and UI charges at 50 Hz (Rs 1.92/kWh) to serve as deterrent against over-drawal by the regional entities at frequency below 50 Hz through a congested transmission corridor and to incentivize the utilization of generation on liquid fuel in the over-drawing region / state. Since then the rates have remained unchanged even though the UI Regulations and generation mix have undergone change.*

*The aforesaid Regulations and the applicable charges have lost its relevance in the current situation while many subsequent development and Regulatory changes have taken place. The applicability of congestion charges specifically for RE generators needs to be reviewed in the present context due to the following reasons stated below:*

- 1. At the time of framing these regulations and determination of Congestion rate, RE generation particularly solar, wind, and hybrid was not prevalent at this scale. However, RE has now become a significant contributor to the national grid. Unlike conventional generation, RE generation which is “Must Run” is inherently variable and dependent on real-time weather conditions, making accurate forecasting and scheduling challenging.*
- 2. The Congestion charges fixed by CERC in its order dated 17.03.2010 were based on CERC (Unscheduled Interchange charges & related matters) Regulations 2009, which is now repealed and replaced by CERC (DSM and related matters) Regulations, 2024. Even the liquid fuel generation at present in the generation mix is miniscule.*
- 3. While the DSM Regulations provide differentiated treatment for RE generators including exemption from penalties for deviations within 10% (solar) and 15% (wind) of the schedule. Congestion charges are still levied at Rs 5.45/kWh even within these exempted bands. Further, for deviation beyond the exempted band dual penalty is imposed i.e. DSM penalties and congestion charges for the same deviations.*

4. At the time when the CERC (Measures to relieve congestion in real time operation) Regulations, 2009 were notified, the DISCOMs & ISGS lacked the mechanism to procure power from alternative sources on real-time basis. The only option available at that time was to reduce drawl / increase injection. However, with the introduction of the Real Time Market (RTM) for electricity trading from 01.06.2020, DISCOMs now have the flexibility to manage over-drawls by procuring power through RTM.

5. For RE generators, while the under-injection mainly caused due to inaccurate weather forecast. Indian Electricity Grid Code (IEGC) does not permit generators to purchase power from RTM in such situations. Furthermore, the RE generators are unable to revise TGNA contracts, which limits the options available to the RE generators to respond to such real time conditions.

6. In order to address the issue of grid stability, during the period of Congestion, CERC's other mechanisms such as Ancillary Services, can be leveraged by NLDC/RLDC instead of applying Congestion charges. These regulations have enabled the NLDC and RLDCs to effectively manage grid balancing through dispatches under SRAS/TRAS. In several instances, such mechanisms have been successfully employed by NLDC/RLDCs to maintain grid stability.

7. Moreover, RE generators have been granted a waiver of transmission charges. Since congestion charges are levied for transmission congestion, it is logical and equitable that RE generators should also be exempted from these charges.”

As per the above, ASSOCHAM has also requested a review of the applicability of congestion charges for RE generators and exempting them from such charges, citing various grounds.

**8.** We note that the congestion charge rate was last determined in 2010 based on the Unscheduled Interchange (UI) charges set as the difference between the maximum UI rate and the UI rate at 50 Hz. In the last 15 years, there have been significant changes in the power system, market mechanisms, and energy mix. Further, the Indian power system has seen a substantial increase in renewable energy (RE) generation, particularly from solar and wind sources.

**9.** Keeping in view the representations received, large-scale RE integration, transition to the Deviation Settlement Mechanism (DSM), introduction of Real Time Market in addition to Day Ahead Market (DAM), the present rate of congestion charge needs a revision for managing the congestion effectively. Accordingly, the commission has decided to review the existing congestion charge rate.

**10.** We have considered the representations received from the ASSOCHAM and NGEL, praying to exempt RE sources from the congestion charge. We are of the view that congestion is an issue of grid security, and all entities must act to reduce it. With large-scale RE integration, RE sources cannot be exempted from the congestion charge. The Congestion Charge mechanism, as prescribed under the CERC (Measures to

Relieve Congestion in Real Time Operation) Regulations, 2009, is designed to ensure equitable and efficient use of the transmission network under constrained conditions. Congestion charges are a system operation tool aimed at maintaining grid reliability, and security and discouraging injection or drawal beyond the available transmission capability. The applicability of such charges to all entities, including RE generators, ensures non-discriminatory treatment and uniform accountability for actions that contribute to congestion, regardless of the source of generation.

**11.** Keeping in view the present Regulatory Mechanism, we propose a congestion charge based on the DSM charges, which is a simpler process for the calculation of congestion charge rate and the fact that the existing rate has been calculated based on the UI rates, which have been replaced with the DSM rates. We are of the view that the congestion charge rate should be kept higher than the DSM rates. In this way, the congestion charge plus the Deviation charge will be higher, which will serve as a deterrent for over-drawal by the regional entities at a frequency below 50 Hz through a congested transmission corridor and will incentivise the utilisation of all generation in the overdrawing region/State, if any, thus relieving congestion. There is a need to fix the floor price for congestion, since there is a possibility that an entity's DSM rate may be zero based on frequency, yet it is still causing congestion. A ceiling price has also to be fixed.

**12.** In view of the above discussions, the Commission proposes to revise the rate of congestion charge and its applicability as under:

(a) The rate of congestion charge shall be 1.5 times the 'Reference Charge Rate' (RR), 'Contract rate' or 'Normal Rate of Charges for Deviation' (NR), as applicable for such entity for such time block as per Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2024 and subsequent amendments and re-enactments, with a minimum rate of Rs 3/unit and a maximum of Rs 10/unit.

(b) No congestion charge shall be levied for congestion in a transmission corridor if the power flow on the corridor is as per the schedule, but the congestion has been caused by forced outages of a line in the corridor, which occurs after the drawal schedule has been fixed. Such contingencies would have to be tackled through emergency instructions by the concerned

SLDCs/RLDCs/NLDC to the relevant regional entities in order to relieve congestion, considering grid security.

An Illustration is included in **Annexure-I** for clarity of the above proposal.

**13.** Comments/ suggestions of the stakeholders on the above proposal are invited by 06.04.2026. We direct that the matter be notified for a public hearing before taking a final decision on the revised congestion charge rate.

**Sd/  
(Ravinder Singh Dhillon)  
Member**

**Sd/  
(Harish Dudani)  
Member**

**Sd/  
(Ramesh Babu V)  
Member**

**Sd/  
(Jishnu Barua)  
Chairperson**



**Illustration of the proposal at Para 12 of the Order for each type of DSM rate viz Contract rate, Normal Rate and Reference Rate as per DSM Regulations**

**(a) Congestion charge rate in respect of the WS Seller for a particular time block:**

Type of Entity	Scheduled Injection (MW)	Actual Injection (MW)	Available Capacity (MW)	Deviation (MW)= Actual-Schedule	Deviation%	Contract Rate (in Rs./ Unit)	DSM rate (Rs./unit)	Congestion charge rate (in Rs./ Unit)
	A	B	C	D=B-A	(Actual - Schedule) / (Available capacity) $E=((B-A)/C) * 100$	F	G	1.5 times the base rate of deviation, i.e. $H= 1.5 \times F$ (subject to a minimum of Rs 3/Unit and a maximum of Rs. 10/Unit)
WS Seller (Solar)	100	115	120	15	12.5%	3	90% of the Contract Rate, i.e. Rs. 2.7 Per Unit	4.5
WS Seller (Solar)	100	105	120	5	4.16%	3	Contract Rate, i.e. Rs. 3 Per Unit	4.5
WS Seller (Solar)	100	90	100	-10	-10%	3	Contract Rate, i.e. Rs. 3 Per Unit	4.5
WS Seller (Solar) merchant	100	115	120	15	12.5%	7	90 % of the Contract Rate, i.e. Rs. 6.3 Per Unit	10 ( $1.5 \times 7 = 10.5$ , capped at Rs. 10)
WS Seller (Solar) merchant	100	88	100	-12	-12%	7	110 % of the Contract Rate, i.e. Rs. 7.7 Per Unit	10 ( $1.5 \times 7 = 10.5$ , capped at Rs. 10)
WS Seller (Solar) merchant	100	80	100	-20	-20%	7	200 % of the Contract Rate, i.e. Rs. 14 Per Unit	10 ( $1.5 \times 7 = 10.5$ , capped at Rs. 10)
WS Seller (Solar) merchant	100	80	100	-20	-20%	0.40	200 % of the Contract Rate, i.e. Rs. 0.80 Per Unit	3 ( $1.5 \times 0.4 = 0.6$ , fixed at min. rate of Rs. 3)
WS Seller (Wind) merchant	100	80	100	-20	-20%	1.5	110 % of the Contract Rate, i.e. Rs. 1.65 Per Unit	3 ( $1.5 \times 1.5 = 2.25$ , fixed at min. rate of Rs. 3)

**Note:** Congestion charges shall be payable/ receivable based on the corridor in which the congestion has been notified by the system operator and the corresponding location of the seller and the deviation by such seller (over-injection/ under-injection)

(b) Congestion charge rate in respect of the General Seller (Other than RoR and MSW) for a particular time block:

Type of Entity	Scheduled Injection (MW)	Actual Injection (MW)	Deviation (MW)= (Actual-Schedule)	Deviation%	Reference Charge (RR) rate (in Rs./ Unit)	Frequency (in Hz)	DSM rate (Rs./unit)	Congestion charge rate (in Rs./ Unit)
	A	B	C=B-A	$100 \times \frac{\text{Actual} - \text{Schedule}}{\text{Schedule}}$ D=100*(B-A)/A	E	F	G	1.5 times the base rate of deviation, i.e., H= 1.5xE (subject to a minimum of Rs 3/Unit and a maximum of Rs. 10/Unit)
General Seller	500	550	50	10%	2.75	50.06	0	4.125
General Seller	500	550	50	10%	2.75	50.10	10% of RR, i.e. Rs 0.275 Per Unit	4.125
General Seller	500	550	50	10%	2.75	50.02	RR rate, i.e. Rs. 2.75 Per Unit	4.125
General Seller	500	450	-50	-10%	2.75	49.88	150% of RR rate, i.e. Rs. 4.125 Per Unit	4.125
General Seller	500	550	50	10%	1.95	50.06	0	3 (1.5*1.95=2.925, fixed at min. rate of Rs. 3)
General Seller	500	550	50	10%	1.95	50.02	RR rate, i.e. Rs. 1.95 Per Unit	3 (1.5*1.95=2.925, fixed at min. rate of Rs. 3)
General Seller	500	425	-75	-15%	1.95	50.00	RR rate, i.e. Rs. 1.95 Per Unit	3 (1.5*1.95=2.925, fixed at min. rate of Rs. 3)

**Note:** Congestion charges shall be payable/ receivable based on the corridor in which the congestion has been notified by the system operator and the corresponding location of the seller and the deviation by such seller (over-injection/ under-injection)

(c) Congestion charge rate in respect of the Buyer for a particular time block:

Type of Entity	Scheduled drawal (MW)	Actual drawal (MW)	Deviation (MW)= (Actual-Schedule)	Deviation%	Normal Rate (in Rs./ Unit)	Frequency (in Hz)	DSM rate (Rs./unit)	Congestion charge rate (in Rs./ Unit)
	A	B	C=B-A	$100 \times (\text{Actual} - \text{Schedule}) / (\text{Schedule})$ $D=100 \times (B-A)/A$	E	F	G	1.5 times the base rate of deviation, i.e., $H = 1.5 \times E$ (subject to a minimum of Rs 3/Unit and a maximum of Rs. 10/Unit)
Buyer	1000	1100	100	10%	3	50.00 Hz	NR, i.e. Rs. 3 Per Unit	4.5
Buyer	400	440	40	10%	3	50.06 Hz	50% of NR, i.e. Rs. 1.5 Per Unit	4.5
Buyer	1000	1100	100	10%	3	50.05 Hz	75% of NR, i.e. Rs. 2.25 Per Unit	4.5
Buyer	1000	850	-150	-15%	3	49.90 Hz	80% of NR, i.e. Rs. 2.4 Per Unit	4.5
Buyer (RE Rich State)	1000	750	-250	-25%	1.9	50.02 Hz	50% of NR, i.e. Rs. 0.95 Per Unit	3 ( $1.5 \times 1.9 = 2.85$ , fixed at min. rate of Rs. 3)

**Note:** Congestion charges shall be payable/ receivable based on the corridor in which the congestion has been notified by the system operator and the corresponding location of the buyer and the deviation by such seller (over-drawal/ under-drawal)

Note: All the above examples are for illustration purposes only and are not exhaustive.