

Comments on Clause 8. (4) Charges for Deviation for **WS Seller being a generating station based on wind or solar or hybrid of wind–solar resources**

Deviation by way of over injection (Receivable by the Seller)	Deviation by way of under injection (Payable by the Seller)
(i) for VL <sub>WS</sub> (1) @ contract rate; (ii) for VL <sub>WS</sub> (2) @ 90% of contract rate (iii) for VL <sub>WS</sub> (3) @ 50% of contract rate, (iv) beyond VL <sub>WS</sub> (3) @ Zero;	v) for VL <sub>WS</sub> (1) @ contract rate; (vi) for VL <sub>WS</sub> (2) @ 110% of contract rate; (vii) for VL <sub>S3</sub> @ 150% of contract rate; (viii) beyond VL <sub>WS</sub> (3) @ 200% of contract rate.
Note: Volume Limits for WS Seller :	
<b>WS Seller</b>	<b>Volume Limit</b>
A generating station based on solar or a hybrid of wind –solar resources or aggregation at a pooling station	VL <sub>WS</sub> (1) = Deviation up to 5% D <sub>WS</sub> VL <sub>WS</sub> (2) = Deviation beyond 5% D <sub>WS</sub> and up to 10% D <sub>WS</sub> VL <sub>WS</sub> (3) = Deviation beyond 10% D <sub>WS</sub> and up to 20% D <sub>WS</sub>

**Comments:**

To analyzing the draft “Central Electricity Regulatory Commission (Deviation Settlement Mechanism and Related Matters) Regulations, 2024” for clause 8(4) a case study of 100MW CTU connected solar plant with different deviation(%) and considering a normal rate of 5Rs./Kwh is shown below.

a) Over-Injection

Over-Injection								
Sr. No.	Actual (KWh)	Schedule(KWh)	AvC(KWh)	Deviation(KWh)	Deviation(%)	CERC 2015	CERC 2022 (Implemented)	Draft CERC 2024
						% Revenue loss	% Revenue loss	% Revenue loss
1	11250	10000	25000	1250	5%	0.00%	0.00%	0.00%
2	12500	10000	25000	2500	10%	0.00%	0.00%	1.00%
3	13750	10000	25000	3750	15%	0.00%	0.91%	5.45%
4	14750	10000	25000	4750	19%	0.68%	7.63%	8.47%
5	15000	10000	25000	5000	20%	0.83%	9.17%	9.17%
6	17500	10000	25000	7500	30%	2.86%	22.14%	22.14%

b) Under-Injection

Under-Injection								
Sr. No.	Actual (KWh)	Schedule(KWh)	AvC(KWh)	Deviation(KWh)	Deviation(%)	CERC 2015	CERC 2022 (Implemented)	Draft CERC 2024
						% Revenue loss	% Revenue loss	% Revenue loss
1	10000	11250	25000	1250	5%	0.00%	0.00%	0.00%
2	10000	12500	25000	2500	10%	0.00%	0.00%	1.25%
3	10000	13750	25000	3750	15%	0.00%	1.25%	7.50%
4	10000	14750	25000	4750	19%	1.00%	6.25%	12.50%
5	10000	15000	25000	5000	20%	1.25%	7.50%	13.75%
6	10000	17500	25000	7500	30%	5.00%	20.00%	38.75%

Following points can be concluded based on above shown comparison-

- 1) Generators revenue loss will get impacted if the deviation is more than 5%
- 2) In case of over injection revenue losses in the draft regulation are more than the revenue loss in the existing regulation up to 19% deviations and revenue losses are equal in the draft regulation and existing regulations beyond deviations of 20%
- 3) In case of Under injection revenue losses in the draft regulation are increased up to 8 times as compared with CERC regulation 2015 and 2 times as compared with existing CERC regulation
- 4) In the given draft DSM charges are much higher in case of Under injection deviations

The significant rise in revenue losses is making existing renewable energy businesses commercially unviable. Although renewable energy generators are committed to maintaining grid discipline, forecasting agencies continue to struggle with accurately predicting weather conditions and are striving for higher forecasting accuracies.

Hence, to improve grid security and ensure commercial viability, the Honorable Central Regulatory Commission may consider the following suggestion points:

- There can be upper ceiling of deviations charges
- Low DSM charges during monsoon weather conditions
- A fixed lower charge for deviations than Normal charges  
eg. Fixed Charge for deviation= 2Rs/Kwh  
Whereas Normal Charge = 4.5Rs.Kwh (based on computation of DAM, RTM, AS prices)