

Regd. No. 362 / IV of 8 May, 2013

भारतीय सौर ऊर्जा महासंघ

पंजीकरण नं 362 / IV - 8 मई, 2013

Ref No: NSEFI/CERC/2024-25/0020

Date: 03/06/2024

To, Shri Harpreet Singh Pruthi Secretary, CERC

Central Electricity Regulatory Commission, 8th Floor, Tower B, World Trade Centre, Nauroji Nagar, New Delhi – 110029

Subject: Members' comments Draft CERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2024

Dear sir,

Greetings from the National Solar Energy Federation of India (NSEFI)!

We from the National Solar Energy Federation of India would like to share our gratitude towards CERC for their kind support in the growth of the renewable energy sector. We would like to share our comments on the Central Electricity Regulatory Commission, Draft CERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2024 from our members.

We would also like to bring to your notice that the Hon'ble Court has admitted the matter but has not granted any stay. The court issued the notice and directed CERC to file its counter within four weeks.

The matter has been listed on 3rd July 2024. Please find the attached comments in the **Annexure** for your reference. Looking forward to your continued support.

With Best Regards



Subrahmanyam Pulipaka Chief Executive Officer National Solar Energy Federation of India



Regd. No. 362 / IV of 8 May, 2013

भारतीय सौर ऊर्जा महासंघ

पंजीकरण नं 362 / IV - 8 मई, 2013

Annexure: Comments on Draft CERC (Deviation Settlement Mechanism and Related Matters) Regulations, 2024

S. No.	Proposed Amendment	Suggested language	Remarks and Rationale
1.	8. Charges for Deviation	8. Charges for Deviation	
	•••		
	(4) Charges for Deviation,	(4) Charges for Deviation,	The previous revision in DSM framework came out in Feb-2023, which
	in respect of a WS Seller	in respect of a WS Seller	means it has just been 14 months from the last revision. The industry has
	being a generating station	being a generating station	barely adjusted itself to the new DSM regulations, and now again such
	based on wind or solar or	based on wind or solar or	significant set of changes in the DSM framework are proposed again
	hybrid of wind-solar	hybrid of wind-solar	within a short timeframe is throwing major challenges and the industry is
	resources, including such	resources, including such	still figuring out mitigation. It is suggested that any new changes, like the
	generating stations	generating stations	instant regulations, be brought into effect with gap of 3 years at least.
	aggregated at a pooling	aggregated at a pooling	
	station through QCA shall	station through QCA shall	Further, as you are aware, generation from Wind and Solar is weather
	be without any linkage to	be without any linkage to	dependent and never fully controllable as weather cannot be 100%
	grid frequency, as under:	grid frequency, as under:	accurately predicted, which means that positive/negative errors are
	Deviation Deviation	Deviation Deviation	considered equally probable. Even with robust forecasting tools, the
	by way of by way of	by way of by way of	forecast would be only near to injection but never exactly equal injection
	over under	over under	due to Errors that may be on positive (over injection) or negative (under
	injection injection	injection injection	injection) side. As an example, in wind sites, neither gusts of wind nor
	(Receivable (Payable	(Receivable (Payable	sudden drop in wind can be predicted causing over injection and under
	by the by the	by the by the	injection respectively.
	Seller) Seller)	Seller) Seller)	



Regd. No. 362 / IV of 8 May, 2013

भारतीय सौर ऊर्जा महासंघ

पंजीकरण नं 362 / IV - 8 मई, 2013

o. Proposed An	nendment	Suggested lan	nguage
(i) for VL _{WS} (1) @ contract rate; (ii) for VL _{WS} (2) @ 90% of contract rate (iii) for VL _{WS} (3) @ 50% of contract rate, (iv) beyond VL _{WS} (3) @ Zero;	v) for VL _{WS} (1) @ contract rate; (vi) for VL _{WS} (2) @ 110% of contract rate; (vii) for VL _{WS} @ 150% of contract rate; (viii) beyond VL _{WS} (3) @ 200% of contract rate.	(i) for VL _{WS} (1) @ contract rate; (ii) for VL _{WS} (2) @ 90% of contract rate (iii) for VL _{WS} (3) @ 50% of contract rate, (iv) beyond VL _{WS} (3) @ Zero;	v) for VL _{WS} (1) @ contract rate; (vi) for VL _{WS} (2) @ 110% of contract rate; (vii) for VL _{WS} @ 150% of contract rate; (viii) beyond VL _{WS} (3) @ 200% of contract rate.

Remarks and Rationale

IMPACT

Simulation was done on a ISTS substation having wind projects and another substation having solar projects to assess impact of present draft regulation on increase in individual deviation impact and deviation impact on aggregate basis from 2022 regulations. In both individual as well as aggregate basis the deviation impact increases. The deviation impact on individual basis significantly rises from 90 % to 125% and on aggregate basis the rise is 3% to 17%. Below is the snapshot of the impact:

		A	В	(B-A)/A	С	(C-A)/A
	Solar MW	CERC 2023 Individual	CERC 2024 draft Individual	Increase over CERC 2023 Regulation (Individual)	CERC 2024 draft Aggregated	Increase over CERC 2023 Regulation (Aggregated)
IPP1	250	3.03	5.81	92%	3.6	15%
IPP2	300	3.9	7.25	86%	4.4	11%
IPP3	250	2.7	5.35	98%	3.7	27%
Aggg Size	800	3.21	VC310,457	0.00,100,00	3.88	17%
Statement of the	2	Individual Avg			Aggregation Avg	

Table 1: Sample study on Solar Projects connected to ISTS Bhadla 1 S/s



Regd. No. 362 / IV of 8 May, 2013

भारतीय सौर ऊर्जा महासंघ

पंजीकरण नं 362 / IV - 8 मई, 2013

S. No. P	roposed Am	endment	Suggested lan	nguage	Rema	rks an	d Ration	ale				
2 2 5 1 1	A generating station based on solar or a hybrid of wind–solar resources or	Volume Limit VL _{WS} (1) = Deviation up to 5% D _{WS} VL _{WS} (2) = Deviation beyond 5% D _{WS}	Suggested land WS Seller A generating station based on solar or a hybrid of wind-solar resources or	Volume Limit $VL_{WS}(1)$ = Deviation up to $\frac{5\%}{10\%}$ D_{WS} $VL_{WS}(2)$ = Deviation beyond $\frac{5\%}{10\%}$ 10%	IPP1 IPP2 IPP3 Agg Size Table As the	Wind MW 250 245 200 695 2: Sam	CERC 2023 Individual 5.3 4.0 4.8 4.69 Individual Avg ple study	B CERC 2024 draft Individual 9.9 9.0 9.2 on Wind	l Projects	even on ag	ggregation	uticorin 2 S/s basis too, we
	aggregation at a pooling station A generating station based on	and up to $10\% D_{WS}$ VL _{WS} (3) = Deviation beyond $10\% D_{WS}$ and up to $20\% D_{WS}$ VL _{WS} (1) = Deviation up to $10\% D_{WS}$	aggregation at a pooling station	D_{WS} and	Furthe Sched and no band of Error present improvaccuratinstead	er to the uling how the of ±15% level in the wed gritte weak of 5% and the text of 5% and the weak of 5% and 5% and the weak of 5% and 5%	r these be a bove ave continuation and a manage than 90% and manage ther fore % Devia:	y, you manuously of Error in the time from early gement, recasting.	reviewed nay also improved r for WS that DSM rlier arou n ±15% ra despite the In line w Solar or	basis empi note that I since the Sellers is I Regulation and 60% E ange. Lesse the persisting with the san Hybrid, the	forecasting 2015 DSM in acceptal ns were in Error in ±1 er Errors hang challen me, it is rene Commi	g as well as I regulations, ble deviation troduced, the 5% range to ave helped in ges in more eleterated that ssion should generators to

135-137, 1st Floor Rectangle-1, D-4, Saket District Center New Delhi-110017 Email: chairman@nsefi.in, pulipaka@nsefi.in, Call: 011-41554149, +91-7045524937, www.nsefi.in



Regd. No. 362 / IV of 8 May, 2013

भारतीय सौर ऊर्जा महासंघ

S. No.	Proposed An	nendment	Suggested lan	nguage	Remarks and Rationale
	wind resource	VL _{WS} (2) = Deviation beyond 10% D _{WS} and up to 15% D _{WS} VL _{WS} (3) = Deviation beyond 15% D _{WS} and up to 25% D _{WS}	A generating station based on wind resource	VL _{WS} (1) = Deviation up to 10% 15% D _{WS} VL _{WS} (2) = Deviation beyond 10% 15% D _{WS} and up to 15% 20% D _{WS} VL _{WS} (3) = Deviation beyond 15% 20% D _{WS} and up to 20% D _{WS} and up to 25% D _{WS}	better adapt to this change without paying excessive penalty. Similarly, the Deviation for Wind should be kept unchanged at 15%, instead of 10%.



Regd. No. 362 / IV of 8 May, 2013

भारतीय सौर ऊर्जा महासंघ

पंजीकरण नं 362 / IV - 8 मई, 2013

S. No.	Proposed Amendment	Suggested language	Remarks and Rationale		
2.	Aggregation of	There is no clarity in the draft rules whether aggregation of schedules will be allowed in multiple or no			
	Schedules	QCA scenarios. The conce	ept of Aggregation of schedule was introduced in the IEGC, 2023. The		
	The respective RLDC	Annexure 6 to the IEGC, 20	023 does not mandate a RE developer to have a QCA. To quote:		
	shall allow aggregation of				
	schedule at an ISTS	"1.(b) The responsibility to	provide forecast and other data and to coordinate with RLDC under this		
	substation for all	Procedure shall be that of	Qualified Coordinating Agency on behalf of all generating stations it is		
	renewable energy	representing. Provided the	at where Qualified Coordinating Agency is not identified, individual		
	generators connected to it	renewable energy generati	ng station or lead generator, as the case may be, shall be responsible for		
	irrespective of single or	the same."			
	multiple QCAs or no				
	QCA.	Basis the IEGC the NLDC	had proposed a draft procedure for aggregation where it considered only		
		single QCA per ISTS subs	tation for aggregation due to administrative reason. As the grid code does		
		not mandate QCA for every	y generator, there can be scenario where out of say 7 developers connected		
		to an ISTS substation only	5 appoint a QCA and remaining 2 do not. The five that appoint QCA may		
		or may not have common	QCA resulting in multiple QCAs. Despite all these possible scenarios, the		
		00 0	facilitated by RLDC as all developers have to provide schedule to RLDC		
			e Hon'ble Commission may mandate aggregation irrespective of QCA in an		
		_	re in this direction should be worked out by NLDC and industry associations		
		shall cooperate with feedba	ck to support this.		
3.	8. Charges for Deviation	8. Charges for Deviation	The depooling of deviation charges should not be left to the individual		
			sellers and the QCA, as this would be susceptible to frequent disputes and		
			delayed DSM payment to pool. An aggregated DSM charge at the pooling		
			station would have to be depooled in such a manner that a WS Seller over		

135-137, 1st Floor Rectangle-1, D-4, Saket District Center New Delhi-110017 Email: chairman@nsefi.in, pulipaka@nsefi.in, Call: 011-41554149, +91-7045524937, www.nsefi.in



Regd. No. 362 / IV of 8 May, 2013

भारतीय सौर ऊर्जा महासंघ

पंजीकरण नं 362 / IV - 8 मई, 2013

S. No.	Proposed Amendment	Suggested language	Remarks and Rationale
	(4) Charges for Deviation, in respect of a WS Seller (c) depooling of deviation charges for WS seller(s) connected to the pooling station shall be as per the methodology mutually agreed upon between the QCA and such individual WS seller(s).	(4) Charges for Deviation, in respect of a WS Sellerd (c) depooling of deviation charges for WS seller(s) connected to the pooling station shall be as per the methodology to be prepared by Grid-India and approved by CERC, and the basis of such methodology would be the contribution to Deviation by each individual WS Seller connected to said pooling station mutually agreed upon between the QCA and such individual WS seller(s).	injecting is paid from deviation pool and one under injecting pays back at the price mentioned in its agreement/ PPA. Leaving this to discretion of QCA and seller's bilateral arrangements opens up a pandora's box of potential litigations/ disputes, thereby derailing the concept of aggregation itself. Accordingly, it is requested that the methodology for depooling be predefined basis contribution to deviation by each WS Seller connected to pooling station, rather than relying on mutual agreement between WS Seller and QCA.



Regd. No. 362 / IV of 8 May, 2013

भारतीय सौर ऊर्जा महासंघ

पंजीकरण नं 362 / IV - 8 मई, 2013

S. No.	Proposed Amendment	Suggested language	Remarks and Rationale
4.	8. Charges for Deviation (4) Charges for Deviation, in respect of a WS Seller being a generating station based on wind or solar or hybrid of wind—solar resources, including such generating stations aggregated at a pooling station through QCA shall be without any linkage to grid frequency, as under:	8. Charges for Deviation (4) Charges for Deviation, in respect of a WS Seller being a generating station based on wind or solar or hybrid of wind—solar resources, including such generating stations aggregated at a pooling station through QCA shall be without any linkage to grid frequency, as under:	More than 30 GW of ISTS connected captive generators are coming up across the country to supply power to captive users seeking to go green. This market is slated to further grow as export-oriented industries face carbon taxes like Carbon Border Adjustment Mechanism in Europe. Hence, huge investment in going green is happening in the country with end users paying for setting up renewable projects. As a captive project has no tariff (sale of energy not involved), the reasonable cost of transferring energy to captive user is recovered by captive generator under captive energy delivery agreement. Such cost of transferring energy or transfer price is captured in captive energy delivery agreement and should be considered for calculating deviation charges.
	(a) the contract rate for the purpose of deviation shall be equal to the weighted average of the contract rates of all individual WS seller(s) opting for aggregation at the pooling station;	(a) the contract rate for the purpose of deviation shall be equal to the weighted average of the contract rates of all individual WS seller(s) opting for aggregation at the pooling station. For WS sellers which are captive	

135-137, 1st Floor Rectangle-1, D-4, Saket District Center New Delhi-110017 Email: chairman@nsefi.in, pulipaka@nsefi.in, Call: 011-41554149, +91-7045524937, www.nsefi.in



Regd. No. 362 / IV of 8 May, 2013

भारतीय सौर ऊर्जा महासंघ

पंजीकरण नं 362 / IV - 8 मई, 2013

S. No.	Proposed Amendment	Suggested language	Remarks and Rationale
		generators the transfer price for supplying captive energy to captive user shall be considered for the purpose of deviation;	
5.	8. Charges for Deviation (5) Charges for Deviation, in respect of a Standalone Energy Storage System (ESS), shall be at par with the charges for Deviation for a general seller other than an RoR generating station or a generating station based on municipal solid waste or WS seller as specified in Clause (1) of this Regulation	8. Charges for Deviation (5) Charges for Deviation, in respect of a Standalone Energy Storage System (ESS), shall be at par with the charges for Deviation for a general seller other than an RoR generating station or a generating station based on municipal solid waste or WS seller as specified in Clause (1) of this Regulation. At the time of drawl of power by ESS the deviation	It is appreciated that the Hon'ble Commissioned has included standalone ESS in the DSM framework now. However, only the treatment of deviation in terms of ESS as a seller, or injecting entity has been addressed There will be scenarios where ESS would be behaving as a drawee entity as well, as the charging power would need to be scheduled/ procured from the grid. The same may be clarified so that there is no room for ambiguity in interpretation. We suggest that it be linked to Buyer other than RE Rich or Super RE Rich State.

135-137, 1st Floor Rectangle-1, D-4, Saket District Center New Delhi-110017 Email: chairman@nsefi.in, pulipaka@nsefi.in, Call: 011-41554149, +91-7045524937, www.nsefi.in



Regd. No. 362 / IV of 8 May, 2013

भारतीय सौर ऊर्जा महासंघ

पंजीकरण नं 362 / IV - 8 मई, 2013

S. No.	Proposed Amendment	Suggested language	Remarks and Rationale
		charges shall be at par	
		with Buyer other than	
		RE Rich or Super RE	
		Rich State.	
6.	8. Charges for Deviation	8. Charges for Deviation	The draft regulations appear to address ESS co-located with WS Seller.
			However, there are scenarios possible where the ESS is co-located with a
	(6) Charges for Deviation,	(6) Charges for Deviation,	General Seller as well. The MoP scheme dated 12.04.2022 for flexibility
	in respect of an ESS co-	in respect of an ESS co-	in Generation and Scheduling of Thermal/ Hydro power stations also
	located with WS Seller(s)	located with general	provided for co-location of RE and ESS with Thermal/ Hydro generating
	connected at the same	seller or WS Seller(s)	stations as an option. Therefore, suitable amendment in the regulations is
	interconnection point,	connected at the same	suggested.
	shall be as follows:	interconnection point,	
	(i) Such seller shall	shall be as follows:	Also, if the ESS is treated as entity behind a lead generator, then charging
	provide a separate	(i) Such seller shall	power will also need to be treated with accordingly. This may be clarified
	schedule for WS	provide a separate	as well.
	and ESS	schedule for other	
	components	generation	
	through the Lead	component, or	
	generator or QCA	the WS and ESS	
	at the	components, as	
	interconnection	applicable	
	point;	through the Lead	
		generator or QCA	



Regd. No. 362 / IV of 8 May, 2013

भारतीय सौर ऊर्जा महासंघ

S. No.	Proposed Amendment	Suggested language
	(ii) Deviation	at the
	corresponding to	interconnection
	WS component	point;
	shall be charged at	(ii) Deviation
	the same rates as	corresponding to
	applicable for WS	the respective
	Seller being a	generation WS
	generating station	component shall
	based on solar or	be charged at the
	hybrid of wind-	same rates as
	solar resource in	applicable for said
	accordance with	generation
	clause (4) of this	component WS
	regulation; and	Seller being a
	(iii)Deviation	generating station
	corresponding to	based on solar or
	the ESS	hybrid of wind-
	component shall	solar resource in
	be charged at the	accordance with
	same rates as	clause (4) of this
	applicable for a	regulation ; and
	standalone ESS in	(iii)Deviation
	accordance with	corresponding to



Regd. No. 362 / IV of 8 May, 2013

भारतीय सौर ऊर्जा महासंघ

S. No.	Proposed Amendment	Suggested language	Remarks and Rationale
	clause (5) of this	the ESS	
	regulation.	component shall	
		be charged at the	
		same rates as	
		applicable for a	
		standalone ESS in	
		accordance with	
		clause (5) of this	
		regulation.	
7.	10. Schedule of Payment	10. Schedule of Payment	A proviso is suggested so that late payment surcharge liability only comes
	of charges for deviation	of charges for deviation	to the entity which has defaulted and not others, in the cases where
	(1) The payment of	(1) The payment of	multiple generating stations are aggregating at a pooling station through
	charges for deviation shall	charges for deviation shall	QCA.
	have a high priority, and	have a high priority, and	
	the concerned regional	the concerned regional	
	entity shall pay the due	entity shall pay the due	
	amounts within 7 (seven)	amounts within 7 (seven)	
	days of the issue of the	days of the issue of the	
	statement of charges for	statement of charges for	
	deviation by the Regional	deviation by the Regional	
	Power Committee, failing	Power Committee, failing	
	which late payment	which late payment	
	surcharge @ 0.04% shall	surcharge @ 0.04% shall	



Regd. No. 362 / IV of 8 May, 2013

भारतीय सौर ऊर्जा महासंघ

S. No.	Proposed Amendment	Suggested language	Remarks and Rationale
	be payable for each day of	be payable for each day of	
	delay.	delay.	
		Provided that, in case of	
		generating stations	
		aggregated at a pooling	
		station through QCA,	
		the applicability of late payment surcharge shall	
		only be on individual	
		generators that have	
		defaulted in the timely	
		payment of deviation	
		charges. This would be	
		suitably incorporated in	
		the methodology for	
		depooling of deviation	
		charges for WS sellers	
		under regulation	
		8.(4)(c).	
8.	7. Normal Rate of	-	Ancillary Services Charge will have a direct impact on revenue of the
	Charges for Deviations		generators. Hence, a detailed procedure needs to be specified for
			calculation of Weighted Average Ancillary Service Charge (in INR/ kWh)



Regd. No. 362 / IV of 8 May, 2013

भारतीय सौर ऊर्जा महासंघ

पंजीकरण नं 362 / IV - 8 मई, 2013

S. No.	Proposed Amendment	Suggested language	Remarks and Rationale
	(1) The Normal Rate (NR)		for each time block and such calculation of Ancillary Services Charge
	for a particular time block		should be transparent and be made readily available on the related
	shall be equal to the sum		websites.
	of:		
	(a) 1/3 [Weighted		Accordingly, CERC should define an agency or platform where daily
	average ACP (in		block-wise ancillary service charges will be published in detail. This data
	paise/kWh) of the		should be made available in advance in a manner accessible to all the
	Integrated-Day		stakeholders.
	Ahead Market		
	segments of all the		
	Power Exchanges];		
	(b) 1/3 [Weighted		
	average ACP (in		
	paise/kWh) of the		
	Real-Time Market		
	segments of all the		
	Power Exchanges];		
	and		
	(c) 1/3 [Ancillary		
	Service Charge (in		
	paise/kWh)		
	computed based on		
	the total quantum of		



Regd. No. 362 / IV of 8 May, 2013

भारतीय सौर ऊर्जा महासंघ

पंजीकरण नं 362 / IV - 8 मई, 2013

S. No.	Proposed Amendment	Suggested language	Remarks and Rationale
	Ancillary Services		
	deployed and the net		
	charges payable to		
	the Ancillary Service		
	Providers for all the		
	Regions].		