

SRPC secretariat comments on the Proposed 4th Amendment

A. *The daily average area clearing prices in the day-ahead market should be used as the basis for market linked DSM price for the time being and not the time block ACP which could have high volatility – Corresponding Changes in Regulation 5*

This provision appears somewhat contradictory to the essence covered under Critical Issues Identified in the Present DSM amendment (d) *The current DSM prices do not capture the difference between the peak and the off-peak value of electricity, whereas the market prices clearly present this in terms of different prices discovered for different time periods in a day. The present DSM prices are constant over very long periods. There is a need for some mechanism to capture the time value of electricity.*

The DSM rates may need to have the capability to capture the value of electricity. Thus, in case average value for the day is considered then it dilutes the intent of considering ACP for settlement which should vary for peak and off peak as per the demand requirement. ACP is taken into account because of transmission constraints which may occur during certain blocks. In case average value for the day is taken then ACP would lose its significance over MCP. As the difference in MCP and ACP is the market split which may not occur in all the blocks.

ACP is considered to value the cost of electricity, in case average value is taken then it dilutes the value of electricity, the very basic reason to shift to ACP based method of price discovery for DSM.

The table above shows the count of Rate in each time block from 1st July 2017 to 30th June 2018. It can be seen that the cost of the power varies with time based on peak and off peak hours.

Time/R S (MCP)	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12
00:00:00	3	41	105	102	53	35	11	5	6	4	0	0
00:15:00	2	33	110	103	44	24	32	8	4	5	0	0
00:30:00	2	42	105	105	44	34	18	10	1	4	0	0
00:45:00	2	55	97	113	51	31	10	2	4	0	0	0
01:00:00	2	61	98	114	52	25	8	4	1	0	0	0
01:15:00	2	70	94	119	49	19	7	5	0	0	0	0
01:30:00	2	75	94	123	46	17	4	4	0	0	0	0
01:45:00	2	79	100	120	44	16	3	1	0	0	0	0
02:00:00	2	85	107	110	45	12	2	2	0	0	0	0
02:15:00	2	85	115	101	43	12	6	1	0	0	0	0
02:30:00	3	92	114	101	38	10	5	2	0	0	0	0
02:45:00	3	95	124	95	32	11	3	2	0	0	0	0
03:00:00	3	95	126	95	33	8	4	1	0	0	0	0
03:15:00	3	96	134	89	32	6	3	2	0	0	0	0
03:30:00	4	96	136	89	29	6	4	1	0	0	0	0
03:45:00	5	98	138	89	28	4	3	0	0	0	0	0

04:00:00	4	94	151	86	23	4	3	0	0	0	0	0
04:15:00	4	93	153	76	32	5	2	0	0	0	0	0
04:30:00	6	82	158	82	31	5	1	0	0	0	0	0
04:45:00	6	82	156	84	31	4	2	0	0	0	0	0
05:00:00	12	76	155	87	31	3	1	0	0	0	0	0
05:15:00	8	30	191	104	28	3	1	0	0	0	0	0
05:30:00	7	25	194	107	29	2	1	0	0	0	0	0
05:45:00	6	15	200	107	32	4	1	0	0	0	0	0
06:00:00	4	23	194	113	27	4	0	0	0	0	0	0
06:15:00	4	4	179	120	45	10	3	0	0	0	0	0
06:30:00	2	3	156	132	59	10	3	0	0	0	0	0
06:45:00	1	4	118	159	69	11	3	0	0	0	0	0
07:00:00	2	3	100	152	88	18	2	0	0	0	0	0
07:15:00	2	2	100	152	93	15	1	0	0	0	0	0
07:30:00	2	3	91	140	102	26	1	0	0	0	0	0
07:45:00	2	5	89	128	105	36	0	0	0	0	0	0
08:00:00	4	3	94	106	112	42	4	0	0	0	0	0
08:15:00	4	6	105	111	100	38	1	0	0	0	0	0
08:30:00	4	5	106	111	97	41	1	0	0	0	0	0
08:45:00	4	7	108	115	95	35	1	0	0	0	0	0
09:00:00	4	7	114	119	88	32	1	0	0	0	0	0
09:15:00	3	10	104	111	104	33	0	0	0	0	0	0
09:30:00	3	9	100	111	113	29	0	0	0	0	0	0
09:45:00	3	7	107	99	121	28	0	0	0	0	0	0
10:00:00	3	3	107	108	118	25	1	0	0	0	0	0
10:15:00	3	3	117	132	92	18	0	0	0	0	0	0
10:30:00	3	3	108	136	100	14	1	0	0	0	0	0
10:45:00	2	4	105	134	103	15	2	0	0	0	0	0
11:00:00	1	3	98	135	109	17	2	0	0	0	0	0
11:15:00	1	3	117	139	89	13	3	0	0	0	0	0
11:30:00	1	3	102	136	105	15	3	0	0	0	0	0
11:45:00	1	4	90	143	109	14	4	0	0	0	0	0
12:00:00	1	4	93	145	105	12	5	0	0	0	0	0
12:15:00	1	4	107	149	91	9	4	0	0	0	0	0
12:30:00	1	4	115	143	89	10	3	0	0	0	0	0
12:45:00	1	4	118	157	71	12	2	0	0	0	0	0
13:00:00	1	4	127	164	57	10	2	0	0	0	0	0
13:15:00	3	3	168	140	41	9	1	0	0	0	0	0
13:30:00	3	3	173	139	35	10	2	0	0	0	0	0
13:45:00	1	5	171	136	35	13	4	0	0	0	0	0
14:00:00	1	5	178	127	35	12	5	2	0	0	0	0
14:15:00	1	6	169	125	44	12	5	3	0	0	0	0
14:30:00	1	5	152	137	48	12	5	5	0	0	0	0
14:45:00	1	4	136	135	61	16	6	3	2	1	0	0
15:00:00	1	3	132	124	75	14	8	4	1	3	0	0
15:15:00	1	5	120	128	75	19	10	2	2	3	0	0
15:30:00	1	4	116	129	72	23	12	2	3	3	0	0
15:45:00	1	7	108	134	69	25	13	2	3	1	2	0
16:00:00	2	6	101	139	71	26	11	2	2	3	2	0
16:15:00	2	8	94	125	79	30	15	3	3	4	2	0

16:30:00	2	9	80	129	86	33	15	3	3	4	1	0
16:45:00	3	11	74	133	89	33	15	1	3	3	0	0
17:00:00	7	7	78	129	97	30	10	5	0	2	0	0
17:15:00	7	10	82	130	95	27	10	2	2	0	0	0
17:30:00	8	10	80	117	100	32	10	4	4	0	0	0
17:45:00	9	12	75	107	118	28	8	6	1	1	0	0
18:00:00	11	6	87	108	99	33	12	6	2	0	1	0
18:15:00	5	10	97	120	80	25	16	6	1	3	2	0
18:30:00	1	7	85	137	80	26	16	4	2	4	2	1
18:45:00	1	1	61	137	111	31	11	5	3	1	2	1
19:00:00	0	1	42	119	123	47	23	4	3	0	2	1
19:15:00	0	1	28	155	109	34	20	10	1	4	2	1
19:30:00	0	0	17	123	115	57	29	16	1	4	2	1
19:45:00	0	0	7	101	118	64	45	18	6	5	1	0
20:00:00	0	0	5	85	112	70	61	23	5	3	1	0
20:15:00	0	0	8	103	102	71	51	24	4	1	1	0
20:30:00	0	0	6	103	107	66	57	21	3	1	1	0
20:45:00	0	0	9	113	105	60	57	16	3	1	1	0
21:00:00	0	0	18	116	94	68	53	12	4	0	0	0
21:15:00	0	0	36	107	96	56	56	11	2	0	1	0
21:30:00	0	0	44	110	95	54	50	7	4	0	1	0
21:45:00	0	0	71	86	93	45	53	8	7	1	1	0
22:00:00	0	0	81	88	83	50	47	4	10	2	0	0
22:15:00	0	0	112	82	71	46	30	14	7	2	1	0
22:30:00	0	2	110	73	76	38	38	15	11	1	1	0
22:45:00	0	8	114	82	67	31	36	10	9	6	2	0
23:00:00	0	19	116	77	63	30	34	8	10	5	3	0
23:15:00	1	21	122	89	59	28	24	6	7	3	2	3
23:30:00	1	27	120	88	57	27	24	7	8	4	2	0
23:45:00	1	34	116	93	54	29	18	8	7	5	0	0

The vagary of IEX volume is tabulated for a year (1st July 2017 to 30th June 2018)

Time/M W (MCV)	0	100	200	300	400	500	600	7000	800	9000	10000	11000
00:00:00	1	0	40	74	62	76	58	43	11	0	0	0
00:15:00	0	1	41	78	59	86	53	30	16	1	0	0
00:30:00	0	1	44	77	58	88	51	30	15	1	0	0
00:45:00	0	1	48	75	58	86	46	36	14	1	0	0
01:00:00	0	1	48	78	58	88	45	34	12	1	0	0
01:15:00	0	1	52	79	61	83	46	31	11	1	0	0
01:30:00	0	1	52	83	61	79	49	28	12	0	0	0
01:45:00	0	1	55	81	69	70	48	31	10	0	0	0
02:00:00	0	1	53	87	65	77	45	30	7	0	0	0
02:15:00	0	1	57	84	75	68	46	25	9	0	0	0
02:30:00	0	1	59	84	70	73	45	23	9	1	0	0
02:45:00	0	1	57	85	80	69	42	21	9	1	0	0

03:00:00	0	1	59	86	84	62	44	20	9	0	0	0
03:15:00	0	1	59	90	81	63	43	21	7	0	0	0
03:30:00	0	1	57	95	78	65	42	21	6	0	0	0
03:45:00	0	1	60	95	75	65	46	18	5	0	0	0
04:00:00	0	1	60	96	75	67	44	18	4	0	0	0
04:15:00	0	0	47	105	78	69	44	19	2	1	0	0
04:30:00	0	0	45	109	79	71	42	17	2	0	0	0
04:45:00	0	0	44	114	76	73	44	12	2	0	0	0
05:00:00	0	0	40	113	83	76	41	10	2	0	0	0
05:15:00	0	0	31	110	95	73	45	9	2	0	0	0
05:30:00	0	0	32	109	102	74	36	10	2	0	0	0
05:45:00	0	0	20	107	122	67	37	12	0	0	0	0
06:00:00	0	0	17	109	114	79	37	9	0	0	0	0
06:15:00	0	0	0	92	118	96	40	18	1	0	0	0
06:30:00	0	0	0	69	127	97	52	16	4	0	0	0
06:45:00	0	0	0	43	139	103	59	17	4	0	0	0
07:00:00	0	0	0	35	133	112	58	23	4	0	0	0
07:15:00	0	0	1	27	105	133	73	21	5	0	0	0
07:30:00	0	0	0	24	105	123	84	25	4	0	0	0
07:45:00	0	0	1	25	104	120	88	25	2	0	0	0
08:00:00	0	0	1	25	103	126	83	26	1	0	0	0
08:15:00	0	0	1	39	115	117	74	18	1	0	0	0
08:30:00	0	0	2	39	113	116	74	20	1	0	0	0
08:45:00	0	0	2	37	118	118	65	24	1	0	0	0
09:00:00	0	0	2	39	116	116	61	27	4	0	0	0
09:15:00	0	0	3	45	102	112	68	30	5	0	0	0
09:30:00	0	0	3	45	101	109	66	36	4	1	0	0
09:45:00	0	0	4	44	97	106	65	43	5	1	0	0
10:00:00	0	0	3	39	93	105	74	44	5	2	0	0
10:15:00	0	0	3	38	91	114	72	40	6	1	0	0
10:30:00	0	0	3	35	96	106	77	40	7	1	0	0
10:45:00	0	0	1	36	91	104	82	42	8	1	0	0
11:00:00	0	0	0	36	84	105	84	45	9	2	0	0
11:15:00	0	0	3	32	82	105	89	44	8	2	0	0
11:30:00	0	0	3	35	71	113	90	41	10	2	0	0
11:45:00	0	0	3	36	75	105	91	39	13	2	1	0
12:00:00	0	0	3	35	80	103	85	40	15	3	1	0
12:15:00	0	0	4	33	86	102	80	43	13	3	1	0
12:30:00	0	0	4	39	84	100	84	38	13	2	1	0
12:45:00	0	0	4	39	90	109	77	30	14	2	0	0
13:00:00	0	0	7	37	98	103	74	30	14	2	0	0
13:15:00	0	0	8	46	109	96	65	26	13	2	0	0
13:30:00	0	0	10	47	110	92	66	25	13	2	0	0
13:45:00	0	0	10	48	110	93	61	27	14	2	0	0
14:00:00	0	0	11	49	105	92	64	28	14	2	0	0
14:15:00	0	0	6	42	103	97	72	25	14	6	0	0
14:30:00	0	0	7	36	108	95	70	29	14	6	0	0
14:45:00	0	0	5	35	111	86	74	31	16	6	1	0
15:00:00	0	0	5	34	114	86	72	33	15	5	1	0
15:15:00	0	0	6	33	104	92	73	33	18	5	1	0

15:30:00	0	0	7	32	106	91	74	34	16	4	1	0
15:45:00	0	0	6	38	103	87	79	32	15	4	1	0
16:00:00	0	0	6	35	111	86	80	28	15	3	1	0
16:15:00	0	0	4	33	98	98	82	33	15	2	0	0
16:30:00	0	0	4	34	99	99	86	29	12	1	1	0
16:45:00	0	0	3	33	115	104	76	21	11	1	1	0
17:00:00	0	0	2	36	108	121	75	16	5	2	0	0
17:15:00	0	0	1	32	106	119	75	27	4	1	0	0
17:30:00	0	0	1	26	111	106	85	27	8	1	0	0
17:45:00	0	0	2	24	92	119	78	39	11	0	0	0
18:00:00	0	0	2	16	69	128	89	56	5	0	0	0
18:15:00	0	0	1	14	49	103	119	66	13	0	0	0
18:30:00	0	0	0	12	28	89	135	87	14	0	0	0
18:45:00	0	0	0	3	23	69	138	105	27	0	0	0
19:00:00	0	0	0	1	12	61	141	103	44	3	0	0
19:15:00	0	0	0	1	14	94	144	90	21	1	0	0
19:30:00	0	0	0	0	18	96	140	84	26	1	0	0
19:45:00	0	0	0	1	22	104	133	82	23	0	0	0
20:00:00	0	0	0	0	29	98	135	80	23	0	0	0
20:15:00	0	0	0	0	35	103	132	76	19	0	0	0
20:30:00	0	0	0	0	35	108	130	72	20	0	0	0
20:45:00	0	0	0	0	38	109	123	69	26	0	0	0
21:00:00	0	0	0	1	42	107	120	68	27	0	0	0
21:15:00	0	0	0	3	52	100	124	59	27	0	0	0
21:30:00	0	0	0	11	53	98	118	62	23	0	0	0
21:45:00	0	0	0	19	54	94	113	59	26	0	0	0
22:00:00	0	0	0	24	68	81	111	58	23	0	0	0
22:15:00	0	0	3	50	80	73	87	51	21	0	0	0
22:30:00	0	0	7	62	73	68	89	47	19	0	0	0
22:45:00	0	0	14	65	70	71	80	47	17	1	0	0
23:00:00	0	0	16	75	66	67	75	48	17	1	0	0
23:15:00	0	0	18	77	66	79	62	48	13	2	0	0
23:30:00	0	0	28	74	63	80	60	46	12	2	0	0
23:45:00	0	0	35	77	64	76	56	45	12	0	0	0

The table above shows the count of power cleared (MW) in each time block from 1st July 2017 to 30th June 2018. It can be seen that the Quantum of power varies with time based on peak and off peak hours.

In case average rate is taken for the day during peak hours the DSM cost could be less than IEX rate at 50 Hz during peak hours creating a scenario for over drawal. Since both volume and cost are more in some blocks, in case average value is considered then it would be economical to overdraw during peak hours up to the volume limits, than approaching market.

Suggestion of SRPC secretariat: ACP of each block may be considered to ensure that all utilities take full advantage of Market. It is understood that the DSM price vector may change each block. However, this is only a

programming aspect which will help capture the value of electricity including peak, off peak, transmission constraints etc. Corresponding changes in Regulation 5 are kindly suggested.

B. The cap rates for generators should be linked to the variable charges for that generator as billed for the previous month - Corresponding Changes in Regulation 5, Regulation 7 & Annexure -I

A generator may over inject or under inject based on frequency corresponding to its variable charge, but the action desired is as per requirement of grid. In the proposed methodology a generator may only over inject in the case when slope of IEX is more than its Variable charge. It may happen that for the same frequency on certain day it would over inject on certain day it may under inject. The same may not be true for beneficiaries as IEX rates are determined majority by their demand/Supply.

SRPC secretariat suggestion: For all Regional generators instead of ACP their Variable charge should the price at 50 Hz. The generators should be given incentive for over injecting if frequency is dipping to ensure that frequency remains within the band. The slope between 50.05-50-49.85 may be as suggested below.

At 50.05 Hz -0 (To save the fuel)

At 50 Hz - Variable Charge (No gain and No loss to the generator)

At 49.85 - Mark Up cost + Variable Charge (Incentive up to Mark Up cost for helping the grid)

In case of sellers/regional Generators under multiple PPA, the weighted average of variable cost all PPA under LTA/MTOA as billed for previous month may be considered as variable Charge. In case for Regional generators there are no PPA under LTA/MTOA, the weighted average of all variable charges of all Regional generator in the Region could be taken as Variable Charge.

Corresponding changes in Regulation 5, Regulation 7 & Annexure- I would be required.

C. After the existing proviso to clause (1) of Regulation 7 of the Principal Regulations, a new proviso shall be added as under:

"Provided also that the total deviation from schedule in energy terms during a day shall not be in excess of 3% of the total schedule for the drawee entities and 1% for the generators and additional charge of 20% of the daily base DSM payable / receivable shall be applicable in case of said violation."

The clause needs more clarity. As soon as drawee entity or generator cross the limit of 3% and 1% respectively, additional charge of 20 % would be payable on

the entire DSM. A small violation may thus lead to huge penalty. There needs to be slabs and charges could be accordingly.

SRPC secretariat suggestion: The clause can be reworded as 'provided also that the total deviation from schedule in energy terms during a day along-with additional charges shall be as per the table below:

Entity	Deviation from schedule in a day	Additional charge of the average rate DSM payable / receivable in blocks as applicable for the excess energy deviation beyond the limits
Drawee	3% to 5%	20%
	5% to 8%	40%
	> 8%	50 %
Generators	1% to 2%	20%
	2% to 3%	40%
	> 3%	50 %

Note: If a Drawee entity is overdrawing by 10 % of the energy in a day, then average of DSM rates of all the overdrawing block would be taken and additional charge would be paid

= Average DSM x 0.2 x (3% to 5%) of energy + Average DSM x 0.4 x (5% to 8%) of energy + Average DSM x 0.5 x (energy > 5%)

Similarly for generators in both the directions i.e. over injection & under injection.

The comments are based on the assumption that absolute value of the cumulative net deviation for the day would be considered that is irrespective of over drawal/under injection or under drawal/ over injection.

D. Clause (10) of Regulation 7 of the Principal Regulations shall be substituted as under:

"In the event of sustained deviation from schedule in one direction (positive or negative) by any regional entity, such regional entity (buyer or seller) shall have to make sign of their deviation from schedule changed, at least once, after every 6 time blocks. To illustrate, if a regional entity has positive

deviation from schedule from 07.30 hrs to 09.00 hrs, sign of its deviation from schedule shall be changed in the 7th time block i.e. 09.00 hrs to 09.15 hrs from positive to negative or negative to positive as the case may be.

Provided that violation of the requirement under this clause shall attract an additional surcharge of 20% on the daily base DSM payable / receivable as the case may be."

In the Explanatory Note it has been stated that the sign of the deviation must change once every 6 time blocks and an appropriate commercial provision to ensure compliance should be introduced.

The proposed DSM amendment is based on ACP and capped rate. In such case exchange of power under DSM is likely to be inadvertent. In such case sign change every 6 time blocks may have limited relevance and may have negative impact. For example if frequency is above 50.05 Hz and a state is over drawing or frequency is below 49.85 Hz and state is under drawing then after 6 time block it should not be asked to under draw/ over draw since primary objective is to bring the frequency within the band/close to 50 Hz which cannot be achieved by sign change.

The intent of sign change may be to eliminate any possibility of gaming. But with ACP, capped rates and volume limit this would tend to get automatically curtailed. The entity may help in bringing back the frequency into the band/50 Hz seeing the commercial mechanism being suggested which the intent is also since the DSM rate is proposed to be linked to both ACP and Frequency. Entity may not be forced to take a decision in real time based on historical deviation against the system parameters. Volume limit of 3% and 1% for beneficiaries and generators would ensure that no entity misuses DSM.

SRPC secretariat suggestion: Sign change is contradictory to Frequency & ACP Linked DSM Mechanism. As entities are expected to act accordingly to frequency also, then sign change may hamper the desired objective.

If it is to be implemented the sub proviso could be reworded as

'Provided that violation of the requirement under this clause shall attract an additional surcharge of 20% on the block DSM payable / receivable as the case may be from 7th block onwards till the sign is reversed.'

SRPC secretariat additional comments on DSM Regulations

A. Implementation of RE Framework

Present Regulation 2(1) (g) state

'Commission' means the Central Electricity Regulatory Commission referred to in sub-section (1) of section 76 of the Act'

This is referred in Regulation 5 (v) & (vi)

SRPC secretariat suggestion: This issue had been already taken up by SRPC Secretariat vide letter 25.05.2018 (Copy enclosed) wherein it had been suggested to include State Commissions in the definition of Commission to have more clarity in implementation of RE Framework.

B. Regulation 5(2)(5) provide the ceiling cap rate corresponding to the main fuel for infirm power injected into Regional grid

SRPC secretariat suggestion: This issue had been already taken up by SRPC Secretariat vide letter 25.05.2018 wherein it had been suggested to include the rates for infirm power injection from RE generators.

C. Regulation 5(1)(iii) & (iv) – Ceiling on under drawal & Over injection

It has been seen with huge RE being injected into the grid it becomes difficult for the states to control their under drawal especially during monsoon when demand is less, ample hydro is available coupled with huge wind and solar during day time. Besides now volume limits are being proposed and over drawal and under drawal has to be balanced in a day by the buyer while over injection and under injection have to be balanced by generator. It becomes necessary to pay some charges for under drawal and over injection.

SRPC secretariat suggestion: In view of the above the following charges may be considered:

For seller/buyer (except Renewable Rich state	When 12 % of schedule is less than or equal to 150 MW	When 12 % of schedule is more than or equal to 150	For Renewable Rich State	Charges payable to buyer/seller

	MW		
For under drawal of electricity by any buyer in excess of 12% and upto 15% of the schedule in a time block	For under drawal of electricity by any buyer is above 150 MW and upto 200 MW in a time block	For under-drawal/ Over-injection above L MW (limit specified for the RE state) and up to L+50 MW in a time block	Equivalent to 60% of charge for deviation
For under drawal of electricity by any buyer in excess of 15% and upto 20% of the schedule in a time block	For under drawal of electricity by any buyer is above 200 MW and upto 250 MW in a time block	For under-drawal/ Over-injection above L+ 50 MW and upto L + 100 MW in a time block	Equivalent to 40% of charge for deviation
For under drawal of electricity by any buyer in excess of 20% of the schedule in a time block	For under drawal of electricity by any buyer is 250 MW in a time block	For under-drawal/ Over-injection above L+ 100 MW in a time block	Equivalent to 20% of charge for deviation
For over injection of electricity by any seller in excess of 12% and upto 15% of the schedule in a time block	For over injection of electricity by any buyer is above 150 MW and upto 200 MW in a time block		Equivalent to 60% of charge for deviation
For over injection of electricity by any seller in excess of 15% and upto 20% of the schedule in a time block	Over injection of electricity by any buyer is above 200 MW and upto 250 MW in a time block		Equivalent to 40% of charge for deviation

For over injection of electricity by any seller in excess of 20% of the schedule in a time block	Over injection of electricity by any buyer is above 250 MW in a time block		Equivalent to 20% of charge for deviation
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Therefore changes in Regulation 5(1) (iii) & (iv) may be considered.

D. Regulation 5(1)(iv) & (v) – Deviation Charge in case of under injection and over injection

	AvC							
Error%	500	1000	1500	2000	2500	3000	4000	5000
15%	75	150	225	300	375	450	600	750
25%	125	250	375	500	625	750	1000	1250
35%	175	350	525	700	875	1050	1400	1750

The % error Vs AvC is shown in the table above. Many of the RE projects are coming up in the range of > 1500 MW. Error (%) translates into significant MW quantum.

SRPC secretariat suggestion: In view of the above, ceiling on MW terms could be considered in addition to % error limits.

SRPC secretariat additional comments on explanatory note

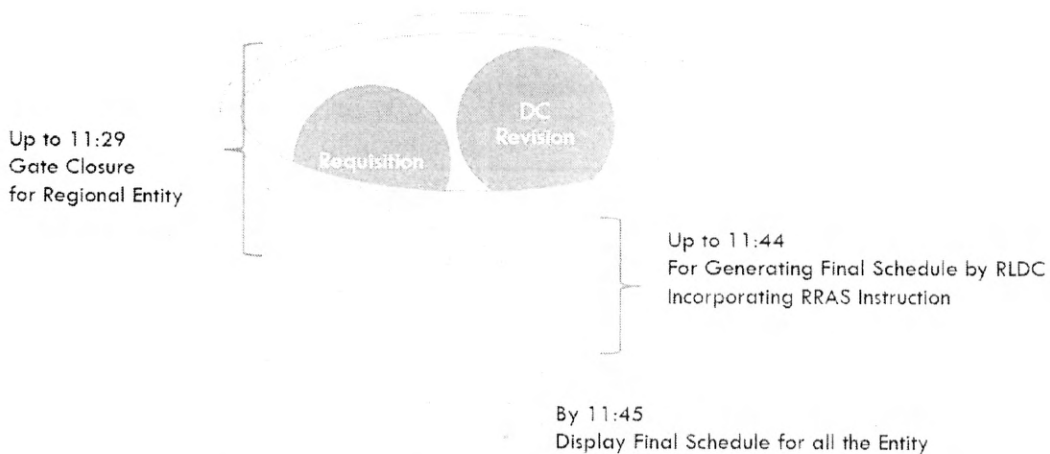
In the explanatory note it has been mentioned that

“There is need for introduction of gate closure concept in the scheduling process so that system operator has the clarity of the quantum of reserve and resources at hand at any given point of time. This will facilitate better optimization of the scheduled despatches and the real time ancillary despatch.”

SRPC Secretariat Comments: Central Electricity Regulatory Commission (Indian Electricity Grid Code) (Second Amendment) Regulations, 2014. Clause “18. Revision of declared capability by the ISGS(s) having two part tariff with capacity charge and energy charge (except hydro stations) and requisition by beneficiary (ies) for the remaining period of the day shall also be permitted with advance notice. Revised schedules/declared capability in such cases shall become effective from the 4th time block, counting the time block in which the request for revision has been received in the RLDC to be the first one.”

As specified in IEGC there is clear gate closure concept in scheduling process and system operator has the clarity of the quantum of reserve and resources at hand at least 30 Minutes prior to the real time operation.

The same is to be utilised under RRAS as per “The schedule of the RRAS Providers will become effective earliest from the time block starting 15 minutes after issue of the dispatch instruction by the Nodal Agency and this shall be clearly specified in the dispatch instruction.”



Implemented Schedule for time Block Starting
12:00 -12:15 Hrs