

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Petition No: 60/MP/2019

Coram:

Shri P.K. Pujari, Chairperson

Shri I.S. Jha, Member

Shri Arun Goyal, Member

Date of Order: 12th of September, 2021

In the matter of

In the matter of seeking relief against scheduling of suo-motu power to Maharashtra State Electricity Distribution Company Limited by Western Regional Load Despatch Centre.

And

In the matter of

Maharashtra State Electricity Distribution Company Limited,
Prakashgad, Prof. Anant Kanekar Marg,
Bandra (East), Mumbai-400051

.....Petitioner

Vs

1. Western Regional Load Despatch Centre.
F-3, M.I.D.C. Area, Marol,
Andheri (East), Mumbai – 400093.
2. National Thermal Power Corporation Limited,
NTPC Bhawan, SCOPE Complex,
Institutional Area, Lodhi Road,
New Delhi – 110003.
3. Maharashtra State Electricity Transmission Co. Limited,
Prakashganga, Plot No.C-19, E-Block,
Bandra Kurla Complex, Bandra (E),
Mumbai – 400051.
4. Madhya Pradesh Power Management Co Limited,
Shakti Bhawan, Rampur,
Jabalpur – 482 008.
5. Gujarat Urja Vikas Nigam Limited,
Sardar Patel Vidyut Bhawan, Race Course Road,
Vadodara – 390 007.



6. Chhattisgarh State Electricity Board,
P.O. Sunder Naga, Dangania, Raipur,
Chhattisgarh – 492 013.
7. Electricity Department, Government of Goa,
Vidyut Bhawan, Panji, Near Mandvi Hotel,
Goa – 403 001.
8. Electricity Department of Daman and Diu
Administration of Daman & Diu
Daman-396210
9. Electricity Department of Dadra Nagar Haveli
Administration of Dadra Nagar Haveli
U.T. Silavassa-396230

... Respondents

Parties Present:

Shri G. Umapathy, Advocate, MSEDCL
Shri Sitesh Mukherjee, Advocate, WRLDC
Shri Abhishek Kumar, Advocate, WRLDC
Shri Sachin Jain, NTPC
Shri Parimal Piyush, NTPC
Shri A. S. Pandey, NTPC

ORDER

The Petitioner, Maharashtra State Electricity Distribution Company Limited (MSEDCL) is a Distribution Company established under the Electricity Act, 2003 which is engaged in distribution of electricity to the entire state of Maharashtra except Mumbai. The Respondents are the Regional Load Despatch Centre of Western Region, NTPC (Inter-State Central Generating Company) and the other state power utilities of the Western Region of India. MSEDCL has major share allocation in NTPC's Solapur STPS (super thermal power station) and Mouda STPS-I to the extent of 48.83% and 39.20% respectively. Though the Petitioner had given zero schedule to Solapur STPS and Mouda STPS-I, WRLDC suo-moto scheduled power to the Petitioner from these generating stations from 23.6.2018 to 26.7.2018 and also scheduled power from Gandhar RLNG during the same period.



2. The Petitioner in the instant petition has disputed the suo-moto scheduling of power to the Petitioner by WRLDC during 23.6.2018 to 26.7.2018. The Petitioner has made the following prayers:

- a) *To admit the Petition as per the provision of Section 29 (5) of Electricity Act 2003;*
- b) *To disallow the 137.66 MUs un-requisite power scheduled to MSEDCL;*
- c) *To direct WRLDC to refund or adjust Rs. 50.60 Crore to MSEDCL which were released for this un-requisite power;*
- d) *To initiate action under section 142 and 149 of Electricity act 2003 against errant officer of WRLDC;*
- e) *To pass any other order/relief as the Hon. Commission may deem fit and appropriate under the circumstances of the case and in the interest of justice;*
- f) *To condone any error/omission/delay and to give opportunity to rectify the same;*
- g) *To permit the Petitioner to make further submissions, addition and alternation to this petition as may be necessary from time to time.”*

Submission of the Petitioner

3. The Petitioner has made the following submissions vide its affidavit filed with the main Petition:

- a) The demand of MSEDCL includes about 35% of agricultural load and thus, during the monsoon period, MSEDCL's demand drops considerably. During the year 2018, the monsoon in Maharashtra began in the month of June and after 21st June 2018, MSEDCL's peak demand dropped by almost 3000 MW. As a part of economical load generation balance, MSEDCL issued zero schedule/ RSD (reserve shut down) requisition to intra-State as well inter-State generating units as per MOD (merit order despatch) stack. In respect of inter-State generating station, MSEDCL had given Zero schedule from 23.06.2018 onwards to NTPC's Solapur STPS and Mouda STPS-I. Further, MSEDCL was also not scheduling power under RLNG either from NTPC's Kawas or Gandhar power station as per the State MOD stack through its day ahead requisition.
- b) MSEDCL had also given zero schedule to some intra-State generating units as per MOD stack prepared by Maharashtra State Load Despatch Centre (MSLDC). The allocated share for MSEDCL from the subject NTPC generating



stations along with variable charges for July 2018 of these stations are as under:

	Solapur STPS	Mouda STPS-I	Gandhar station
Allocated Share (%)	48.83%	39.2%	30.48%
Variable charges for July 2018 (Rs./kWh)	4.55	3.1	7.7

c) MSEDCL, from 23.06.2018 had given zero schedule against its entitlement share of 48.83% in Solapur STPS. Since no schedule/ requisition was given by MSEDCL, the overall schedule to the station fell below technical minimum limit of 55% (100 minus 48.83 = 51.17%). Considering power schedule/ requirement, WRLDC was supposed to take decision i.e. either to give technical minimum support to Unit/s or to withdraw Unit/s as per the provisions in Clause 5.6 read with Clauses 5.7 and 5.8 of the “Detailed Operating Procedure for Reserve Shut Down” dated 05.05.2017 under the Grid Code (hereinafter referred to as “the RSD Procedure”).

d) WRLDC suo-moto scheduled power to Maharashtra from Solapur STPS and Mouda STPS-I from 23.06.2018 to 26.07.2018 and also scheduled power from Gandhar RLNG during the same period, in spite of repeated correspondences via e-mail from MSEDCL. The details of the un-requisite scheduled power from these generating units are as under:

Name of Station	Power scheduled (in MU)		
	23.06.2018 to 30.06.2018	01.07.2018 to 26.07.2018	Total from 23.06.2018 to 26.07.2018
Solapur STPS	17.94	59.01	76.95
Mouda STPS-I	12.18	46.69	58.87
Gandhar RLNG	0.00	1.84	1.84
Total	30.12	107.54	137.66

e) On account of suo-moto scheduling of this costly power to MSEDCL, total financial burden on MSEDCL is Rs. 53.19 crore. The details are as under:



Name of Station	Energy Scheduled in June 2018			Energy Scheduled in July 2018		
	23.06.2018 to 30.06.2018	Energy Rate	Amount	01.07.2018 to 26.07.2018	Energy Rate	Amount
	MUs	Rs./kWh	Rs. crore	MUs	Rs./kWh	Rs. crore
Solapur STPS	17.94	3.84	6.89	59.01	4.55	26.85
Mouda STPS-I	12.18	2.91	3.55	46.69	3.1	14.48
Gandhar RLNG	0	7.31	0	1.84	7.7	1.42
Total	30.12		10.44	107.54		42.75

f) As these units having higher variable cost and higher position in MOD stack were not withdrawn by WRLDC, MSEDCL was compelled to withdraw its contracted intra-State generating units even having lower variable cost than Solapur STPS and Mouda STPS-I under zero schedule for economical load generation balance. Thus, MSEDCL was additionally burdened by Rs. 30 crore. The intra-State Units which were under RSD during June and July 2018 are as under:

Sr. No	Station/ Unit	Capacity (MW)	Ex-Bus Declared DC (MW)	Variable Cost as per MoD in Rs. per Unit	From Date	Up to Date	Number of Days
1	Parli – 6	250	229	3.08	24-06-2018 18:02	22-07-2018 23:59	28.25
2	Parli – 7	250	229	3.08	25-06-2018 00:00	20-07-2018 12:00	25.50
			229	3.08	23-07-2018 00:00	29-07-2018 11:50	6.49
3	RIPL – 3	270	245	2.95	26-06-2018 00:01	30-07-2018 12:05	34.50
4	Nashik-5	210	167	3.31	12-07-2018 00:00	10-09-2018 03:45	60.16
5	RIPL – 2	270	245	2.95	12-07-2018 00:00	30-07-2018 05:00	18.21
6	RIPL – 5	270	245	2.95	12-07-2018 01:28	31-07-2018 04:12	19.11

g) MSEDCL vide letter dated 26.07.2018 requested WRLDC to intimate regulatory provision in the RSD Procedure under which Solapur STPS and Mouda STPS-I units were kept on bar for said period. In response, on receiving this letter through email (at 13:10 hrs of 26.07.2018), WRLDC immediately decided to withdraw Solapur STPS under RSD and accordingly it was withdrawn at 16:58 hrs i.e. within very short period of time from receipt of letter



from MSEDCL on 26.07.2018 itself assigning the reason of less demand in western region.

h) In spite of no major change in the demand supply scenario or weather conditions on the day, within 30 minutes of receipt of MSEDCL's letter, WRLDC instructed NTPC to withdraw Solapur STPS. In response to WRLDC instructions, NTPC also immediately withdrew Unit-1 of Solapur STPS under RSD. Further, after providing RSD to Solapur unit on 26.07.2018, MSEDCL requested to bring this unit on bar on 09.09.2018 at 11:19 hrs (which was actually synchronised on 11.09.2018 at 13:00 hrs). During the period of RSD of unit-1 of Solapur STPS, WRLDC control room on 14.08.2018 and 16.08.2018 requested for consent from MSEDCL to take Solapur unit on bar. But MSEDCL, in view of low demand, did not give consent for the same. This is clear indication that MSEDCL's non-requirement of power in the background of low demand during this period was not momentary.

i) In view of suo-moto scheduling of power by WRLDC, MSEDCL deducted Rs. 47.77 crore out of the total amount of Rs. 53.19 crore from the energy bills of Solapur STPS, Mouda STPS-I and Gandhar station for the month of September 2018. The same was communicated to NTPC vide letter no. CE/PP/NTPC/20621 dated 27.8.2018. To this, NTPC raised concern with MSEDCL and also requested to make the payment of this amount as per the provisions of PPAs. As per the provisions of PPA, MSEDCL revised the deductible amount as below:

Sr. No.	Name of Station	Clause of the PPA	Amount deducted (Rs. crore)	% of disputed amount to be released	Amount to be released under protest (Rs. crore)
1	Solapur STPS	Clause 6.1.6 & 6.1.7	33.74	95	32.05
2	Mouda STPS-I	Clause 6.1.5 & 6.1.6	18.03	95	17.13
3	Gandhar RLNG		1.42	100	1.42
	Total		53.19		50.60

j) Out of Rs. 53.19 crore, MSEDCL made payment of Rs. 50.60 crore under protest and retained remaining Rs. 2.59 crore. MSEDCL communicated the same to NTPC with the reasons for doing so vide e-mail dated 14.11.2018.



k) In response to MSEDCL's letter, NTPC wrote a letter dated 11.10.2018 to MSEDCL with a copy to WRLDC. WRLDC in response to NTPC's letter dated 11.10.2018 vide letter dated 22.10.2018, informed MSEDCL that there was advertent over drawal from grid to tune of 692 MW to 1250 MW on almost all days (after off-setting the suo-moto schedule) and decision to keep Solapur STPS and Mouda STPS-I on bar was judiciously taken by WRLDC keeping the big canvas of regional or national perspective. However, WRLDC did not mention specific clause under the RSD Procedure for not taking unit under RSD and made vague claim of regional or national perspective and further tried to malign MSEDCL by suggesting capacity building need of MSEDCL.

l) The reason given by WRLDC in its letter dated 22.10.2018 for scheduling of Solapur STPS, Mouda STPS-I and Gandhar RLNG is as under:

"Please appreciate that whenever MSEDCL draws more than allowable limit, prompt action is taken by telephonic messages to limit OD. However, in spite of repeated requests over drawal is not contained & continued to consider grid as a source of power for commercial consideration then suo-moto allotment is done by WRLDC including from Gandhar RLNG to give signal of commercial decision to your LM cell."

m) In response to the allegations made by WRLDC vide above letter, MSEDCL vide letter dated 30.11.2018 replied and clarified that MSEDCL was in surplus power scenario and the instantaneous over drawal is immediately controlled by Maharashtra in real time in short duration.

n) For the amicable settlement of the issue, MSEDCL raised this issue as Agenda in 37th TCC/WRPC meeting which was scheduled on 17.12.2018 & 18.12.2018. During the deliberation on subject matter before WRPC forum, the reply from Executive Director representing WRLDC was very rude. During the meeting, instead of giving particular clause under the RSD Procedure for not taking unit under RSD, he made baseless allegation against Maharashtra. In deliberations, Executive Director, WRLDC mentioned that:

- i. Maharashtra is using DSM as market & due to such action of state like Maharashtra, 4th amendment of DSM has been published.
- ii. CERC in its SOR on 4th amendment warned Maharashtra not to use grid as market.
- iii. There is no load forecasting in Maharashtra
- iv. Maharashtra has not given full **surrender requisition in one revision** for withdrawing unit under RSD;



v. *Parliament, CERC, IEGC has given complete authority to WRLDC for suo-moto scheduling of power & same has been used”.*

o) Further through presentation, WRLDC showed only selective data of maximum overdrawl instances of Maharashtra State to fabricate and to show how Maharashtra was in shortfall. Further, in presentation, WRLDC showed UI charges paid by Maharashtra during FY 2017-18 and FY 2018-19 till November 2018 to misguide the members of forum by misinterpreting the data to falsely establish that Maharashtra was using the Grid as market.

p) From the abstract data of State-wise demand in region as under, scheduled requisition given before 20:00 hrs on day ahead basis and WRLDC’s instant decision of withdrawal of unit on 26.07.2018 in response to MSEDCL’s letter citing the reason of low demand, it is amply clear that there was no requirement of keeping on bar Solapur STPS, Mauda STPS Stage-I and Gandhar RLNG generation units from 23.06.2018 to 26.07.2018.

States	(MW)				
	May-18	Jun-18	Jul-18	Aug-18	Sep-18
Chhattisgarh	3,652	3,718	3,654	4,136	4,075
Gujarat	15,855	16,327	14,569	16,705	16,963
Madhya Pradesh	8,745	8,366	7,664	8,775	8,771
Maharashtra	23,254	21,703	19,327	20,757	22,349
Daman & Diu	310	351	351	347	356
Dadra & Nagar Haveli	778	778	778	804	815
Goa	530	493	493	535	596
Western Region	52,442	50,922	44,574	49,629	52,895

q) The allegations made by the WRLDC are baseless. The prudence of MSEDCL can be seen from the following:

(i) *MSEDCL is not using Grid as a market/source of standby power*

- From quarterly reports available on WRLDC website, showing power position scenario, it is clear that even during acute power shortage (due to coal shortage) and with highest ever peak demand period, Maharashtra has not overdrawn energy more than its schedule. In fact, States of Western Region which are/ were overdrawing compared to their scheduled energy are Gujarat, DD & DNH.



- It can be seen from the data of energy drawn through grid by some major States of India during FY 2018-19 up to Oct-2018 that the net UI energy by Maharashtra is negative i.e. energy was being injected into the grid, instead being overdrawn from the grid.
- MSEDCL was the highest buyer of power from IEX during month of October 2018 when market clearing price on IEX even crossed Rs.18 per unit. In fact, MSEDCL purchased 2331 MU from IEX at Rs.5.78 per kWh and 704 MU from short term tenders at Rs.4.56 per kWh during September 2018 to October 2018.
- The exaggerated figures of Rs. 132 crore shown by WRLDC as DSM charges paid by MSEDCL is purely because of the abnormal difference in SCADA data of WRLDC v/s the SEM data/ MSLDC SCADA data due to the failure of communication. MSEDCL has lost Rs. 94.72 crore due to this issue during FY 2017-18 and Rs. 50 crore in FY 2018-19 till 28th October 2018. MSEDCL has raised this issue many times earlier and has also communicated this issue to the Commission in comments while Draft 4th Amendment of the DSM regulations was published in 2018.
- During the period of 23rd June 2018 to 26th July 2018, UI as per SCADA shows under-drawl of 74 MU by Maharashtra as against 60 MU under drawal computed as per SEMs.

(ii) MSEDCL's immediate action to control over drawal

- WRLDC in the presentation during WRPC meeting showed instantaneous over-drawl for some of time blocks with an attempt to falsely indicate that MSEDCL resorted to Grid for power requirement.
- However, such over-drawls were mainly on account of scheduling problem from MSLDC and there was sufficient surplus capacity in terms of back down available with MSEDCL.
- Moreover, for such instances Koyna hydro station having installed capacity of 1920 MW is also available.
- The maximum over-drawl which occurred during the period mentioned by WRLDC in its letter was verified with SCADA/UI recorded in real time at MSLDC and it is seen that over drawal quantum reported by WRLDC was higher than recorded at MSLDC SCADA system on which MSLDC operated



real time system. During all mentioned events, over drawal was also brought back to normalcy within one to three time blocks and the same is tabulated below.

(MW)							
23-06-18		24-06-18		25-06-18		26-06-18	
TB	UI	TB	UI	TB	UI	TB	UI
56	583	56	452	70	550	77	480
57	150	57	271	71	386	78	58
58	-52	58	251	72	285	79	-140
59	-66	59	263	73	129	80	-286
60	-266	60	63			81	-225

27-06-18		28-06-18		29-06-18		30-06-18	
TB	UI	TB	UI	TB	UI	TB	UI
91	882	73	542	19	395	7	361
92	702	74	374	20	183	8	320
93	244	75	-307	21	-137	9	197
94	231	76	155	22	-3	10	36
		77	162	23	166	11	19

(TB: Time Block, UI: Unscheduled Interchange)

(iii) Regarding 'Maharashtra has not given full surrender requisition in one revision for withdrawing unit under RSD'

- Regarding requisition for RSD, MSEDCL was giving zero schedule requisition on day ahead basis. On analysis of requisition to Solapur STPS and Mouda STPS-I by other beneficiaries, it can be seen that in respect of Solapur STPS, apart from Maharashtra, other major constituents i.e., Madhya Pradesh and Chhattisgarh were also giving zero schedule on day ahead basis. On analysis of requisition of all beneficiaries, it was clear that before 20:00 hrs, there was not a single time block in a day where there was any requisition upto technical minimum. As can be seen from final total schedule of Solapur STPS, power was utilized by States like Uttar Pradesh having very meagre share i.e. 1.98 MW through URS to maximum of 500 MW, but that too for a limited time period on 3 or 4 days.

(iv) Regarding 'no load forecasting' in Maharashtra

- MSEDCL submits its forecasted demand to MSLDC daily and the errors in forecasting are closely observed.



- WRLDC is an operational regulatory body and has important role to play in economical and secure dispatch of power as per provisions u/s 28 of the Electricity Act, 2003. Persons exercising authority and having powers vested to control power system and being responsible to manage the regional power system is expected to be considerate, transparent, neutral and non-discriminate. But instead of playing this role as a responsible operational regulator, Executive Director, WRLDC is prejudiced and non-cooperative with ulterior motive. He has misused his power and tried to dominate the forum by putting erroneous facts before members to hide failure of WRLDC in taking decision by not withdrawing Solapur STPS and Mouda STPS-I.
- MSEDCL requests this Commission to make an enquiry of such irresponsible prejudice officer by verifying the audio transcript of 36th TCC/WRPC meeting and initiate stringent action u/s 142 and u/s 149 of Electricity Act, 2003. WRLDC by its above act has not followed the RSD Procedure approved by this Commission vide its order dated 05.05.2017 in Order No. L-1/219/2017-CERC.

Submissions of the Respondent No.1 WRLDC

4. The Respondent, WRLDC vide its affidavit dated 06.06.2019, has submitted the following:

a) The referred issue has been already deliberated in the 37th WRPC meeting as well as 80th & 81st CCM of WRPC and is a well-settled case. The synopsis of deliberations which were held in the presence of all other States of the Western Region, NTPC and WRPC secretariat members is as under:

“Subsequent to the direction of 37th WRPC, matter was deliberated in full details during the 80th & 81st CCM meetings and Member Secretary, WRPC asked the representative of MSEDCL, “Do you still feel that any violation of the CERC approved RSD procedure was done by WRLDC?”. The MSEDCL representative said “No”. Pending the issuance of the corrigendum of 80th CCM minutes and MoM of 81st CCM, two letters were issued from WRLDC to MS WRPC on this matter which are attached.”

b) The Petitioner’s claim that MSEDCL wanted the generating units to go under RSD and that they had continuously given zero requisition from NTPC Solapur STPS and Mouda STPS-I from 23.6.2018 onwards is blatantly erroneous. The table below indicates the actual requisitions punched by



Maharashtra in the Web-Based Energy Scheduling (WBES) software during 23.06.2018 to 26.07.2018. This information in WBES software is transparently available in public domain and can be accessed by anyone. As can be seen from the table, barring a few days, the Petitioner has requisitioned power varying between 180 MW to 370 MW in Mouda STPS-I and around 100-300 MW in Solapur STPS on several days during the said period. In fact, on many occasions, the Petitioner requisitioned full entitlement from these stations.

*Table: Maharashtra requisition in Solapur STPS and Mouda STPS-I
(23.06.2018 to 27.07.2018)*

Date	Maximum Requisition by Maharashtra (MW)	
	Mouda STPS-I	Solapur STPS
23-06-2018	186	259
24-06-2018	0	0
25-06-2018	0	0
26-06-2018	370	201
27-06-2018	370	304
28-06-2018	370	304
29-06-2018	370	304
30-06-2018	370	304
01-07-2018	370	100
02-07-2018	370	304
03-07-2018	0	0
04-07-2018	370	0
05-07-2018	370	304
06-07-2018	370	304
07-07-2018	370	304
08-07-2018	370	304
09-07-2018	370	304
10-07-2018	370	0
11-07-2018	370	0
12-07-2018	370	304
13-07-2018	370	304
14-07-2018	370	304
15-07-2018	314	304
16-07-2018	0	0
17-07-2018	100	0
18-07-2018	216	304
19-07-2018	216	304
20-07-2018	314	304
21-07-2018	370	0
22-07-2018	0	0
23-07-2018	0	0
24-07-2018	370	269



25-07-2018	370	269
26-07-2018	370	269
27-07-2018	185	0

c) In fact, in contrast to the claim made by the Petitioner, WRLDC received several requests from the Petitioner to increase its schedule in Solapur STPS and Mouda STPS-I during the said period (23.06.2018 to 26.07.2018). The summary is given under:

Table: MSEDCL Requisition for increasing schedule in Mouda STPS-I and Solapur STPS

Date	Requisition Number	Power Station Name	Quantum requested by MSEDCL
05.07.2018	16	NTPC Mouda-1	200 MW for time blocks 80-86
06.07.2018	23	NTPC Mouda-1	236 MW for time blocks 90-96
06.07.2018	23	NTPC Solapur	200 MW for time blocks 91-96
13.07.2018	22	NTPC Solapur	304 MW for time blocks 80-82
17.07.2018	21	NTPC Mouda-1	100 MW for time blocks 78-81
18.07.2018	21	NTPC Mouda-1	215 MW for time blocks 76-84
18.07.2018	21	NTPC Solapur	304 MW for time blocks 76-84
28.07.2018	13	NTPC Mouda-1	180 MW for time blocks 52-54

d) Thus, the Petitioner wanted to avail power from these stations almost on daily basis during the said period. This act of raising the issue by the Petitioner subsequently (vide their letter dated 26.07.2018) that they gave 'zero schedule' continuously since 23.6.2018 is factually incorrect and an after-thought. All the annexures submitted by the Petitioner, against their claim of 'zero requisition' only refer to their very first requisition given one day ahead which is mis-leading since they have revised their requisition upwards to their full entitlement in subsequent revisions on most of the days. Similarly, the Petitioner's claim that all other beneficiaries of the said stations also submitted 'zero requisition' is a factually wrong statement which can be verified in the annexure G1 to G127 of the petition filed by the Petitioner. It is pertinent to mention here that as per the Central Electricity Regulatory Commission (Indian Electricity Grid code) Regulations, 2010 (hereinafter referred to as 'the Grid code'), a regional entity is free to submit any number of requisitions for schedule revision throughout the day of operation and the Petitioner has precisely done that during the said period.



e) The said generating stations are coal-fired thermal power stations which can't be withdrawn on RSD on D-1 day and again taken in service for 1-2 hrs on D-day based on need and convenience.

f) As per provisions of the Electricity Act, 2003, SLDC Maharashtra is responsible for optimum scheduling and despatch of electricity within the State and is also mandated under regulation 2.7.2 of the Grid code to comply with the directions of the Regional Load Despatch Centre (WRLDC in instant case). Since all the above referred interactions between the WRLDC and the Petitioner had taken place via SLDC Maharashtra, it is desirable that SLDC Maharashtra be impleaded as a respondent in the instant petition.

g) The Grid code requires that all entities including distribution licensees must initiate requisite action in time so as to contain their drawal from the grid within schedule and ensure that there is no over-drawal. In compliance to the regulation 5.4.2 of the Grid code, WRLDC regularly gives warning messages to the overdrawing constituents in western regional (WR) grid. The warning messages issued to Maharashtra from WRLDC control room during 23.06.2018 – 26.07.2018 is enclosed as Annexure-3. The following table summarises a few such cases:

Table: Warning messages issued by WRLDC to control over drawal

Sl. No.	Date	Time	Message sent by WRLDC to	Deviation from Schedule	Remarks
1	23-Jun-18	22:09	Maharashtra	Maharashtra OD (99 MW)	To control OD and draw as per schedule
2	26-Jun-18	12:23	Maharashtra, Gujarat	Maharashtra OD (210 MW) Gujarat OD (128 MW)	To control OD, failing which suo-moto scheduling will be done by WRLDC as per IEGC
3	27-Jun-18	22:45	Maharashtra	Over drawal by 800 MW	To control OD, failing which suo-moto scheduling will be done by WRLDC as per IEGC
4	29-Jun-18	18:09	Maharashtra	Maharashtra OD (447 MW)	To control OD, failing which suo-moto scheduling will be done by WRLDC as per IEGC
5	29-Jun-18	19:31	Maharashtra	Maharashtra OD (89 MW) Chhattisgarh OD (196 MW)	To control OD and draw as per schedule
6	01-Jul-18	22:51	Maharashtra	Maharashtra OD (398 MW)	To control OD and draw as per schedule
7	02-Jul-18	06:12	Maharashtra, Gujarat	Maharashtra OD (332 MW) Gujarat OD (217 MW)	To control OD and draw as per schedule



Sl. No.	Date	Time	Message sent by WRLDC to	Deviation from Schedule	Remarks
				MW)	
8	03-Jul-18	05:56	Maharashtra	Maharashtra OD (422 MW)	To control OD, failing which suo-moto scheduling will be done by WRLDC as per IEGC
9	03-Jul-18	19:18	Maharashtra	Maharashtra OD (399 MW)	To control OD, failing which suo-moto scheduling will be done by WRLDC as per IEGC
10	09-Jul-18	17:54	Maharashtra	Maharashtra OD (507 MW)	To control OD, failing which suo-moto scheduling will be done by WRLDC as per IEGC
11	14-Jul-18	15:44	Maharashtra	Maharashtra OD (534 MW)	To control OD, failing which suo-moto scheduling will be done by WRLDC as per IEGC
12	15-Jul-18	09:03	Maharashtra, Gujarat	Maharashtra OD (461 MW) Gujarat OD (295 MW)	To control OD, failing which suo-moto scheduling will be done by WRLDC as per IEGC
13	15-Jul-18	18:52	Maharashtra	Maharashtra OD (301 MW)	To control OD, failing which suo-moto scheduling will be done by WRLDC as per IEGC
14	19-Jul-18	14:13	Gujarat, Maharashtra	Gujarat OD (317 MW) Maharashtra OD (129 MW)	To control OD, failing which suo-moto scheduling will be done by WRLDC as per IEGC
15	20-Jul-18	13:43	Gujarat, Maharashtra, Chhattisgarh	Gujarat OD (220 MW) Maharashtra OD (156 MW) Chhattisgarh OD (231 MW)	To control OD, failing which suo-moto scheduling will be done by WRLDC as per IEGC
16	25-Jul-18	19:17	Maharashtra	Maharashtra OD (258 MW)	To control OD, failing which suo-moto scheduling will be done by WRLDC as per IEGC
17	28-Jul-18	18:56	Maharashtra, Madhya Pradesh	Maharashtra OD (314 MW) Madhya Pradesh OD (270 MW)	To control OD, failing which suo-moto scheduling will be done by WRLDC as per IEGC

h) Maharashtra having a combined wind and solar installed capacity of more than 3000 MW, qualifies as a renewable rich state for which the deviation limit would be 250 MW. Thus, during real time operation, the Petitioner is required to restrict its deviation from schedule within a limit of 250 MW within the specified frequency band. Further, no over drawal is permitted if frequency falls below 49.85 Hz. However, as explained by this Commission in various orders, statements of reason (SOR) etc., the deviation settlement mechanism (DSM) is only a tool for handling inadvertent deviations from the schedules and it must not be construed as a market mechanism and the grid entities must not resort to deliberate overdrawal from the grid to meet their demand for



electricity. Thus, the regional entities including distribution licensees must resort to organised electricity market and must not lean on over-drawl from grid for meeting their energy need since grid as such does not generate electricity. They must schedule power under long-term and/or medium-term and/or short-term contracts as per the extant regulatory framework and do scheduling based on proper demand forecasting so as to avoid overdrawing from grid.

i) If, any entity (including the Petitioner) at any point of time fails to comply with provisions of the Grid code including the above referred regulations, WRLDC is mandated to initiate necessary action in the interest of better system operation as stipulated in the Grid code & other regulations of this Commission.

j) The RSD Procedure empowers RLDCs to keep a generating unit on bar by providing technical minimum schedule, in the interest of better system operation, when the net requisition in that power station falls below the minimum injection schedule (i.e. 55% of MCR) as specified by the Grid code.

k) Mouda STPS-I has 16 beneficiaries and Solapur STPS has 15 beneficiaries including both regional and inter-regional entities. As per the RSD Procedure, a beneficiary in an ISGS station may furnish less requisition based on its demand forecast. However, any single beneficiary can't dictate the terms of whether to take a unit under RSD or not. In fact, the issue was already deliberated in the 80th & 81st Commercial Committee Meetings (CCM) of WRPC wherein the argument of the MSEDCL representative in favour of taking the units under RSD purely based on low requisition from Maharashtra was strongly objected by other beneficiaries like DNH, Gujarat etc. Under the RSD Procedure, RLDC has been assigned the responsibility to assess the existing grid conditions and decide whether to take the unit under RSD or allow to run it at technical minimum in the interest of better system operation.

l) WRLDC was in receipt of several email communications from NLDC during 20th-22nd June 2018 and 6th-7th July 2018 for maximising generation in view of the prevailing low frequency and rising demand which were immediately forwarded to all central generating stations and UMPPs in WR. Hence, in the interest of better system operation, a collective decision was taken to keep the units at Mouda STPS-I and Solapur STPS running on bar at technical minimum



as and when necessary in line with the RSD Procedure. The real time grid operation is a critical job and such decision is taken collectively by system operators (at NLDC and RLDCs) keeping in view the reliability and security of the regional grid and the national grid. Further, the decision of taking a generating unit under RSD cannot be an instantaneous one based on low requisition by a beneficiary, and several factors need to be considered as given in the RSD Procedure since once taken out of service a unit can't be brought back on bar immediately.

m) The Petitioner has grossly violated various regulations of this Commission by persistently overdrawing from the grid in the said period (23.06.2018 to 26.07.2018). The real time grid operation is carried out based on telemetered data available in real time SCADA system of RLDC and not on the basis of energy meter data which are received by RLDC once in a week. If a real time system operator starts listening to the arguments of grid users that there is some error in meter data vs SCADA data, for which the said user can't be held accountable for its over-drawal, then the entire philosophy and process of real time grid management may collapse.

n) That WRLDC being a responsible system operator can't be a mute spectator to such gross indiscipline by the Petitioner and allow it to persistently over-draw from the grid while deliberately under-requisitioning its entitled power from Central Generating Stations (CGS). Accordingly, WRLDC had taken action as mandated in the Grid code and the RSD Procedure and scheduled power suo-moto to Maharashtra as and when felt absolutely necessary from available reserve margin at Central Generating Stations in the interest of better system operation and for the security of regional and national grid.

o) The archived energy meter data indicates the number of time blocks of over-drawal beyond the allowable limit (250 MW) by Maharashtra that would have taken place without the suo-moto scheduling by WRLDC. As evident, had there been no suo-moto scheduling from WRLDC, there would have been violation of permissible limit (250 MW) by Maharashtra in 1031 time blocks during the 33 days period i.e. 23.6.2018 to 27.7.2018. 1031 time blocks translate into 10.7 continuous days out of the 33 days under reference. This means that the Petitioner expected WRLDC to turn a blind eye towards those



10.7 days of violation and allow them to overdraw and use the grid as a market and thereby compromising heavily on security of regional and national grid. However, because of pro-active and timely action by WRLDC as per clause 6.5.20 of the Grid code and the RSD Procedure, the number of violations of the deviation limit by Maharashtra could be restricted to 454.

p) Despite suo-moto scheduling of power from CGS by WRLDC, there was still significant over-drawal by the Petitioner (i.e. 800 MW to 1270 MW on multiple occasions). This fact only strengthens and vindicates the decision of WRLDC in favour of keeping the units on-bar. In addition to keeping these two thermal units on bar, WRLDC kept taking many other actions like regular interactions with MSLDC to bring down the over-drawals and whenever the results were not coming, suo-motu scheduling of power (as and when available) in other Central Sector Power Stations viz. NTPC Kawas and NTPC Gandhar was undertaken so that grid security was not compromised.

q) The following table indicates the prevailing generation outage scenario during the said period from 23.06.2018 to 26.07.2018. As can be seen, WR grid was already facing a depleted generation scenario due to outage of around 30000 – 37000 MW generation capacity for coal shortage and other reasons. It was understood that the generation outage on coal shortage was not likely to revive in a short-term time horizon.

Table: Generation outage in WR during 23.06.2018 to 27.07.2018

Date	Total Generation Outage (MW)	Generation outage on Coal Shortage (MW)
23-06-2018	30059	6930
24-06-2018	31386	6680
25-06-2018	31386	6680
26-06-2018	32230	6950
27-06-2018	29590	6950
28-06-2018	31381	6650
29-06-2018	31609	7310
30-06-2018	30421	7310
01-07-2018	32249	7310
02-07-2018	32692	7860
03-07-2018	34421	7860
04-07-2018	35236	7260
05-07-2018	33878	7260
06-07-2018	33812	7260
07-07-2018	33750	7260
08-07-2018	33123	7260



Date	Total Generation Outage (MW)	Generation outage on Coal Shortage (MW)
09-07-2018	33682	6900
10-07-2018	31262	6630
11-07-2018	33141	7150
12-07-2018	34516	7150
13-07-2018	34369	7450
14-07-2018	34853	7700
15-07-2018	34010	7950
16-07-2018	34195	7700
17-07-2018	33825	7700
18-07-2018	31935	7700
19-07-2018	33639	8000
20-07-2018	33540	8360
21-07-2018	34685	9210
22-07-2018	36325	9210
23-07-2018	36010	7890
24-07-2018	36370	8490
25-07-2018	38358	8490
26-07-2018	37385	8490
27-07-2018	37642	7830

r) Further, the regional as well as all India demand was on higher side for a significant portion of the time during the said period. Similarly, Maharashtra demand was in excess of 17000 MW for more than 60% of the time during the said period. Accordingly, under such a scenario (higher demand & higher generation outage), it would not have been prudent to take additional units under RSD that too in a situation wherein Maharashtra was deliberately using the grid as a source for meeting its demand for the reasons best known to them.

s) It is an established practice that matters related to grid operation and scheduling are discussed in the lower forums viz. the Operational Coordination Committee (OCC) & Commercial Committee meetings (CCM) before being taken up at the higher forum like WRPC/TCC. The instant agenda of 'suo moto' scheduling of power by WRLDC to Maharashtra' got included in the 37th WRPC meeting at the last minute by the WRPC Secretariat against the established procedure of having first deliberated in subordinate forums of WRPC i.e. OCC and/or CCM.

t) In spite of gross violation throughout the period under reference, the Petitioner instead of trying to understand the RSD Procedure, during the 37th



WRPC Meeting alleged that WRLDC kept Solapur STPS and Mouda STPS-I Units on bar despite their giving the so called 'Zero Requisition' throughout the Period. The Petitioner has further demanded that WRLDC and other States/ beneficiaries should compensate for the alleged commercial loss to MSEDCL to the tune of Rs. 47.77 crore by keeping Solapur STPS and Mouda STPS-I on bar.

u) WRPC expressed that ideally the agenda should not have been included without having been discussed first in the CCM. Accordingly, it was directed by WRPC that the issue must be discussed first in CCM. As decided in 37th WRPC meeting, the issue was deliberated in detail during 80th CCM held on 21.2.2019 and all States/ beneficiaries who have their share in the above-mentioned NTPC stations and who were present in the meeting opposed the unilateral insistence of the Petitioner for taking the said units under RSD at a time when the country was witnessing unprecedented high demand and reeling under generation depletion scenario for shortage of coal & other reasons.

v) Even after a detailed deliberation on this agenda in presence of all members, in the 80th CCM leading to arrival of a broad consensus and even after hearing the arguments of other States/ beneficiaries that insisting on RSD by one State merely because they have major share and without appreciating the power supply position of other States/ beneficiaries, is not in line with the RSD Procedure. Further, the MSEDCL representative, after stating that he was convinced that WRLDC has not violated any step of the RSD Procedure, he suddenly announced that he is not inclined to take the matter to next WRPC meeting and that MSEDCL has already filed a petition before this Commission.

w) This act of the Petitioner's representative, keeping all CCM members in the dark throughout the meeting proceedings was not appreciated by other members. This action was against all standard norms of working together in a cohesive manner and to resolve disputed issues with free and frank discussion. It was also against the decision taken by WRPC forum that the issue need to be discussed in CCM forum. Nevertheless, living up to its stature and as a sign of professionalism, the CCM forum decided that since the matter was already sub-judice as mentioned by Petitioner's representative at the end of the discussion, the 80th CCM deliberations on the agenda should not be recorded. Thus,



minutes of 80th CCM held on 21.2.2019 did not record the actual deliberations against this agenda.

x) The next commercial committee meeting (i.e. 81st CCM) was held on 14.5.2019. It came to be known that the said petition was not admitted by this Commission and that petition number had not been generated as on 21.2.2019 i.e. the day of 80th CCM. In fact, apparently, the Petitioner's representative had misled all CCM members on that day (21.2.2019), by a false claim of filing a petition, so as to put the settled deliberations on this agenda out of the CCM recordings. It was unanimously understood and agreed in the 81st CCM that on the day of the 80th CCM deliberations, the case was not sub-judice. The Petition was finally admitted on 16.5.2019 i.e. after 85 clear days post the day of 80th CCM. Thus, the members attending the 81st CCM on 14.5.2019 decided to issue an amendment to earlier issued 80th CCM minutes. Pending the amended minutes of 80th CCM, a letter was issued by WRLDC to WRPC Secretariat summarising the actual deliberations which took place during 80th CCM on this Agenda.

y) On critical examination, it emerged that the Petitioner was maintaining a position of net-selling of power in the day-ahead collective market (PX) to the tune of 10,000 - 30000 MWh during the said period (23.06.2018 to 26.07.2018). Such action of the Petitioner is beyond comprehension as on one hand they sold power in the exchange for commercial considerations and on the other hand, used the grid as a market to meet their real time actual demand and attempted to overdraw from the grid persistently for 1031 time blocks beyond their permitted limit of 250 MW. The statistics based on energy meter data totally nullifies the Petitioner's argument and claim that they had adequate generation reserves available in the form of hydro generation at Koyna and other low-cost intra-State generation.

z) The Petitioner intended to surrender its share in Mouda STPS-I and Solapur STPS and overdraw heavily (1000-1200 MW) from the grid while selling energy in the power exchanges. All these were done by the Petitioner with a motive of making undue commercial gain by using the grid as a source for meeting its short-term demand. The Petitioner got trapped under this misadventure as the market clearing price (MCP) of power exchanges were less than the variable cost of both Solapur STPS and Mouda STPS-I for most part of



the period which got scheduled suo-moto to them by WRLDC in view of their persistent indiscipline. Hence, possibly, with the apprehension that they will be exposed before the statutory authorities viz. compliance auditors etc. for such ill-conceived adventures, the Petitioner is now probably trying to divert the attention by making WRLDC a scapegoat.

aa) During the course of investigation for preparing its reply to this petition, WRLDC came across a media reporting in a daily newspaper - the Mumbai Mirror on 24.12.2018 which is relevant in the instant case. In the said media report, the Petitioner (MSEDCL) itself was accusing the Tata Power Company (an embedded distribution licensee in Maharashtra) of overdrawing from the State grid and making huge commercial gain by selling in power exchange during the said period. This open claim in public media by the Petitioner on over drawal by an intra-State entity (Tata Power) only vindicates the details furnished by WRLDC in the foregoing paragraphs that the Petitioner had heavily overdrawn, in the said period in violation of the DSM Regulations and the Grid Code. It is understood from the above media report that based on the complaint by MSEDCL before SLDC Maharashtra, an enquiry Committee has been formed which is looking into the matter. WRLDC submits that the said enquiry Committee's report may be made available for further analysis of the issue by WRLDC and this Commission to understand the complexity.

bb) In page-26 (paragraph 11) of the Writ Petition WP 241/2019 (pending before Hon'ble High Court of Delhi), the Petitioner has made the following statements which are dangerous from the perspective of grid security:

"The Petitioner has to mandatorily meet the demand of consumers even in case of failure of supply of power from generating companies or network constraints. Resultantly, the Petitioner cannot always avoid to draw power in excess of the scheduled quantum..."

cc) Thus, the Petitioner admits that for meeting consumers' demand, it will draw in excess of schedule in case of generation tripping or network constraints. In a way, overdrawing from the grid is considered as a matter of right by the Petitioner. This is against the intent and spirit of the Grid Code and the DSM regulations and can prove potentially fatal towards reliability and security of the Grid. Many non-compliances of the Grid Code like poor SCADA and telemetry, no renewable forecasting, no demand estimation etc. have been openly



acknowledged by the Petitioner in its above writ petition 241/2019 which merits attention of this Commission for invoking penalty under section 142 of the Act.

dd) The claim made by the Petitioner that it was because of their email communication to WRLDC at 13:00 hrs of 26.07.2018 that WRLDC was forced to withdraw the unit at Solapur STPS is misplaced. The final collective decision to take one unit of Solapur STPS on RSD was purely based on the prevailing system conditions, future load forecasts, wind power availability, widespread rains in several other states etc. It was, in fact, after intense deliberations within WRLDC control room in the morning of 26.07.2018 (at around 10:30 hours) steered by ED (WRLDC) wherein it was decided to take out one unit of NTPC Solapur on RSD.

ee) As a gesture of extending support to the Petitioner so as to bridge the gap in understanding of the prevailing regulations and for making them appreciate the larger perspective of secure and reliable operation of regional and National grid, WRLDC offered to conduct a capacity building workshop for the Petitioner. The need was felt to sensitise the Load Management (LM) cell of the Petitioner that for RSD of a unit, they have to give zero schedule not only in their very first requisition but maintain the same status throughout the day and be prepared for the unit to be unavailable for next few days. WRLDC as the system operator, regularly conducts capacity building workshops with stakeholders so as to improve the mutual understanding and appreciation of the extant regulatory frameworks in place. Further, the CERC (RLDC Fees & Charges) Regulations 2019, has identified the 'stake-holder capacity building' as a major key performance indicator (KPI) for the WRLDC. However, unfortunately, this offer for conducting a capacity building workshop was viewed as an 'attempt to malign' MSEDCL. WRLDC regrets to note such unprofessional gesture of the Petitioner.

ff) As head of WRLDC, the Executive Director, has to take judicious decisions from time to time in the overall interest of the Regional and National grid. At the crucial time like the period under reference i.e. between 23rd June to 26th July, when the country was hitting an unprecedented demand of 160 GW and above with acute generation depletion of 30000-37000 MW in WR on account of coal shortage and other issues, the Executive Director had the following two options:



- i. Be a silent spectator of Continuous Violations by the Petitioner and risk the Grid to an imminent collapse and feel apologetic afterwards before the entire Nation.
 - ii. Be proactive and ensure Grid discipline within the framework of powers entrusted by the Parliament through the Electricity Act, 2003 and by this Commission by its regulations & orders.
- gg) In fact, WRLDC has saved the Grid and embarrassment to the Nation by his firm and proactive approach and by keeping Solapur STPS and Mouda STPS-I units on bar and has neutralised the deliberate action of the Petitioner of making undue commercial gain at the risk of regional/national Grid Security.

Submissions of the Respondent No.2 NTPC

5. The Respondent No. 2, NTPC vide its affidavit dated 6.6.2019 submitted the following:

- a) MSEDCL unilaterally withheld the payment of Rs 47.77 crore against the energy bill raised by NTPC, raising dispute against the energy charges corresponding to the suo motu scheduling of energy by WRLDC from NTPC plants. On this unilateral decision of withholding the amount payable, it raised concerns with MSEDCL and also requested to make the payment of this amount as per the provisions of PPAs vide its letter dated 30.8.2018 and 11.10.2018. Subsequently, MSEDCL has made payment of Rs. 45.43 crore for the above energy under the PPA clause applicable for disputed bill amount under protest and retained Rs. 2.34 crore under dispute.
- b) That the matter was discussed in 37th TCC/WRPC meeting held on 17th/18th December 2018, wherein WRLDC explained the reasons for suo-motu scheduling to MSEDCL. Further, NTPC stated that Maharashtra should pay NTPC dues and should not withhold as NTPC was not a party to it.
- c) Section 29(1) of the Electricity Act, 2003 empowers RLDC to give such direction and exercise supervision and control as may be required for ensuring stability of grid operations and for achieving the maximum economy and efficiency in the operation of the power system in the region under its control. Also, Section 29(2) of the Act provides for complying of directions issued by



RLDC, by every licensee, generating station, sub-station and any other person connected with the operation of the power system.

d) As per Regulation 6.5.14 of the Grid Code, RLDC has to ensure operationally reasonable scheduling of generating units and as per Regulation 6.5.20 of the Grid Code, RLDC is empowered to revise the schedule on its own in the interest of the better system operation. Further, Clause 5.7 of the RSD Procedure provides power to RLDC to suo-moto revise the schedule of any generating station.

e) Raising of dispute by MSEDCL on the above energy bills raised by NTPC and consequent retention of 5% of the billed amount is incorrect as NTPC stations have operated strictly as per the schedule provided by WRLDC.

f) NTPC has raised the bill to MSEDCL as per the quantum of Schedule Generation (SG) shown against Maharashtra in the Regional Energy Account(s) (REAs) issued by WRPC for the respective month(s), in line with Regulation 2.4.5 and Clause 10 of Complimentary Commercial Mechanisms laid down in the Grid Code. Although NTPC was not the party in scheduling, the issue was raised by MSEDCL before NTPC vide its letters dated 27.08.2018 and 01.10.2018, which were replied by NTPC vide letters dated 30.08.2018 and 11.10.2018. NTPC, vide letter dated 19.11.2018 has reiterated for the payment of Rs 2.34 crore withheld by MSEDCL. However, the amount has still been not paid by MSEDCL to NTPC.

Rejoinder of Petitioner to reply filed by WRLDC

6. The Petitioner vide affidavit dated 26.6.2019 filed rejoinder against reply dated 6.6.2019 filed by WRLDC and has mainly submitted as under:

a) MSEDCL has raised dispute regarding suo-moto power scheduled by WRLDC without taking consent of MSLDC. In the present case, MSLDC has not given any requisition for schedule of power from Solapur STPC and Mouda STPS-I in compliance of its duty under Section 33 of Act. The requisitions given for these stations in real time operation by MSLDC to WRLDC are not disputed in present case. Hence, inclusion of MSLDC as one of the parties in this matter is not essential.



b) In Maharashtra State, other than MSEDCL (excluding ISGS) following Regional Entities are located:

Sr. No.	User Name	User Type	Registration No.	Address
1	BARC FACILITY	Drawing Entity	BAR1098648066	Plant Superintendent, TRP Nuclear Recycle Board, BARC, Tarapur, Maharashtra, Mumbai 401502
2	BHAHVDC	Drawing Entity	WRRBH1BY	2x 500 MW HVDC Back to Back Station & 400 KV AC Station, Village: Sumthana, Tahsil: Bhadrawati, Dist. Chandrapur, Maharashtra, Nagpur 442902
3	Dhariwal Infrastructure Limited	Injecting Entity	WRRDW1GN	CESC House, Chowringhee Square, West Bengal, Kolkata 700001
4	GMR Warora Energy Limited	Injecting Entity	WRREMCGN	Plot No B-1, Mohabala MIDC Growth Center, Post Tehsil- Warora, Dist-Chandrapur, Maharashtra, Chandrapur 442907

c) In respect of above Regional Entities, user itself is responsible for controlling its deviation on its own. But in case of MSEDCL as Regional Entity, the said Entity has been created for the State as a whole, where State deviations are to be controlled. Even though account is being prepared by WRLDC/ WRPC in the name of MSEDCL, but settlement of DSM charges within different State Entities (State Pool Participants) is being done on basis of Procedure prepared by Maharashtra Electricity Regulatory Commission (MERC). The settlement is done on basis of principles laid down by MERC in the procedure 'Final Balancing and Settlement Mechanism'. All charges to be paid to Regional DSM pool are not paid by MSEDCL alone. Moreover, as stated in demarcation of responsibilities in Regulation 6.4(1) and 6.4(5)(v) of the Grid Code, MSLDC is responsible to regulate the net drawal of their control area from the Regional Grid in accordance with the respective Regulations of the CERC. Hence, the submission of WRLDC that MSEDCL is responsible for maintaining deviation at Regional level for entire State of Maharashtra is irrelevant.

d) WRPC in its MoM of 81st CCM has circulated deliberation of 80th CCM on the issue of suo-moto scheduling of power from Solapur STPS and Mouda



STPS-I. In this regard, MSEDCL has already informed Member Secretary, WRPC for recording of wrong interpretation of MSEDCL's submission during meeting. During the 80th CCM meeting dated 21.2.2019, the procedure regarding taking unit under RSD or taking RSD unit on bar which is being followed after 37th WRPC meeting dated 17.12.2018, was also discussed. It was discussed that after 37th WRPC meeting, in case any unit's schedule goes below Technical Minimum, WRLDC should confirm the schedule and requisition of all beneficiaries. Further, whenever any RSD unit is to be taken on bar, consent of all beneficiaries should be taken by WRLDC and if RSD unit is required to be taken on bar for Regional/ National prospective, then Technical Minimum Support is given under RRAS mechanism by WRLDC and NLDC.

e) After this discussion, on enquiry by the Member Secretary, WRPC whether the procedure is being now followed by WRLDC, MSEDCL's representative informed that presently (i.e. after 37th meeting held on 17.12.2018), no such violation of the RSD Procedure is being observed. However, this discussion was not covered in the MoM and on the contrary, the statement that "MSEDCL representative informed that no such violation done by WRLDC" is recorded. In view of this, MSEDCL vide its letter No. CE/PP/80th CCM MoM/17066 dated 19.06.2019, requested to correct the MoM of 80th CCM and also requested to include the above uncovered discussion.

f) In case WRLDC would have taken appropriate action stipulated under Clauses 5.6 and 5.7 and taken these NTPC units under RSD, then in terms of Clause 5.10 of the RSD Procedure, it will be MSEDCL's responsibility to make necessary power arrangement to meet its demand. However, since WRLDC did not withdraw Mouda STPS-I and Solapur STPS under RSD, MSEDCL opted to schedule power for some time blocks from these stations in real time operation so that use of its important peak demand resource can be restricted. The Day-wise requisitioned time blocks for schedule of power from Solapur STPS and Mouda STPS-I are as under:



Date	Solapur STPS			Mouda STPS-I		
	Time Block	Number of Time Blocks in which requisition was given by MSEDCL	Maximum Requisition (MW)	Time Block	Number of Time Blocks in which requisition was given by MSEDCL	Maximum Requisition (MW)
23.06.2018		0		21 & 27	2	185.538
24.06.2018		0			0	
25.06.2018		0			0	
26.06.2018	81 to 82	2	58.6003	80 to 83	4	369.572
27.06.2018	79 to 89	11	304.373	27 to 30	19	370.487
				59 to 60		
				78 to 90		
28.06.2018	28 to 30	22	304.373	4 to 8	31	370.487
	34 to 36			26 to 35		
	80 to 95			80 to 95		
29.06.2018	27 to 49	29	304.373	22 to 54	49	370.487
	80			76 to 77		
	83 to 84			79 to 92		
	86 to 88					
30.06.2018	22 to 29	19	304.373	20 to 54	39	370.487
	38 to 40			60 to 63		
	46 to 47					
	50 to 52					
	61 to 63					
01.07.2018	65 to 68	4	100	65 to 68	5	369.572
				79		
02.07.2018	26 to 28	3	304.373	1 to 3	17	370.487
				25 to 30		
				37 to 38		
				45 to 50		
03.07.2018		0			0	
04.07.2018				29	8	370.487
				81 to 87		
05.07.2018	26 to 30	7	304.373	27 to 35	13	370.487
	33 TO 34			80 to 83		
06.07.2018	28 to 30	8	200	26 to 30	10	370.487
	91 to 94			90 to 94		
07.07.2018	1 to 8	23	304.373	1 to 10	44	235.854
	25 to 28			23 to 34		
	78 to 84			73 to 96		
	89 to 91					
08.07.2018	1 to 2	3	293.584	1 to 4	5	370.487
	7			8		
09.07.2018		0		1 to 2	2	370.487
10.07.2018		0		28 to 32	10	370.487
				41		
				59 to 62		
11.07.2018		0		80 to 81	2	369.572
12.07.2018	27 to 91	65	304.373	26 to 91	66	370.487
13.07.2018	25 to 31	20	304.373	25 to 40	31	370.487
	79 to 91			78 to 92		



14.07.2018	23 to 30	33	304.373	21 to 32	47	370.487
	34 to 40			34 to 39		
	64 to 68			64 to 68		
	74 to 82			70 to 93		
	84 to 87					
15.07.2018	79 to 81	3	303.769	26 to 29	17	314.472
				38 to 44		
				79 to 81		
				86 to 88		
16.07.2018		0			0	
17.07.2018		0		79 to 82	4	100
18.07.2018	29 to 31	10	304.373	29 to 31	12	216.2
	78 to 84			78 to 84		
				86 to 87		
19.07.2018	24 to 33	26	304.373	8	29	216.2
	39			23 to 33		
	74 to 88			39		
				74 to 89		
20.07.2018	28 to 32	8	269.119	27 to 32	14	313.695
	78 to 80			34 to 37		
				77 to 80		
21.07.2018		0		82 to 83	2	369.572
22.07.2018		0			0	
23.07.2018		0			0	
24.07.2018	78 to 88	14	268.585	24 to 45	43	370.487
	90 to 92			68 to 72		
				77 to 92		
25.07.2018	25 to 39	18	269.119	24 to 39	24	370.487
	80 to 82			80 to 83		
				87 to 90		
26.07.2019	25	1	269.119	25 to 30	15	370.487
				74 to 82		

g) Thus, requisition was issued in real time as the options of Solapur STPS and Mouda STPS-I were available. If these units would have been taken under RSD, reserve resources would have been utilized or any URS power in other ISGS would have been availed or MSEDCL would not have withdrawn its contracted intra-State generating unit/s under zero schedule.

h) From day-wise demand pattern and district-wise rainfall data for the month of June 2018 as well as July 2018, it can be seen that MSEDCL demand dropped by almost 3000 MW. The peak demand which was 18,590 MW on 01.06.2018, dropped after start of monsoon significantly after 21.06.2018 when peak demand remained between 15,000 to 16,000 MW.

i) Moreover, wind generation also increased and it is observed that highest wind generation in State during June 2018 and July 2018 was 2953 MW



and 3157 MW, respectively. The day-wise hourly wind generation for month of June 2018 and July 2018 shows that wind generation increased considerably after 09.06.2018 and remained in the range of 40 MU to 65 MU.

j) Due to rise in availability of wind generation and drop in demand on account of monsoon, for economic load generation balance, MSEDCL gave zero schedule to intra-State generator as well as zero requisition to Solapur STPS and Mouda STPS-I. Even then, MSEDCL was in surplus and hence, it decided to sell surplus power in market. Further, considering availability and forecasted demand, MSEDCL has even purchased as well as sold power on specific days. From the day-wise hourly power purchase and sale from IEX from 23.06.2018 to 26.07.2018, it can be seen that MSEDCL not only sold power in market but also purchased power from market as per requirement.

k) Even after sale of power in power exchange, when there was surplus in real time operation, MSLDC gave backing down instructions for load generation balance. The day-wise report showing backing down instructions given to various intra-State generators from 23.06.2018 to 26.07.2018 is annexed as Annexure-E of the Petition. The surplus power available in various ISGS generator contracted with MSEDCL from 23rd June 2018 to 26th July 2018 is annexed as Annexure-F of the Petition. This report is prepared on the basis of information available in public domain on WRLDC web-based scheduling software. Based on daily back down quantum (both in intra-State generators and ISGS), State UI and power scheduled from Solapur STPS, Mouda STPS-I & Gandhar RLNG, hourly report has been prepared for 23.06.2018 to 26.07.2018 and same is annexed as Annexure-G of the Petition. It can be seen that even without scheduling suo-moto power scheduled of Solapur STPS and Mouda STPS-I by WRLDC, State would have managed required power to meet its demand.

l) With regard to inadvertent over drawal claimed by WRLDC, MSEDCL has verified over drawal and under drawal events from recorded SCADA data. Day-wise over-drawal (in MU) and under-drawal (in MU), maximum over-drawal, over-drawal instances crossing State deviation limit i.e. above 250 MW are annexed as Annexure-H of the Petition. The summary of same is as under:



Particular	Details
% Time overdrawal remain above 250 MW	9%
Overdrawal Energy (MUs)	52.32
Underdrawal Energy (MUs)	-128.47

m) It can be seen that underdrawal by Maharashtra is more than overdrawal. The overdrawal instances were mainly on account of difficulty of MSLDC to access wind and solar generation accurately. As per Clause 5.3(g) of the Grid Code, SLDC is required to carry out wind and solar forecasting to meet active and reactive power requirement. But presently there is no forecasting of RE in place in Maharashtra, as it is not binding on wind and solar generators for submission of forecasted availability. Looking into practical difficulty, MERC, in month of June 2018 has notified the MERC (Forecasting, Scheduling and Deviation Settlement for Solar and Wind Generation) Regulations, 2018 and its commercial operation was expected to start from 01.04.2019 but still same is not in place. MERC considering practical difficulty informed by MSLDC in implementation of Forecasting & Scheduling Regulation from 1st April 2019 extended commercial operational date to 1st July 2019.

n) As per Regulation 6.4.5(v) of the Grid Code, it is MSLDC's responsibility to regulate the net drawal of their control area from the regional grid in accordance with the respective regulations of the CERC. If any SEB/ distribution licensee or bulk consumer is overdrawing from grid, SLDC needs to initiate action as stipulated under Regulation 5.4.2 of the Grid Code. Hence, on every occasion of overdrawal from Regional grid, MSLDC is supposed to instruct concerned Distribution licensee to restrict drawal from grid, if its availability is less than its demand. But no such instructions were received during 23.06.2018 to 26.07.2018. This is due to fact that overdrawal was mainly due to problem faced by MSLDC for correct scheduling due to absence of wind and solar forecasted data. The overdrawal that occurred in real time was normally controlled within 2 to 3 time blocks. The same can be checked from block-wise UI recorded in SCADA.

o) In month of October 2018, there was huge power shortage all over India and demand of MSEDCL crossed 20,000 MW. Hence, MSEDCL took all-out effort for purchase of power from market to meet its demand. However, even



then, for any instruction received from MSLDC for load curtailment in real time, MSEDCL complied with it. Hence, allegation that MSEDCL is using grid as source of power are baseless and also allegation of violation of Regulation 5.4.2 of the Grid Code i.e. non-compliance of directive given by MSLDC for load curtailment in case of overdrawal from grid by MSEDCL are also not correct.

p) In case of Maharashtra, WRLDC scheduled power to Maharashtra on suo-moto basis when schedule from other beneficiaries was less than technical minimum. On checking the suo-moto scheduling of power, it can be seen that power was scheduled even when there was heavy underdrawal in the State. Some of instances are given under:

Date	Time Block	State UI as per SCADA (MW)	Suo-moto Power schedule by WRLDC (MW)
27.06.2018	11	-91	86
27.06.2018	12	-261	125
27.06.2018	13	-390	163
27.06.2018	14	-351	211
27.06.2018	15	-363	245
27.06.2018	16	-409	274
20.07.2018	13	-228	195
20.07.2018	14	-254	209
20.07.2018	15	-283	230
20.07.2018	16	-457	286
20.07.2018	17	-551	331
20.07.2018	18	-730	346
20.07.2018	19	-525	361
20.07.2018	20	-452	372
20.07.2018	21	-362	386
20.07.2018	22	-562	386
20.07.2018	23	-487	380
20.07.2018	24	-523	372
20.07.2018	25	-72	372

q) WRLDC in its reply has mentioned that it received email correspondence from NDLC, for maximization of generation in evening period. If frequency profiles of these periods are checked, it can be seen that frequency during evening period was on lower side. Now hypothetically, if it is assumed that WRLDC was scheduling suo-moto power to control inadvertent overdrawal of Maharashtra, then such suo-moto scheduling of power in evening peak period should be higher than that in other periods. But same is not true. The



day-wise suo-moto scheduling of power during evening peak period (i.e. 1800 hrs to 2300 hrs) and another period is as under:

Date	Day	Suo-moto Energy Schedule during evening peak (MU)	Suo Moto Energy Schedule during other period (MU)	% of Energy schedule during evening peak to other period	All India evening peak demand (MW)
23-06-2018	Sat	0.56	2.88	19%	164193
24-06-2018	Sun	0.69	3.90	18%	155956
25-06-2018	Mon	0.33	2.64	13%	161978
26-06-2018	Tue	0.80	4.27	19%	161043
27-06-2018	Wed	0.46	3.40	13%	156632
28-06-2018	Thu	0.39	2.94	13%	150168
29-06-2018	Fri	0.47	3.48	13%	152739
30-06-2018	Sat	0.17	2.74	6%	157073
01-07-2018	Sun	0.40	2.04	20%	150643
02-07-2018	Mon	0.10	2.30	4%	157631
03-07-2018	Tue	0.85	4.40	19%	155960
04-07-2018	Wed	0.38	5.49	7%	155365
05-07-2018	Thu	0.30	3.56	8%	159538
06-07-2018	Fri	0.17	2.99	6%	163341
07-07-2018	Sat	0.02	2.39	1%	161483
08-07-2018	Sun	0.26	3.25	8%	154480
09-07-2018	Mon	0.31	2.09	15%	161948
10-07-2018	Tue	0.21	3.10	7%	164728
11-07-2018	Wed	0.60	4.01	15%	160921
12-07-2018	Thu	0.12	1.68	7%	160680
13-07-2018	Fri	0.14	2.65	5%	153667
14-07-2018	Sat	0.32	2.27	14%	154848
15-07-2018	Sun	0.58	4.39	13%	149308
16-07-2018	Mon	0.61	4.96	12%	155098
17-07-2018	Tue	0.51	5.08	10%	159122
18-07-2018	Wed	0.10	4.34	2%	159086
19-07-2018	Thu	0.27	2.04	13%	160207
20-07-2018	Fri	0.52	4.71	11%	158771
21-07-2018	Sat	1.23	5.07	24%	153186
22-07-2018	Sun	1.59	5.36	30%	144627
23-07-2018	Mon	0.00	5.40	0%	155333
24-07-2018	Tue	0.46	3.24	14%	160249
25-07-2018	Wed	0.63	4.92	13%	155519
26-07-2018	Thu	0.16	4.97	3%	151864

r) It can also be seen that the power schedule on suo-moto basis by WRLDC during evening period on Sunday is more. The all-India demand on



Sunday remains on lower side. Hence, the reason for increase in suo-moto scheduling in evening time on Sunday as compared to other day was mainly due to low requisition from other beneficiaries and hence to ensure technical minimum. It was not for overdrawal, as claimed by WRLDC.

s) Further, if decision to keep unit of Solapur STPS and Mouda STPS-I was taken by WRLDC as per email from NLDC, then reserve requirement was for grid. Under such circumstances, the power from these generating stations was expected to be used by RLDC for RRAS. Recently, NLDC considering reserve requirement at regional level has taken a decision to bring units of Mouda STPS-I & II in month of January 2019 so that technical minimum was ensured through RRAS mechanism. Further, Solapur STPS units were taken on bar in months of May and June for maintaining sufficient reserve in grid and technical minimum was ensured from RRAS mechanism. While taking these units on bar and giving schedule under RRAS, it was mentioned by NDLC that *“The RRAS support shall be provided to maintain technical minimum. However, in case if any constituent overdraws from the grid, URS shall be allocated to the overdrawing constituents by proactively taking up with them.”*

t) Even during high demand period in months of April 2019 and May 2019, no suo-moto scheduling of power was done to Maharashtra either from Solapur STPS unit or from Gadawara STPS unit by WRLDC. Although on few occasions, State was in overdrawal but same was also mandatory on some occasions to avoid sign change penalty. If similar decision of not scheduling suo-moto power to MSEDCL would have been taken by WRLDC in months of June and July 2018, the instant issue would have been avoided.

u) WRLDC has plotted graph of violation by Maharashtra without considering suo-moto power. If WRLDC would not have suo-moto scheduled costly power from Mouda STPS-I or Solapur STPS, then MSEDCL would not have been forced to take its intra-State generation (that have variable cost lower than Mouda STPS-I and Solapur STPS) under zero schedule and would not have been required to carry out backing down of low cost thermal units.

v) Solapur STPS unit was taken under RSD on 14.11.2018 and was under RSD till NLDC gave directive to bring that unit through support from RRAS on



21.05.2019. MSEDCL has not scheduled a single unit from Solapur STPS units even when this unit was taken on bar by NLDC for grid requirement. Similarly, in respect of unit-2 of Mouda STPS-I which was under RSD from 27.01.2019 to 20.02.2019, MSEDCL did not give any schedule. This can be verified from requisition data of Web based scheduling software of WRLDC. Thus, any decision taken by MSEDCL for RSD of unit was not momentary decision.

w) It is mentioned by WRLDC that overdrawal recorded on 09.07.2018 and 24.07.2018 was to tune of 1100 MW to 1200 MW. As per SCADA data available with MSEDCL, the maximum overdrawal on 09.07.2018 was 573 MW in block no.73 and same was controlled immediately as UI in next time block was -308 MW. Even, as per WRPC bill calculated based on SEM data, maximum overdrawal on 09.07.2018 was 944 MW in 31st time block. However, UI recorded in SCADA is only 137 MW. These are problems due to mismatch between readings of SEM and SCADA and in real time operation, this was intimated to MSLDC as well as WRLDC for taking corrective action. Similarly, maximum UI recorded on 24.07.2018 was 1450 MW in 1st time block and this was controlled in next three-time block. This abnormal overdrawal was due to scheduling issue and not due to shortfall in availability and also due to issue of SCADA. UI recorded in previous four-time block and next four-time block is as follows for clarification:

Date	Time block	UI as per SCADA (MW)	UI as WRPC UI bill (MW)
23.07.2018	93	-160	-673
23.07.2018	94	-71	-472
23.07.2018	95	-7	-411
23.07.2018	96	90	-221
24.07.2018	01	1450	1272
24.07.2018	02	1070	1006
24.07.2018	03	655	563
24.07.2018	04	589	472
24.07.2018	05	205	104

x) The issue of SCADA accuracy has been taken up by MSEDCL in its comments of draft 4th DSM Amendment and again its representation submitted to this Commission as per Hon'ble High Court order in Writ Petition filed by MSEDCL citing practical difficulties. This Commission in explanatory memorandum of draft 5th Amendment of DSM regulation has also taken note of



same. To have check on SCADA data visibility of ISTS drawal points, MSEDCL requested MSLDC to prepare screen whereby SCADA data values captured by SCADA installed by STU as well as CTU can be compared on one to one basis and will be easier to rectify the problem. Accordingly, new screen was developed by MSLDC in the month of October 2018. This screen helps MSEDCL to monitor deviation between two SCADA values and helps to reduce financial burden to some extent. UI recorded in FY 2017-18 as per SCADA was 732 MU of overdrawal and 844 MU of underdrawal. But as per DSM bill raised, UI computed for FY 2017-18 was 959 MU of overdrawal and 815 MU of underdrawal. This was informed by MSEDCL in its comments on draft 4th Amendment to DSM Regulations vide its letter dated 30th July 2018. This issue of SCADA was also reported to WRLDC vide letter No.22041 dated 15.09.2018 for initiating corrective measures.

y) The issue SCADA accuracy and visibility although improved due to development of new SCADA screen by MSLDC but still there is difference between SCADA and SEM drawal. Due to difference between SCADA & SEM, State has to pay additional Rs.46.07 crore in DSM pool from 01.01.2019 to 30.04.2019 and same is tabulated as follows:

Month	As per WRPC Bill					As per SCADA					Impact of SCADA (Rs. in lac)
	OD MUs	UD MUs	Number of sign change violation	Sign Change Penalty (Rs. in lac)	Net DSM Bill (Rs. in lac)	OD MUs	UD MUs	Number of sign change violation	Sign Change Penalty (Rs. in lac)	Net DSM Bill (Rs. in lac)	
Jan-19	58	-58	122	775	1567	44	-82	111	783	507	1060
Feb-19	57	-37	75	623	1520	47	-47	24	62	513	1007
Mar-19	54	-40	70	379	1010	45	-51	18	67	142	869
Apr-19	42	-52	66	328	442	37	-59	18	62	-135	577
May-19 (up to 26.5.19)	41	-40	65	526	914	38	-65	30	145	-181	1095
Total	252	-228	398	2631	5452	211	-304	201	1119	845	4607

z) Day-wise overdrawal recorded in SCADA and SEM from 23.06.2018 to 26.07.2018 and its financial impact are as under:



Date	UI computed based on SEM data		UI recorded in SCADA		Average Difference between SCADA & SEM (in MW)	Financial implication Gain (+)/ Loss (-) (Rs. in lac)
	OD MUs	UD MUs	OD MUs	UD MUs		
23-Jun-18	0.81	-5.73	1.89	-2.64	207.78	81.85
24-Jun-18	1.41	-4.97	2.39	-2.62	184.42	41.42
25-Jun-18	1.24	-4.02	2.42	-3.04	118.79	42.47
26-Jun-18	1.02	-4.26	2.03	-2.66	133.72	45.58
27-Jun-18	1.61	-4.67	2.95	-3.08	142.83	53.45
28-Jun-18	0.84	-4.31	2.18	-2.38	160.70	55.54
29-Jun-18	0.63	-5.00	1.72	-2.91	158.68	60.15
30-Jun-18	3.18	-2.41	1.21	-4.64	211.26	-113.24
01-Jul-18	3.80	-1.83	1.94	-2.39	169.30	-54.62
02-Jul-18	1.93	-3.87	2.04	-3.01	184.00	12.37
03-Jul-18	2.83	-1.75	2.00	-2.60	77.13	-26.26
04-Jul-18	2.60	-2.71	1.97	-4.36	110.85	-21.90
05-Jul-18	3.87	-2.22	2.39	-2.94	110.86	-76.92
06-Jul-18	1.21	-4.96	0.88	-5.14	97.12	-22.65
07-Jul-18	1.29	-3.44	1.35	-2.55	91.21	15.47
08-Jul-18	1.91	-3.66	1.27	-5.36	152.61	-28.22
09-Jul-18	3.09	-4.36	1.10	-4.79	188.12	-88.47
10-Jul-18	1.86	-3.24	1.26	-3.74	109.75	-35.51
11-Jul-18	0.43	-5.35	0.61	-4.70	75.69	14.15
12-Jul-18	2.05	-1.88	2.26	-2.11	102.31	8.17
13-Jul-18	1.35	-3.22	1.64	-3.58	94.89	3.66
14-Jul-18	2.04	-3.11	0.91	-4.16	132.74	-75.56
15-Jul-18	1.43	-4.24	0.95	-4.60	108.25	-19.76
16-Jul-18	0.34	-6.69	0.58	-6.41	69.26	12.86
17-Jul-18	1.26	-2.66	0.87	-2.94	50.73	-15.79
18-Jul-18	1.51	-3.84	1.27	-4.53	53.69	-25.75
19-Jul-18	0.70	-4.32	0.53	-5.07	58.10	-18.18
20-Jul-18	1.35	-4.07	1.04	-4.84	67.20	-13.61
21-Jul-18	2.56	-1.65	1.38	-4.48	197.14	-57.81
22-Jul-18	0.26	-4.30	0.21	-5.90	131.64	-1.44
23-Jul-18	3.86	-1.86	1.96	-2.86	200.55	-60.15
24-Jul-18	4.48	-1.64	2.50	-2.13	162.25	-64.20



25-Jul-18	4.90	-0.77	1.58	-2.69	253.00	-98.85
26-Jul-18	3.98	-2.09	1.55	-5.06	227.67	-104.23
Total	67.61	-119.10	52.84	-126.90	135.12	-575.98

aa) It can be seen that as per WRPC bill total overdrawal MUs are less than that billed. Further, as per SCADA, underdrawal was almost 2.4 times more than overdrawal. Hence, statement by WRLDC that there was advertent overdrawal by Maharashtra during 23.06.2018 to 26.07.2018 is not correct. The average difference between SCADA and SEM UI is about 135 MW.

bb) The Market Monitoring Report published by this Commission for the months of June 2018 and July 2018 is based on DSM bills issued by respective RPCs, which is based on SEM data. The overdrawal and underdrawal by Maharashtra through regional grid is as under:

Month	Through DSM with Regional Grid (MUs)		
	Import (Over Drawal)	Export (Under Drawal)	Net
Jun-2018	57.93	107.96	-50.03
Jul-2018	72.62	100.48	-27.87

cc) Hence, allegation of WRLDC as regards overdrawal by the Petitioner based on DSM bills for FY2017-18, is wrong.

dd) Further, WRLDC has mentioned that suo-moto scheduling of power from Gandhar and Kawas RLNG was done to control overdrawal. It is to submit that no suo-moto power from Kawas RLNG was scheduled by WRLDC whereas suo-moto power was scheduled only from Gandhar RLNG.

ee) MSEDCL agrees that spinning reserve need to be kept and accordingly MSEDCL has Koyna hydropower plant as spinning reserve with peaking capacity of approximately 1900 MW. Further while deciding for sale option, sufficient reserve is always kept in thermal generation apart from Koyna hydropower plant. It is responsibility of every Discom as well as SLDC/RLDC to ensure that there is sufficient spinning reserve. This is not the responsibility of MSEDCL alone. The issue of maintaining spinning reserve at the State level by all Distribution Licensees in State was also taken up by MSEDCL in 24th MSPC meeting held on 11th December 2018. MSEDCL also took up this issue with MERC in its comments submitted on Draft MERC (DSM) Regulation.



ff) MSEDCL has studied the demand pattern at Regional level. The report has been compiled from weekly reports available on POSOCO website. It can be seen that from 18.06.2018 to 26.07.2018, demand in all States in Western region had reduced. The study was also done in respect of peak demand recorded at Regional level and national level for months of June 2018 and July 2018. The peak demand of Western Region reduced from 53,367 MW in the beginning of June 2018 to 45,995 MW on 23.06.2018 and remained between 41 GW to 45 GW. The lowest peak of 41 GW was observed on 22.07.2018 in Western Region. The peak demand recorded in month of June 2018 at National Level was 170241 MW on 22.06.2018 and same dropped to 164327 MW on 24.06.2018. Except on five/ six days, peak demand did not cross 165000 MW. Most of time peak demand remained close to 162 GW. The lowest demand at National Level was recorded on 22.07.2018 i.e. 149966 MW.

gg) The peak demand recorded in month of June 2018 in State of Maharashtra was 22211 MW on 01.06.2018 and same dropped to 17723 MW on 23.06.2018. Except on some days, peak demand again did not cross 18500 MW. The lowest demand was recorded on 24.06.2018 i.e. 16753 MW. Hence, though contention of WRLDC that Maharashtra State demand remained above 17,000 MW for more than 60% of time during 23.06.2018 to 26.07.2018 is correct, but it needs to be considered that demand dropped by almost 2500 MW during this period as compared to first week of June 2018.

hh) As regards the issue of news published in Mumbai Mirror in respect of TATA Power as highlighted by WSLDC, the same was brought to notice of MSLDC by MSEDCL and when no action in matter was taken by MSLDC, the said matter was deliberated at meeting of Maharashtra State Power committee (MSPC) held on 17.12.2018. During meeting, it was directed by Chairman, MSPC to MSLDC to investigate the matter. But till date no report on said matter has been published by MSLDC. Hence, MSEDCL is also not aware of finding of MSLDC. It was informed that TPC-D was selling power during evening period in IEX without having sufficient surplus for said sale and said report was based on availability declaration and forecasted demand of TPC-D. The overdrawal by TPC-D is yet to be ascertained by MSLDC.



ii) In Maharashtra, concept of intra-State DSM is different than DSM existing at Central/ Regional level. The centralized MoD principle used for scheduling and settlement of energy exchange between intra-State utilities is done on basis of Weighted Average System Marginal Price principle. Intra-State DSM is not frequency-linked. In addition to deviation from RE generators, the deviation by contracted generators is also required to be borne by Discoms. Further, settlement process from MSLDC is also delayed by more than 2 years. Considering huge financial implication due to present mechanism, MSEDCL has already approached MERC that has issued certain directives to MSLDC. MERC has recently notified new intra-State DSM Regulation on 01.03.2019, which is in line with provision of the CERC DSM Regulations. The new regulation is proposed to be in commercial operation by 1st April 2020. Hence, issue of TATA Power for showing that Maharashtra was overdrawing power is of no relevance in present petition filed by MSEDCL against WRLDC.

Written Submissions

7. The WRLDC, Respondent No. 1 in its written submission dated 4.7.2020, has mainly submitted as under:

a) MSEDCL has claimed that had these units been withdrawn on RSD they would have utilized other intra-State reserves to contain overdrawal (OD). However, as revealed from the actual meter data, even after scheduling power from Mouda STPS-I and Solapur STPS, MSEDCL continued to overdraw beyond 250 MW in 454 time blocks during the said period and at times the OD was of the order of 1000-1200 MW.

b) If MSEDCL had adequate reserves in intra-State generators, it should have deployed them and not overdrawn in 454 time blocks even after suo-moto scheduling by WRLDC. If one simply goes by this claim of MSEDCL, it gets established that it preferred to lean on the grid to meet its demand through OD and by using DSM as a market without deploying its reserve capacity.

c) The statement "Only after 37th WRPC, there was no violation of RSD procedure by WRLDC" has been misquoted in the 80th/ 81st CCM minutes for which they have given a letter on 19.06.2019 to Member Secretary, WRPC to



correct the MoM. However, it is an after-thought and deliberate attempt by MSEDCL to withdraw its own statement. WRLDC filed its reply to this petition on 06.06.2019 wherein WRLDC quoted the discussions held in 80th/81st CCM. 81st CCM MoM was published by WRPC secretariat on 06.06.2019, which noted the same statement as mentioned by WRLDC in its reply.

d) That if any entity (including the Petitioner) at any point of time fails to comply with provisions of the Grid code, WRLDC is mandated to initiate necessary action in the interest of better system operation as stipulated in the Grid code and other regulations of this Commission.

e) MSEDCL has submitted energy (MU) figures instead of MW figures. WRLDC is supposed to monitor real time grid operation and ensure that inadvertent over drawal of power in MW (and not energy in MU) at any instant is within the limit specified (250 MW) by the regulations (the Grid Code and the DSM Regulations). Energy computation is post facto thing and is meant for accounting & settlement. Real time operation can't run on the assumption that MSEDCL will not overdraw in future time blocks. It only exposes the poor understanding of MSEDCL on the nature of real time grid operation where a few seconds of indiscipline can lead to a disaster viz. cascaded tripping & grid collapse.

f) MSEDCL has claimed that it has overdrawn beyond 250 MW for 9% of the time (which is ~71 hours!) during the said period (23.06.2018 to 26.07.2018) and OD is 52 MU whereas UD is -128 MU. And thereby, MSEDCL is justifying its action of OD. Pending verification of the figure quoted by MSEDCL, the very reasoning that they are allowed to neutralise their OD energy by under drawing is flawed and can have very serious repercussions on grid reliability.

g) WRLDC has quoted NLDC emails received during the said period only to highlight gravity of the situation. On one hand, NLDC was advising to maximise generation at all existing/ running units whereas MSEDCL was forcing to withdraw two 660 MW ISGS units under RSD. Under such scenario based on the prevailing grid conditions, WRLDC decided to keep the two units on bar and whenever required provided technical minimum schedule as per the RSD Procedure.



h) The Petitioner is trying to find fault with WRLDC stating that RRAS support could have been given instead of suo-moto scheduling. In the rejoinder, MSEDCL has quoted NLDC email of 20th May 2019, wherein NLDC had asked for taking a unit at Solapur STPS on bar wherein Technical Minimum support would be ensured through RRAS and un-requisitioned surplus (URS) power would be scheduled to the overdrawing entities on suo-moto basis. RRAS is one of the options available with NLDC and not the only option as claimed by MSEDCL. It is left to the wisdom of system operators at RLDCs/ NLDC to decide a course of action based on the actual scenario. What NLDC had done at a particular situation in May 2019, can't be extrapolated back to all past situations (viz. June-July 2018) to undo an action done in the past. In real time, RLDC takes action as per its best assessment of the situation and the grid users have to comply to such directions/ decisions of RLDC in the interest of secure grid operation. With a flawed post facto assessment by MSEDCL and citing a reference to what was done by NLDC in May 2019, the disciplinary action taken by WRLDC on MSEDCL in June-July 2018 can't be undone/ questioned. MSEDCL has further submitted that if in April-May 2019 even after overdrawing from the grid, WRLDC did not go for suo-moto scheduling, then why not the same was done last year. This only exposes the lopsided poor understanding of real time operation by the Petitioner. As already stated, every time action is taken by RLDC after a holistic assessment of multiple factors in real time. OD is one of the factors. And such comparing of RLDC action of April 2019 with what could have been done in June-July 2018 conditions is baseless and flawed.

i) In addition to keeping these two thermal units on bar, WRLDC kept taking many other actions like regular interactions with MSLDC to bring down the overdrawals and whenever the results were not coming then suo-motu scheduling of power (as and when available) in other Central Sector Power Stations viz. NTPC Gandhar was taken recourse to, so that grid security is not compromised.

j) MSEDCL being a regional entity can't shy away from its responsibility of containing OD (as per IEGC 5.4.2) under the plea that SLDC did not take action, no forecasting in state, gap between inter-State and intra-State regulations etc. While the issues flagged by MSEDCL are internal and need to



be verified from SLDC, WRLDC cannot make the grid a prisoner of the inherent inefficiencies and poor forecasting infrastructure of MSEDCL and allow indiscipline by such a large State in the Western Region. No regulation provides that if SLDC does not take action or is unable to control OD due to poor forecasting, RLDC should let the State/ Discom overdraw beyond the allowed limit and wait for SERC to implement regulations.

k) The Petitioner has erroneously referred to Regulation 6.4 of the Grid Code. This only indicates their lack of understanding of the Grid Code and the commercial settlement mechanism in place at regional level. They have alluded that since regional entities like BARC, Dhariwal, GMR Warora, HVDC Bhadrawati despite being located inside Maharashtra are themselves (and not MSEDCL) responsible for containing their deviation, other entities like TPCL, BEST etc. within Maharashtra should be held accountable and that MSEDCL is not responsible for OD for the entire state of Maharashtra. WRLDC computes drawal schedule of Maharashtra based on requisition received from SLDC Maharashtra.

l) The instant petition is liable to be rejected at the threshold since it suffers from non-joinder of a necessary party namely Maharashtra State Load Despatch Centre (MSLDC). MSLDC is apex body constituted under Section 32 of the Electricity Act, 2003 responsible for integrated operation of the power system in the State of Maharashtra. MSLDC is responsible for optimum scheduling and despatch of electricity within Maharashtra and is also mandated under Regulation 2.7.2 of the Grid Code to comply with the directions of the Regional Load Despatch Centre. Since all the interactions between WRLDC and the Petitioner had taken place via MSLDC, the Petitioner ought to have made MSLDC a party in the instant petition.

m) Further, on many occasions, during transmission constraints, the necessary generation regulation at the upstream and downstream of the congested network to ensure grid security could not be implemented by SLDC Maharashtra due to non-cooperation from LM Cell, since they did not allow re-scheduling of the identified state generating stations and ISGS plants as advised by SLDC. For example, on 19.04.2020, two 400 kV lines in Maharashtra [viz. Chandrapur-Parli circuit-3 & Chandrapur-Nanded circuit-2]



tripped, reportedly due to tower collapse at location no. 59, 60 & 61 and tower damage at location number 58, causing a sharp rise in line loading on the 400 kV Parli (PG) - Parli(M) D/C to more than 600 MW per circuit. In view of such critical line loading, SLDC Kalwa was advised by WRLDC to revive generating units at Parli thermal power station which were out on reserve shut down. However, LM Cell did not agree to schedule the same and the Parli units could not be revived. Subsequently, as an alternative measure, one 765 kV line and one 400 kV line had to be kept out of service by WRLDC in order to bring down the loading on 400 kV Parli (PGCIL)-Parli (Maharashtra) circuits to safe operational limits.

n) The Petitioner considered overdrawn from the Grid as a matter of right and had openly admitted on side-lines of various meetings of WRPC that DSM rates were cheaper than DAM-PX price. Further, they had the audacity to admit that DSM is more convenient to them compared to bidding in the power exchanges (PX) since they did not have to bear the hassles of paying advance Margin Money unlike the case of purchasing power from the PX. Such flawed understanding & undisciplined behaviour of the Petitioner can be seen from their pay-out amount to regional DSM pool during the FY 2017-18 & 2018-19. This clearly illustrates their deliberate & gross violation of DSM regulations with least regards for grid security.

Financial Year	Amount Payable to WR DSM pool by MSEDCL (in Rs. Crore)
2017-18	142.64
2018-19	132.56

o) By not paying NTPC the billed amount and withholding 5% from the scheduled energy (MUs) as issued in Regional Energy Accounting (REA) issued by WRPC Secretariat, the LM cell Kalwa of the Petitioner has made the entire regional settlement system a hostage of their audacity & high-handedness. Their alleged dispute was with respect to an action of WRLDC and NTPC was in no way responsible for the same. However, by such coercive tactics of MSEDCL, the cash flow of NTPC got affected. Now even if they have to pay it, there is no other choice but to pay with delayed payment interest. Hence, such misadventures by LM cell Kalwa is adversely affecting the power purchase cost of Maharashtra and directly impacting around 27 million customers of MSEDCL.



p) On one hand, CERC, through mechanisms like SCED, is trying to bring down the per unit purchase cost of power, such poor understanding of the subject by a few officers of LM Cell Kalwa, is pushing up the cost of power for 27 million consumers of MSEDCL. An exercise was done by WRLDC and it was seen that in the month of March 2020, due to excessive under-drawal beyond the DSM volume cap (250 MW), LM Cell Kalwa lost to the tune of Rs. 2.74 Crore. Similarly, during the same period, on account of under-drawing at grid frequency above 50.1 Hz, they paid a penalty of Rs. 48.9 lakhs as additional DSM charges. For all such under-drawals beyond DSM limits, they must have paid the scheduled energy charges to the respective generators. If a detailed analysis is done for a financial year, the financial loss figure will run into hundreds of crores on account of poor load management by LM cell Kalwa with their flawed understanding. These potential savings are like low hanging fruits and can be easily realized with a better understanding of the extant DSM mechanism and various regulations of this Commission. Unfortunately, with their blurred knowledge, the concerned officers working in the LM cell of the Petitioner have been directly affecting the power purchase cost in Maharashtra.

q) The LM Cell of the Petitioner under the guidance of few officers with blurred interpretation of Regulations are invariably taking advantage of their lion's share in most of the ISGS in WR and under-requisitioned thereby allowing the generator to be taken out under reserve shut down (RSD) thereby depriving the other smaller beneficiaries of their entitlement from those stations. Under such scenarios, sometimes NLDC used to exercise prudence and based on assessment of grid at national level used to despatch such generators under RRAS. In the process, many of WR ISGS could not get the technical schedule on several time blocks as pointed out by NTPC in their written submission dated 27.06.2020. LM cell of MSEDCL by the instant petition has challenged and disputed the smoothly running process of keeping ISGS units on bar at technical minimum generation for better system operation by suo-moto rescheduling by WRLDC among all beneficiaries as and when the grid conditions so demanded.

r) Since the Petitioner has a major share in most of the ISGS (viz. Mouda STPS-I, Solapur STPS etc.), LM Cell's blurred vision and flawed approach is not only compromising Grid Security, but it has also been making other smaller



constituents (like DNH/DD/GOA) suffer the economic brunt due to unexpected RSD of the ISGS thereby forcing them to purchase power at higher cost from PXs while continuing to pay fixed charges to ISGS under RSD. The minutes of 81st CCM highlights similar concerns expressed by the representative of Dadra Nagar Haveli. A recent e-mail received from SLDC-DNH further highlights this issue.

8. NTPC, Respondent No.2 in its written submission dated 27.6.2020, mainly submitted as under:

a) The RSD Procedure provides that in case scheduled injection is less than technical minimum, RLDC(s) shall review the anticipated demand pattern based on the demand forecast and grid conditions to decide on the requirement of providing technical minimum schedule to the generating station. Further, clause 5.7 of the RSD Procedure provides that RLDC shall suo-moto revise the schedule of any generating station as per Clauses 6.5.14 and 6.5.20 of the Grid Code to operate at or above technical minimum to maintain reserves on regional or all India basis, extreme variation in weather conditions, network congestion etc. in the interest of smooth system operation. If the scheduled injection is still less than technical minimum, RLDC shall review the anticipated demand pattern based on the demand forecast and grid conditions to decide on the requirement of providing technical minimum schedule to the generating station. Therefore, RLDCs are empowered to exercise their power under the Regulations and Orders independently for scheduling & despatch, minimum & maximum generation levels as well as revision of schedules on its own in the interest of stable system operation on sustained basis.

b) The reasonable scheduling of ISGS/CGS is to be ensured by the respective RLDC. However, it is being observed that after filing of the instant petition, ISGS are not getting reasonable aggregate scheduling on many of the instances. The operation of the coal-based generating unit becomes quite difficult when they are scheduled below technical minimum in many of the blocks intermittently or at a stretch during the day (i.e. out of 96 blocks). During past months, many of Western region generating stations have been scheduled below technical minimum (TM), e.g. various stages of Vindhyachal STPS have been scheduled less than TM varying from 2 blocks to 56 blocks on certain days



during March 2020. Similarly, Lara STPS was scheduled below technical minimum from 4 to 48 blocks in a day. Same is the scenario with Mauda STPS-I and II also.

c) That such uneven scheduling not only brings operational difficulties due to cyclic loading but also attracts additional cost to the system. On account of aggregate scheduling below Technical Minimum for intermediate blocks during the day, the generator is compelled to operate on or above technical minimum in these blocks by over-injecting into the grid, primarily due to safety and flame stability concerns in boiler. As a consequence, these stations may compromise on grid security by over generating and also bear additional financial implication on account of DSM.

d) Even though as per provisions of the Grid Code, the generator has the option to take the unit under Reserve Shut down, but the option of taking these units under RSD is not a practical solution, as frequent and repeated shutdown and start-ups due to RSD impacts the life and reliability of the machine adversely. Moreover, if these Units take RSD and generation from these units is not available during the peak hours, the beneficiaries would have to source power from stations next higher in the merit order which would increase their power purchase cost. In addition, there would be liability on them to pay for start-up oil compensation when these units re-start. If generator is not getting the reasonable scheduling for operating the units, it is neither in the interest of grid security nor for beneficiaries and generator. Therefore, reasonable scheduling of the generator in such cases should be taken care of by the system operator (WRLDC in this case) for 'economic and efficient' operation of the system.

e) In view of the aforementioned difficulty being faced by the generator, the Commission may direct WRLDC to take due cognizance of reasonableness of schedule generation (SG) of generating station(s) while finalizing the aggregate schedule, ensuring the grid stability including the technical rationale behind the operation of generating unit(s) as well as the commercial settlement of energy in line with the established regulatory provisions/ mechanism laid down by this Commission.



9. The Petitioner in its written submission dated 27.6.2020, has mainly reiterated its earlier submissions. It has additionally submitted as under:

a) In respect of Solapur STPS, total requisition from all beneficiaries on day ahead basis was less than technical minimum for almost 96.5% of time and in respect of Mouda STPS-I, it was 77.3% of time from 23.06.2018 to 26.07.2018. However, in spite of having low demand trend in Western region and total requisition of power from all beneficiaries in day ahead requisition being less than technical minimum on almost every day, WRLDC did not take decision as per clause 5.6 of the RSD Procedure to withdraw unit under RSD. Thus, there was no requirement by WRLDC for scheduling Solapur STPS, Mouda STPS-I and Gandhar RLNG units even during 23.06.2018 to 27.07.2018.

b) With regard to submission of WRLDC that Petitioner's representative in 80th CCM accepted that there was no violation of the RSD Procedure, it is submitted that WRPC in its MoM of 81st CCM has circulated deliberation of 80th CCM on the issue of suo-moto scheduling of power from Solapur STPS and Mouda STPS-I. The Petitioner's representative informed Member Secretary, WRPC about recording of wrong interpretation of MSEDCL's submission during meeting. It was discussed that after 37th WRPC meeting held on 17.12.2018, in case any unit's schedule goes below Technical Minimum, WRLDC should confirm the schedule and requisition of all beneficiaries. Further, whenever any RSD unit is to be taken on bar, consent of all beneficiaries should be taken by WRLDC and if RSD unit is required to be taken on bar for Regional/ National perspective, then Technical Minimum Support is given under RRAS mechanism by WRLDC and NLDC. Pursuant to the objection raised by Petitioner to draft MoM of 80th CCM in 82nd CCM meeting held on 13th Nov 2019, Committee accepted MSEDCL's submission.

c) That technical minimum issue faced by NTPC is not because of MSEDCL. On the contrary, in real time operation, whenever NTPC control room has requested MSEDCL control for technical minimum support to unit/s, whenever possible. MSEDCL has extended its support by even scheduling power above 55% of own share during back down period. Although NTPC has pointed out Technical Minimum issue being faced by its stations but not



highlighted the beneficiaries who used to schedule power less than 55% of own on bar entitlement in real time operation and who are responsible for total schedule from station being less than technical minimum. Issue raised by NTPC is beyond the scope of the Petition and deserves no consideration.

Analysis and Decision

10. The Respondent WRLDC has raised a preliminary issue as regards non-impleading of Maharashtra SLDC as party to the Petition and has submitted that, as a consequence the Petition suffers from non-joinder of parties. It has submitted that SLDC is apex body constituted under Section 32 of the Electricity Act, 2003 responsible for integrated operation of the power system in the State of Maharashtra. SLDC is responsible for optimum scheduling and despatch of electricity within Maharashtra and is also mandated under Regulation 2.7.2 of the Grid Code to comply with the directions of the Regional Load Despatch Centre. Since all the interactions between WRLDC and the Petitioner had taken place via Maharashtra SLDC, the Petitioner ought to have made Maharashtra SLDC as a party in the instant petition.

11. We observe that in the matter of Udit Narayan Malpaharia Vs. Board of Revenue [AIR 1963 SC 786], the Hon'ble Supreme Court has explained the concepts of necessary party and proper party to a proceeding as under:

“7. To answer the question raised, it would be convenient at the outset to ascertain, who are necessary and proper parties in a proceeding. The law on the subject is well settled: It is enough if we state the principle. A necessary party is one without whom no order can be made effectively; a proper party is one in whose absence an effective order can be made but whose presence is necessary for a complete and final decisions on the questions involved in the proceedings.”

12. The issue raised by the Petitioner is against WRLDC as regards suo-moto scheduling of Solapur STPS, Mouda STPS-I and Gandhar RLNG station despite these stations having schedules below technical minimum during the period from 23.06.2018 to 26.07.2018. The Petitioner has cited provisions of the RSD Procedure



and the Grid Code that authorise RLDCs to keep a unit on bar and submitted that decision of WRLDC was not as per those provisions. In the instant case, the units that are subject matter of this petition were not taken under RSD despite low schedules and were given suo-motu scheduling by WRLDC. These generating stations are regional entities and are under control area of RLDCs. Merely because of the fact that instructions of WRLDC were conveyed to the Petitioner via Maharashtra SLDC does not necessitate that it should be made a party to the proceedings. We also note that the Petitioner has made no claims against Maharashtra SLDC. In view of the above, Maharashtra SLDC is neither a necessary party nor a proper party and, therefore, there is no need to implead it for effective adjudication of the matter.

13. WRLDC has also submitted that the issue has been already deliberated in the 37th WRPC meeting as well as 80th & 81st CCM of WRPC and is a well-settled case. It has quoted extract from deliberations during 37th WRPC meeting and stated that the representative of the Petitioner had agreed that there was no violation of the RSD Procedure by WRLDC. The Petitioner has disputed this assertion of the Respondent WRLDC and submitted that minutes wrongly recorded the statement of the representative of the Petitioner. Subsequently, the Petitioner took up the matter with WRPC to correctly record the minutes of the meeting. The minutes were rectified subsequently as stated by the Petitioner. WRLDC has also stated that the Petitioner took up the matter for change of minutes. Having gone through the claims of the parties, it is clear that the matter has not been settled.

14. WRLDC has justified its actions of suo-moto scheduling of the aforesaid generating stations of NTPC also on the plea that the Grid Code requires that all entities including distribution licensees must initiate requisite action in time so as to contain their drawal from the grid within schedule and ensure that there is no over-drawal. It has submitted that in compliance to the Regulation 5.4.2 of the Grid code,



WRLDC regularly gives warning messages to the overdrawing constituents in western regional (WR) grid. If any entity (including the Petitioner) at any point of time fails to comply with provisions of the Grid code including the above referred regulations, WRLDC is mandated to initiate necessary action in the interest of better system operation as stipulated in the Grid code & other regulations of this Commission. As regards claims of WRLDC that the Petitioner has consistently violated the provisions of the Grid Code and the DSM Regulations, we note that no such petition has been filed by WRLDC in this regard.

15. WRLDC has also submitted that the real time grid operation is carried out based on telemetered data available in real time SCADA system of RLDC and not on the basis of energy meter data which are received by RLDC once in a week. If the system operator in the real time operation starts listening to the arguments of grid users that there is some error in meter data vs SCADA data, because of which the said user can't be held accountable for its over-drawal, then the entire process of real time grid management may collapse. However, in our view this argument is not relevant in the present context, as taking a unit under RSD or continue to schedule it is not a real-time operation.

16. We also observe that there are several submissions and counter-submissions wherein parties have made allegations and counter-allegations and levelled charges against each other, which are beyond the subject matter of the petition and, hence, are not being dealt with.

17. We have considered the submissions of the Petitioner and Respondents, and perused the detailed data submitted in support of those submissions. Accordingly, the following Issues emerge for analysis and decision:



Issue No.1: Whether the Petitioner (MSEDCL), during the disputed period of 23rd June 2018 to 26th July 2018, was consistently overdrawing and whether the suo-moto scheduling of power done by Respondent No.1 (WRLDC) to the Petitioner (MSEDCL) during the said period was in the interest of Grid security as claimed by the Respondent No.1?

Issue No.2: What should be the treatment of such suo-moto scheduled power during the disputed period in the context of overall facts of the case?

Issue No.3: Whether the financial loss suffered as claimed by the Petitioner on account of the suo-moto scheduling by Respondent No.1 (WRLDC) during the disputed period is required to be compensated?

Issue No.4: Whether there is any case for initiating action under section 142 and 149 of the Electricity Act 2003 against errant officer of WRLDC?

We now proceed to analyse each of the above issues, as below.

Issue No. 1: Whether the Petitioner (MSEDCL), during the disputed period of 23rd June 2018 to 26th July 2018, was consistently overdrawing and whether the suo-moto scheduling of power done by Respondent No.1 (WRLDC) to the Petitioner (MSEDCL) during the said period was in the interest of Grid security as claimed by the Respondent No.1?

18. Respondent No.1 (WRLDC) has contended that the Petitioner has been habitually resorting to over-drawal from the grid and has even resorted to consistent and wilful over-drawal during the disputed period of 23.06.2018 to 26.07.2018, thereby endangering the safety and security of WR and National Grid. Hence, WRLDC was forced to schedule the power on suo-moto basis to protect the Grid from collapsing. Respondent No.1 has referred in its reply, to some instances of over-drawal by the Petitioner, based on the post-facto analysis of energy transactions recorded in SEM. The Respondent No.1 has further contended that despite suo-moto scheduling of power from CGS by WRLDC, there was still significant over-drawal by the Petitioner.

19. On the other hand, the Petitioner has denied this charge of Respondent No.1 and has stated that it was not overdrawing in that period as claimed and rather was under-drawing to a large extent, owing to the fall in demand due to arrival of monsoon. The Petitioner has also stressed that it was having sufficient margins in on-



bar units, surplus reserves at all times and has taken all the timely control actions to bring the short inadvertent over-drawals, if any, into permissible limits within 2-3 time blocks, whenever such over-drawals happened because of unforeseen outages and RE volatility etc. The Petitioner has also submitted Real Time SCADA Data, as available to it for control during the disputed period, to support its arguments.

20. In view of the submissions of the Petitioner and the respondents, it is relevant to analyse the energy over-drawn and energy under-drawn by the Petitioner in the WR during the disputed period. Both the Petitioner and the Respondent No.1 have submitted a plethora of data of block-wise energy scheduled, energy over-drawn and energy under-drawn during the period of dispute in support of their respective submissions. We have gone through all the data submitted by the parties and analysed the same. However, since the key question in the present petition is whether there was consistent energy over-drawal by the Petitioner during the disputed period, we have in this order brought out only that data which assist answer the said question. Based on the time block-wise SCADA data submitted by the Petitioner for the disputed period of 23.06.2018 to 26.07.2018 (approximately 34 days, which is 815.5 hours or 3262 numbers of 15-minute time blocks), the following facts emerge:

- (a) Total over-drawn energy during disputed period was 52.50 MU, while under-drawn energy during same period was 128.28 MU.
- (b) 61.9% of the disputed suo-moto scheduled energy (i.e. 84.84 MU out of total disputed energy of 137.04 MU) was scheduled while the Petitioner was under-drawing in 52.6 % of the disputed time blocks (1717 time blocks).



- (c) Only 10.2% of the disputed suo-moto scheduled energy (i.e. 14.01 MU) was scheduled while the Petitioner was over-drawing in 8.3% of the disputed time blocks (270 time blocks).
- (d) Only 10.7% of the disputed suo-moto scheduled energy (i.e. 14.71 MU) was scheduled to the Petitioner during Peak hours of disputed period, whereas 89.3% of disputed suo-moto scheduled energy (i.e. 122.95 MU) was scheduled during Off-Peak hours of disputed period.
- (e) During the disputed period, the Petitioner was having on an average a margin of 1763 MW in Koyna Hydro Plant, backed down surplus of 1236 MW in on-bar running units (excluding disputed power) and off-bar RSD surplus of 716 MW in intra-State generation.

21. In view of above facts, it emerges that the Petitioner has not resorted to persistent over-drawal from the Regional Grid and the Petitioner had sufficient quantum of on-bar and off-bar surplus capacity as reserves. The Commission, however, would like to reiterate its strong views against any wilful act of over-drawal or under-drawal of power from the grid by any Discom at any point of time.

22. Respondent No.1 (WRLDC) in its reply has referred to provisions of the Grid Code, the RSD Procedure and Orders of the Commission dated 13.10.2015 in Petition No. 11/SM/2015 and dated 22.02.2014 in Petition No. 167/SM/2012 to justify suo-motu scheduling of the generating stations under question.

23. The relevant provisions of the Grid Code and the RSD Procedure and the relevant extracts of the Orders are as under:

- (i) Regulation 6.5.14 of the Grid Code:

“6.5.14 While finalizing the above daily despatch schedules for the ISGS, RLDC shall ensure that the same are operationally reasonable, particularly in terms of ramping-



up/ramping-down rates and the ratio between minimum and maximum generation levels. A ramping rate of upto 200 MW per hour should generally be acceptable for an ISGS and for a regional entity (50 MW in NER), except for hydro-electric generating stations which may be able to ramp up/ramp down at a faster rate”

(ii) Regulation 6.5.20 of the Grid Code:

“20. If, at any point of time, the RLDC observes that there is need for revision of the schedules in the interest of better system operation, it may do so on its own, and in such cases, the revised schedules shall become effective from the 4th time block, counting the time block in which the revised schedule is issued by the RLDC to be the first one.”

(iii) Clause 5.7 of the RSD Procedure:

“5.7. RLDC shall suo-moto revise the schedule of any generating station as per clauses 6.5.14 and 6.5.20 of the Grid code to operate at or above technical minimum in the ratio of under-requisitioned quantum (with respect to technical minimum) in the interest of smooth system operation under the following conditions:

- (i) Extreme variation in Weather Conditions;*
- (ii) High Load Forecast;*
- (iii) To maintain reserves on regional or all India basis;*
- (iv) Network Congestion;*
- (v) Any other event which in the opinion of RLDC/NLDC shall affect the grid security.*

*While doing so, it is possible that the requisition of some beneficiaries may go up to ensure technical minimum. In this case, SLDCs may surrender power from some other inter-State generating station(s) or intra-State generating station(s) based on merit order. The concerned RLDC shall **issue R-1 schedule** accordingly and this shall be intimated to the concerned generating station, through the scheduling process.”*

(iii) Order dated 13.10.2015 in Petition No. 11/SM/2015:

“11. The Commission would like to underscore that grid does not generate electricity and as such cannot be relied upon for meeting energy needs. Reserves and reserves alone can address this and the earlier the stakeholders realise this, the better it is for safe and secure system operation. Reserves assume greater significance additionally in the wake of the goal of integration of large scale variable renewable energy sources. With increasing penetration of variable and intermittent RE generation, flexible generation such as pumped storage hydro plants are needed. There is a need for more flexibility in the operation of conventional generation plants also”

(iv) Order dated 22.02.2014 in Petition No. 167/SM/2012:

“The system operator is given a mandate for economic, efficient and secure operation. While the economic and efficient operation is to be considered at day ahead operational planning in real time system operation and contingency, secure operation takes precedence over all other considerations...”

24. Respondent No.1 (WRLDC) has stated that NLDC had instructed WRLDC in that period to maximise generation in view of the prevailing low frequency and rising



demand. It has quoted email communications from NLDC during 20th June 2018 & 07th July 2018 regarding the same in support of its decision for suo-moto unit commitment and scheduling of power.

25. The content of one such email dated 20th June 2018 is reproduced below:

“---- in continuation to earlier mail regarding maximization of available ISGS generation, considering rise in all India demand and continuous low frequency grid operation, all RLDCs are further requested to continue the standing instructions for maximization of available ISGS generation including available RLNG based generation (but excluding LF based) throughout the day till 2400Hrs upto the level of DC on bar under RRAS.”

26. On close perusal of the above said email message from NLDC, it is observed that each of the NLDC Shift-in-Charge, in separate email per shift, had requested all RLDCs to maximise ISGS generation of available-on-bar up to the level of DC under RRAS and only up to a specified hour of that day (mostly up to the end of shift or the end of day). Further, NLDC messages specified that in case of surrender of ISGS share by any constituent, such available margin may also be dispatched under RRAS.

27. WRLDC has stated main reasons for suo-motu scheduling as generation outage on coal shortage in the region and at national level, shares of other beneficiaries (where there was no rainfall) in the Central Generating Stations and over-drawal from the grid by Maharashtra. WRLDC has also quoted communications of NLDC during 20-22 June 2018 & 06-07 July 2018 to maximise generation. WRLDC has stated that in the interest of better system operation, a collective decision was taken by NLDC and WRLDC to keep the units at Solapur and Mouda-I running on bar at technical minimum as and when necessary in line with RSD procedure.

28. We observe that clause 5.7 of the RSD Procedure allows RLDC to operate the generating unit at or above technical minimum in the interest of smooth system



operation under the specified conditions and clause 6.5.20 of the Grid code allows RLDC to suo-moto revise the schedule of any generating station without the consent of the beneficiaries. However, we are of the view that that such authorisation has to be exercised in a most responsible and judicious manner.

29. We observe that the system operator has been empowered under Clause 5.7 of the RSD Procedure to keep units on bar in the interest of smooth system operation. However, WRLDC has not placed on record generation and load forecasts of the Western region to substantiate its claim of “smooth system operation” and has not documented reasons for such suo-moto scheduling of Solapur and Mouda -1 units during the disputed period. WRLDC has also not brought on record any communications between WRLDC and MSLDC/MSEDCL for keeping the units on technical minimum during the disputed period other than over-drawal messages. In the present case, Respondent No.1 (WRLDC) has apparently acted in haste as per its own flawed understanding and interpretation of regulatory/procedural provisions regarding smooth system operation, which is not supported by adequate justification. WRLDC has also not clarified under which sub-clause of Clause 5.7 of the RSD Procedures, suo-moto scheduling was resorted to. Ideally, such decisions involving commercial implications should have been documented with logs of data for future reference and as aid to future decision makings in similar situations. We are of the view that WRLDC should have acted in a more judicious and responsible manner in exercising powers under clause 5.7 of the RSD Procedure and clause 6.5.20 of the Grid code.

Issue No. 2: What should be the treatment of such suo-moto scheduled power during the disputed period in the context of overall facts of the case?

30. We now examine the issue of what should be the treatment of such suo-moto scheduled power.



31. The Petitioner has contended that, if decision to keep unit of Solapur STPS and Mouda STPS-I was taken by WRLDC as per email from NLDC, then reserve requirement was for grid. Under such circumstances, the power from these generating stations was expected to be used by RLDC for RRAS.

32. WRLDC has submitted one of the reasons for suo-motu scheduling as email communication from NLDC which provides for scheduling under RRAS, whereas if the units were scheduled under RRAS, there was no need of suo-motu scheduling to the petitioner.

33. We observe from the submissions of WRLDC that it kept units on bar keeping in view coal shortage scenario, and that other beneficiaries who had shares in generating stations under dispute wanted the units to be on bar. WRLDC has submitted that it kept units on bar in view of better system operation. We observe that none of these reasons can be treated as triggering criteria for dispatch of RRAS under Regulation 6.5 of RRAS Regulations. Hence, we do not agree with contentions of the Petitioner that scheduling of impugned stations should be treated as being for maintaining reserves under RRS Regulations.

34. Clause 5.7 of RSD Procedure empowers RLDC to suo-motu schedule power as per clauses 6.5.14 and 6.5.20 of the Grid code in the interest of smooth system operation. Sub-clause (iii) of Clause 5.7 of the RSD Procedure provides one of the conditions as “to maintain reserves on regional or all India basis”. We have already observed that WRLDC exercised its powers as per its own understanding and interpretation and assessment of situation of the grid without support of adequate justification.



35. We observe that Respondent No. 2 (NTPC) has delivered the suo-motu scheduled power to all constituents of Western region including the petitioner. The power scheduled has already been availed by the constituents. Since the scheduling was known on day ahead basis to the petitioner and other WR constituents, they have already taken real time decisions based on such schedule.

36. We observe that WRLDC gave suo-motu schedule from the stations of Solapur and Mouda from 23.6.2018 to 26.7.2018. Such schedule was given on daily basis. During this period, after WRLDC released the day ahead schedule, no communication is on the record from the Petitioner to WRLDC (through email or letter or otherwise) to substantiate that it did not want such power. It is only after availing the scheduled power, the Petitioner has raised the issue of Suo-Motu scheduling.

37. Therefore, in view of the fact that power as scheduled has been availed the Petitioner, it is to be treated as power scheduled to it and delivered by Respondent No. 2 NTPC.

Issue No. 3: Whether the financial loss suffered as claimed by the Petitioner on account of the suo-moto scheduling by Respondent No.1 (WRLDC) during the disputed period is required to be compensated?

38. The Petitioner (MSEDCL) has submitted that it has suffered a loss of Rs 53.19 crore on account of suo-moto unit commitment and scheduling of power by Respondent No.1 (WRLDC) during disputed period as given below:



Name of Station	Energy Scheduled in June 2018			Energy Scheduled in July 2018		
	23 rd June to 30 th June 2018	Energy Rate	Amount	1 st July to 26 th July 2018	Energy Rate	Amount
	MU	Rs./kWh	Rs. Crore	MU	Rs./kWh	Rs. Crore
Solapur STPS	17.94	3.84	6.89	59.01	4.55	26.85
Mouda STPS-I	12.18	2.91	3.55	46.69	3.1	14.48
Gandhar RLNG	0	7.31	0	1.84	7.7	1.42
Total	30.12		10.44	107.54		42.75
Total Disputed Bill Amount			Rs 53.19 crore			

39. 95% of this disputed amount pertaining to Solapur STPS and Mouda STPS-I and 100% pertaining to Gandhar RLNG station has been paid by MSEDCL, under protest to Respondent No.2, NTPC and 5% of the amount (pertaining to Solapur STPS and Mouda STPS-I) has been withheld as per provisions of the PPA.

40. The Petitioner has further stated that contracted intra-State generation, with variable cost lower than the above units, had to be backed down and taken to RSD because of WRLDC's suo-moto scheduling, because of which it has suffered an additional cost of Rs. 30 crores as given below:

Sr. No	Station/ Unit	Capacity (MW)	Ex-Bus Declared DC (MW)	Variable Cost as per MoD in Rs. Per Unit	From Date	To Date	Number of Days
1	Parli - 6	250	229	3.08	24-06-2018 18:02	22-07-2018 23:59	28.25
2	Parli – 7	250	229	3.08	25-06-2018 00:00	20-07-2018 12:00	25.50
			229	3.08	23-07-2018 00:00	29-07-2018 11:50	6.49
3	RIPL – 3	270	245	2.95	26-06-2018 00:01	30-07-2018 12:05	34.50
4	Nashik-5	210	167	3.31	12-07-2018 00:00	10-09-2018 03:45	60.16
5	RIPL – 2	270	245	2.95	12-07-2018 00:00	30-07-2018 05:00	18.21
6	RIPL – 5	270	245	2.95	12-07-2018 01:28	31-07-2018 04:12	19.11



41. We are of the view that it is not possible to visualize, post facto, the likely power scheduling scenario in case power had not been suo-motu scheduled from stations of Solapur and Mouda-I during the disputed period. Accordingly, the financial loss assessment as presented by the petitioner cannot be accepted, more so in view of the fact that the operating conditions of the alternate power sources cannot be re-created for any kind of financial impact assessment.

42. For example, the argument of the Petitioner that the total variable cost of suo-moto scheduled power is the financial loss is not correct in entirety. The Petitioner would have any way incurred/paid some variable cost for meeting its demand corresponding to the suo-moto scheduled power, had such suo-moto scheduling not occurred, as it would have arranged the power from other available sources as per Petitioner's merit order stack during the disputed period.

43. In light of discussions in foregoing paragraphs, and in view of the fact that power as suo-moto scheduled has been availed by the Petitioner, it is liable to make payment of charges for the power scheduled to it and delivered by Respondent No. 2 NTPC.

Issue No. 4: Whether there is any case for initiating action under Section 142 and Section 149 of the Electricity Act 2003 against errant officer of WRLDC?

44. The Petitioner has, inter alia, prayed

“d) To initiate action under section 142 and 149 of Electricity act 2003 against errant officer of WRLDC”.

45. In this regard, the provisions of the Act are reproduced below:

Section 142. (Punishment for non-compliance of directions by Appropriate Commission):

In case any complaint is filed before the Appropriate Commission by any person or if that Commission is satisfied that any person has contravened any of the provisions of this Act or the rules or regulations made thereunder, or any direction issued by the Commission, the Appropriate Commission may after giving such person an opportunity of being heard in the matter, by order in writing, direct that,



without prejudice to any other penalty to which he may be liable under this Act, such person shall pay, by way of penalty, which shall not exceed one lakh rupees for each contravention and in case of a continuing failure with an additional penalty which may extend to six thousand rupees for every day during which the failure continues after contravention of the first such direction.

Section 149. (Offences by companies):

(1) Where an offence under this Act has been committed by a company, every person who at the time the offence was committed was in charge of and was responsible to the company for the conduct of the business of the company, as well as the company shall be deemed to be guilty of having committed the offence and shall be liable to be proceeded against and punished accordingly:

Provided that nothing contained in this sub-section shall render any such person liable to any punishment if he proves that the offence was committed without his knowledge or that he had exercised all due diligence to prevent the commission of such offence.

(2) Notwithstanding anything contained in sub-section (1), where an offence under this Act has been committed by a company and it is proved that the offence has been committed with the consent or connivance of or is attributable to any neglect on the part of any director, manager, secretary or other officer of the company, such director, manager, secretary or other officer shall also be deemed to be guilty of having committed such offence and shall be liable to be proceeded against and punished accordingly.

Explanation. - For the purposes of this section,-

(a) "company" means a body corporate and includes a firm or other association of individuals; and

(b) "director", in relation to a firm, means a partner in the firm.

46. We have held that the actions of Respondent No.1 (WRLDC) were not covered under provisions of the RSD procedure or any of earlier orders of the Commission. We have observed that WRLDC has not clarified under which sub-clause of Clause 5.7 of the RSD Procedures, the suo-moto scheduling was resorted to and neither has supported with adequate justification its argument regarding smooth system operation. At the same time, we have observed that the Respondent No.1 (WRLDC) has apparently acted in haste as per its flawed understanding and interpretation of regulatory/procedural provisions. We have also held that WRLDC should have acted in a more judicious and responsible manner in exercising powers under clause 5.7 of the RSD Procedure and clause 6.5.20 of the Grid code.

47. We note that provisions of Section 142 of the Act can be invoked for contravention of provisions of the Act, Rules or Regulations, but the instant case is



not a case of contravention of the Act or any Rules/ Regulations. The matter has arisen, as observed by us, on account of flawed understanding of the regulatory/ procedural provisions of Regulations. We also note that Section 149 of the Act deals with offences as enumerated under the Act, committed by companies. However, none of the actions of the Respondent WRLDC falls under any of the offences enumerated in the Act. Therefore, we are of the view that no case is made out to initiate any action either under Section 142 or Section 149 of the Act.

48. At the same time, we direct WRLDC and other system operators as well to act in a rational, transparent, responsible and judicious manner while exercising their powers under relevant provisions of the Electricity Act, Grid Code and other Regulations/ Procedures laid down by the Commission and also maintain proper logs/ records of consultation with the stakeholders and decisions taken.

49. The Petition No. 60/MP/2019 is disposed of in terms of the above.

Sd/
(Arun Goyal)
Member

Sd/
(I.S. Jha)
Member

Sd/
(P.K. Pujari)
Chairperson

