BEFORE THE MAHARASHTRA ELECTRICITY REGULATORY COMMISSION, MUMBAI

Filling No. Case No.

IN THE MATTER OF

Petition under Section 86 of the Electricity Act, 2003 seeking analysis and examination of the reasons leading to sudden fall in availability of MSEDCL's contracted capacity during September 2017 leading to load shedding and high cost short-term power purchase.

AND

IN THE MATTER OF

Prayas (Energy Group) Unit III A & B, Devgiri, Joshi Railway Museum lane, Kothrud Industrial Area, Kothrud, Pune, MH 411038 INDIA Telephone: 91-20-25420720, 91- 9822517481 E-mail : peg@prayaspune.org ashwini@prayaspune.org	Petitioner
V/s	
Maharashtra State Power Generation Company Itd. Regulatory and Commercial Dept., Prakashgad, 3rd Floor, Plot No. G-9, Bandra (East), Mumbai 400 051 E-mail: <u>rcgen@mahagenco.in</u>	Respondent-1
Maharashtra State Electricity Distribution Co. Limited Plot No G-9, Prakashgad, 5th Floor, Anant Kanekar Marg, Bandra (East), Mumbai - 400 051 E-mail : <u>ceppmsedcl@gmail.com</u>	Respondent-2
Consumer Representatives:-	
Cc: The General Secretary, Thane Belapur Industries Association, Rabale Village, Post Ghansoli, Plot P-14, MIDC, Navi Mumbai 400 701 E-mail: <u>tbia@vsnl.com</u>	
Cc: Mumbai Grahak Panchayat, Grahak Bhavan, Sant Dynaneshwar Marg, Behind Cooper Hospital, Vile Parle (West), Mumbai 400 056 E-mail: <u>mgpanchayat@yahoo.com</u>	
Cc: Vidarbha Industries Association, 1st Floor, Udyog Bhavan, Civil Line, Nagpur 440 001. E-mail: <u>rkengg@gmail.com</u>	

Cc: Maharashtra Chamber of Commerce, Industry & Agriculture, Oricon House, 6th Foor, 12 K. Dubash Marg, Fort, Mumbai - 400001 E-mail: <u>maccia.nsk@gmail.com</u>

The petitioner respectfully submits as under:

- The present petition is filed under the Section 86 (1)(a) & (b) of the Electricity Act 2003 {henceforth referred to as "the 2003 Act"}, to seek examination of the coal procurement planning and practices followed by Maharashtra State Power Generation Company Ltd (MSPGCL) and issues pertaining to lack of availability of generation capacity contracted by Maharashtra State Electricity Distribution Co. Limited (MSEDCL). Coal cost constitutes the most significant component of generation tariff and hence appropriate prudence check is required on claims concerning this cost considering the interest of the consumer at large.
- 2. The petitioner, Prayas (Energy Group), {hereafter referred to as 'Prayas'} is a Pune based non-profit organization working on issues concerning electricity policy and regulation for more than two decades. Prayas is one of the authorised consumer representatives appointed by the Maharashtra Electricity Regulatory Commission (MERC or "the Commission") as per the section 94(3) of the 2003 Act. In its capacity as a consumer representative, Prayas has been actively intervening in various matters concerning tariff and power purchase for more than a decade. Prayas is also a member of the State Advisory Committee, a statutory body constituted by the Commission as per the provisions of the 2003 Act.

Fact of the case

3. While determining the tariff of MSEDCL for the period from FY 2016-17 to FY 2019-20, the MERC in its Multi-Year Tariff (MYT) Order dated 3.11.2016 in Case No. 48 of 2016 ('MYT Order') has noted as follows:

"... the Commission observes that a large quantum of surplus power is expected in the 3rd Control Period. The Table below shows the projected energy availability as against the energy requirement, and the corresponding surplus available which may have to be backing down over some or all of the 3rd Control Period.

estimated by Com	nission				
Particulars	Units	FY 2016-	FY 2017-	FY 2018-	FY 2019-
Purticulars	Units	17	18	19	20
Energy Available	MU	140,985	166,090	168,768	171,683
Energy Procured	MU	115,380	119,533	124,116	129,101
Surplus Energy /	ми	25 605	16 559	11 652	42,582
Backed Down	IVIO	25,605	46,558	44,653	42,582

Table 5-43: Surplus Energy Availability in3rdControl Period, as estimated by Commission

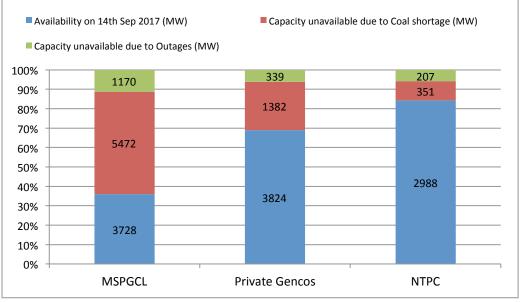
Thus, surplus energy of around 25,000 MU in the first year and increasing up to around 42,000 MU in the last year is likely in the 3rd Control Period. Hence, MSEDCL should explore various options for selling the surplus power through short-term/ medium-term bilateral contracts or through Power Exchanges in an optimal and efficient manner such that the revenue gained can cushion the effective cost of power procurement. Another option might be to provide tariff rebates to certain consumer categories, which would be advantageous to them and also assist higher power demand for meeting additional production and other requirements. The MYT Regulations, 2015 allow such rebates provided there is no discrimination between consumers within any category, and MSEDCL bears the impact of the higher revenue foregone. There may be scenarios in which this may still be beneficial to MSEDCL. Indeed, on the basis of clarifications sought separately, the Commission understands that MSEDCL is considering this option also. In any case, in view of the likely surplus, any future long-term/mediumterm contracting for power procurement during the 3rd Control Period will have to show how it meets the test of actual requirement and optimum cost." (Emphasis added)

Based on these projections regarding surplus capacity and backing down the Commission also introduced an additional supply charge to account for the cost of the excess capacity in the tariff of open access consumers. However, in spite of having so much surplus capacity, MSEDCL has had to resort to load shedding¹. On 18th September 2017, MSEDCL filed a petition (case no 135 of 2017) before the Commission seeking in-principle approval for short-term power purchase at a higher cost than the ceiling rate of Rs. 4 per unit approved by the Commission for such procurement in the MYT Order. The Commission vide its order dated 6th October 2017 in this matter, has approved such high-cost short-term power purchase. The said order is annexed as <u>Annexure 1</u> of the petition.

As recorded in the said order, MSEDCL floated a tender for short-term power purchase on 22.09.2017 for RTC 500 MW and 06:00 to 16:00 hrs for 500 MW from October to December, 2017 on the MSTC DEEP e-bidding portal. The rates discovered in the above tender are in the range of Rs 4.15/kWh to Rs 5.50/kWh. Assuming that MSEDCL procures this power at the indicated rates, it will have to incur an expense of around Rs. 600 Cr for this purpose. The average variable cost of MSPGCL generation, which constitutes around 40% of MSEDCL's total power purchase, is around Rs. 2.80 per unit. Had MSEDCL been able to procure this power from MSPGCL at rates approved by the Commission or even from the capacity that has been backed down for economical reasons at variable cost of say, Rs. 3 to 3.5 per unit, even then it would have saved around Rs.140-230 Cr. In other words, the short-term power procurement allowed under case no 135 of 2017 would impose an additional tariff burden of Rs.140 - 230 Cr on MSEDCL consumers. If the quantum increases or the actual rates at the time of procurement are higher than the projections, then the tariff impact will be higher.

4. The petition filed by MSEDCL in case no 135 of 2017 states that as on 14th September 2017 around 6,600 MW of its contracted capacity was unavailable largely on account of claimed shortage of coal. It is stated that at a meeting held on 13th July 2017, the generators informed MSEDCL that the coal shortage situation would continue for some months. Other than the claimed coal shortage, some units are unavailable on account of outages (both planned and forced). The Figure 1 below shows ownership-wise break of the contracted capacity as reported by MSEDCL in its petition in case no 135 of 2017.

Figure 1: Generation company-wise average availability on 14.9.2017 and reasons for lower availability as reported by MSEDCL in its petition in case no 135 of 2017



Source: Table under para 3.2 of the MERC order in case no 135 of 2017 http://mercindia.org.in/pdf/Order%2058%2042/Order-135%20of%202017-06102017.pdf

The figure shows that more than 60% of MSPGCL's coal based capacity is unavailable in September 2017 and most of it is on account of claimed shortage of coal. It is important to note that the availability reported by NTPC stations is quite high, indicating that all generators are not equally affected by the claimed coal shortage. Out of MSEDCL's total contracted capacity of 33,496 MW, more than one-third belongs to MSPGCL. Further, MSPGCL generation accounts for about 40% of MSEDCL's total power purchase quantum. Given such

¹ News reports from April 2017 <u>http://indianexpress.com/article/india/power-cuts-across-state-leave-consumers-fuming-4667350/</u> and recently from September 2017 <u>http://www.thehindu.com/news/cities/mumbai/rising-heat-coal-shortage-lead-to-power-cuts/article19803729.ece</u>

high dependence on MSPGCL generation, the situation highlighted above paints a grim picture for MSEDCL consumers and necessitates an immediate and thorough assessment of the claims made by MSPGCL. The matter becomes even more serious when one considers the fact that the claims regarding coal shortage made by MSPGCL are contrary to the public statements made by the Ministry of Coal and the data published by Coal India Ltd (CIL) regarding coal production and supply, as has been demonstrated below.

- 5. As per the New Coal Distributions Policy (NCDP) 2007 and the subsequent amendments to it, the generators are entitled to coal supply of at least 65% to 75% (depending on the contract year) of the total annual coal quantum for which the Fuel Supply Agreement (FSA) has been signed. According to the statements issued by the Ministry of Coal, CIL's coal production in September 2017 has been significantly higher (more than 20%) than what it was in September 2016. In this regard, there are several PIB press releases² issued by the Ministry of Coal in the last two months, each emphasising the following:
 - a. The production in September 2017 is much higher than that at the same time last year,
 - b. There is significant pithead stock at CIL mines, implying that generators have not requisitioned this coal, and
 - c. The number of power plants in critical or super critical category of coal stock situation across the country is less than 10, implying that the claimed coal shortage is not a national phenomenon.

The said press releases are annexed as <u>Annexure 2</u>.

6. In May 2016, the Cabinet approved a proposal for allowing flexibility in utilization of domestic coal to power generating stations. This was done with an objective of reducing cost of generation. As per the approval given by the Cabinet, the Central Electricity Authority (CEA) was asked to issue a methodology for the implementation of the said proposal, after undertaking due consultation with all the stakeholders. Accordingly, in June 2016 the CEA issued a methodology for this purpose. The said methodology is annexed as <u>Annexure 3</u>. Amongst other things, the said methodology proposes the following:

2. <u>All the source wise-coal company wise long term coal linkages</u> of individual States (States would include UTs) or Centre owned generating stations <u>to be aggregated and consolidated</u> with respective States / (or State notified agency (to be notified from among the existing power utilities)) or company owning the Central Generating Stations (CGSs), as the case may be, instead of individual Thermal Power Stations, <u>to enable efficient coal utilization amongst end use</u> generating stations.

3. The coal company wise Annual Contracted Quantity (ACQ) of each individual coal linkages (as per Fuel Supply Agreement, FSA) to be aggregated as consolidated ACQ for each State and company owning the Central generating stations as the case may be, instead of individual generating stations. The terms and conditions of coal company wise FSA will be applicable on the aggregate ACQ of State as a whole or Company owning Central generating stations as the case may be. However, the FSAs of IPPs would not be aggregated.

4. <u>The utility-wise (Central Generating Company or State notified</u> <u>agency) supplementary agreement would be signed with the CIL and</u> <u>SCCL.</u>

5. To achieve the objective of reduced energy charges the Generating company / State shall communicate to CIL/SCCL its station wise requirement from different coal sources within the ambit of overall ACQ allotted to the Company/ State. If supply from the identified source is not possible/feasible, CIL/SCCL shall have the flexibility of offering coal supply from its various subsidiaries to facilitate assured level of supply for that State and CGS and for meeting MOEF

² <u>http://pib.nic.in/newsite/pmreleases.aspx?mincode=42</u>

<u>stipulations regarding transportation etc</u>. As far as possible, alternate source of supply of coal of CIL/SCCL shall be of similar landed cost and quality as sought by the Generating company/State.

6. The existing practice of determination of Station-wise energy charges as per applicable Tariff Regulations shall be continued based on station-wise coal accounting with respect to coal quantity, quality and price.

7. The requisition for transfer/supply of coal would be given by the State/Central generating company to the coal companies at least one month in advance from the agreed date of commencement of supply of electricity. The Coal companies will give their consent / response within 15 days from the receipt of requisition, else it will be deemed to be approved. The State notified agency/ Central Gencos having supplementary agreement will be responsible to ensure supply of transferred coal at the generating stations.

8. The Ministry of Railways would be conveyed for transportation of coal at least one month in advance from the agreed date of commencement of supply of electricity by the State notified agency /Central generating company and the Ministry of Railways would convey their approval or otherwise within 15 days from the date of receipt of request. The Ministry of Railways would endeavor to transport coal as per the requirement given by the State notified agency / Central generating company. However, in case there are some constraints in movement of rakes by the Ministry of Railways, an alternative plan would be made by the State/ Central generating company in consultation with the Ministry of Railways. The State notified agency / Central Gencos would ensure overall optimization of the cost while going for alternative plan.

9. To enable utilities identify Stations for transfer of coal, the State/ Central generating company will display information on their respective website and the web portal being developed for this purpose, related to normative fixed and variable charges of electricity for the previous month as well as the margin available for additional generation. ..." (Emphasis added)

From the above policy notification it becomes clear that the state owned generating companies such as MSPGCL, have flexibility in utilising their coal linkages in a manner that would allow them to optimize the overall cost of generation. In fact the explicit aim of the policy is to reduce generation cost by rationalising coal linkages.

7. In case of MSPGCL, out of its total coal based installed capacity of 10,380 MW, about 4,522 MW is supposed to be backed down in FY 17-18³ for economic reasons. As coal supply contracts are of take or pay nature, it is possible that MSPGCL has diverted the coal supply allocated for the backed down plants to its operating stations. Given such flexibility in managing coal supply and possibility of excess coal on account of planned backing down of around 40% of its coal based capacity, it is not clear why MSPGCL is still facing such an acute coal shortage. As the table 1 below shows, MSPGCL has FSAs for annual coal quantum of around 31.5 MTPA, which can support about 8 GW of capacity at generating at 80% Plant load factor. Assuming that MSPGCL receives coal supply that is only half of this quantum, still that should be sufficient to run at least 4000 MW at normative availability. In addition to this, MSPGCL must have signed FSAs with other coal companies as well. Therefore, if MSPGCL has contracts for coal supply of this much quantum it seems untenable that it had to back down more than 60% of its operating capacity on account of coal shortage and hence these claims need a thorough evidence based scrutiny by the Commission.

³ As per the data submitted by MSEDCL in its petition under case no 48 of 2016 – Annexure: 7 Back down details

Subsidiary	Name of Plant	Year in which coal supply started as per FSA	Duration of contract (years)	Quantity of coal contracted in MT (million tonnes) per year	Grade of coal	Capacity in GW supported*
WCL	Bhusawal	2009	19	2.48	G8/G9	0.64
WCL	CSTPS (Chandrapur?)	2009	19	11.89	G8/G9	3.09
WCL	Khaperkheda TPS	2009	19	0.93	G8/G9	0.24
WCL	Koradi TPS	2009	19	0.50	G8/G9	0.13
WCL	Nasik TPS	2009	19	2.35	G8/G9	0.61
WCL	Paras TPS	2009	19	1.48	G8/G9	0.38
WCL	Parli TPS	2009	19	2.39	G8/G9	0.62
WCL	Parli 7, Khaparkheda 5, Paras and Bhusawal	2015	20	4.53	G8/G9/G10	1.18
MCL	Khaparkheda TPP	2009	20	3.07	G10-G13	0.64
MCL	Koradi TPS	2009	20	1.10	G10-G13	0.23
MCL	Khaparkheda TPP	2013	20	0.81	G10-G13	0.17
	Total			31.53		7.95

Table 1: Station-wise Fuel supply agreement details for MSPGCL plants

Source: Replies from coal subsidiaries to RTI applications filed by Prayas

*Capacity supported calculated based on grade-wise coal consumption as specified by CEA assuming 80% PLF http://www.cea.nic.in/reports/others/thermal/tppd/coal_cons_norms.pdf

8. Further, as per the consumer wise coal despatch data available on the government portal "KOYLA GRAHAK SEVA"⁴, there seems to be not much difference in the coal despatched by CIL subsidiaries to various MSPGCL stations for the last three months. The table 2 below shows the monthly coal dispatch data as reported by CIL on the SEVA portal. It is understood that SEVA portal does not have data for SCCL and hence the data shown below is limited to coal supply from CIL. As per this data, the coal supplied by CIL in September 2017 was more than that in August 2017. If indeed the September coal supply situation is to be believed as "critical", then it becomes apparent that MSPGCL should have raised alarm bells in July or August 2017. However, it is not clear what actions MSPGCL has been taking in this regard since July 2017 and why has the crisis persisted if appropriate actions were initiated at the right time.

		Coal despatch in Million Tonnes										
Month	Bhusawal	Chandrapur	Khaperkheda	Koradih	Nasik	Paras	Parali	MSPGCL Total				
Jul-17	0.12	0.93	0.27	0.51	0.17	0.22	0.00	2.21				
Aug-17	0.12	0.96	0.16	0.58	0.09	0.12	0.01	2.04				
Sep-17	0.42	0.74	0.18	0.43	0.11	0.17	0.15	2.21				
Source: ht	tp://elib.cmpd	li.co.in/SEVA/pa	ges/minewisepage	s/consumerV	Visedes.php?	cust=MAH	AGENCO					

Table 2. Coal	desnatch as r	enorted by CIL	. on SEVA portal
	acopaten as i	cported by cit	. on seve portat

9. Similarly, the monthly production reports of the CIL subsidiaries, WCL, MCL and SECL, which supply most of the coal for MSPGCL stations, show that the coal production has largely been as per the target. The table 3 below shows subsidiary-wise monthly production and off-take from April 2017 to September 2017. Report for August 2017 is not available, hence the data for that month is calculated based on July and September cumulative data. Copies of the said CIL reports are attached as Annexure 4. It is noteworthy that for all these months, the off-take targets are higher than the production targets, implying significant pithead stock was available through out this period. This is also corroborated by the PIB press releases issued by Ministry of Coal mentioned earlier. All this data points to the fact that coal was available and there is at least no apparent shortfall in coal production.

⁴ http://elib.cmpdi.co.in/SEVA/index.php

Subsidiaries		WCL	WCL	MCL	MCL	SECL	SECL
Subsidiaries		Production	Off-take	Production	Off-take	Production	Off-take
	Target	2.94	3.95	11.68	12.31	10.63	12.22
April 2017	Actual	2.77	3.53	10.28	11.07	10.1	12.44
	% Ach	94%	89%	88%	90%	95%	102%
	Target	3.11	4.07	11.85	12.68	11.4	12.58
May 2017	Actual	2.74	3.81	10.87	11.16	10.93	12.57
	% Ach	88%	94%	92%	88%	96%	100%
	Target	3.1	3.99	12.88	12.26	11.04	12.16
June 2017	Actual	2.61	3.8	10.7	11.13	10.68	12.57
	% Ach	84%	95%	83%	91%	97%	103%
	Target	1.71	3.7	11	11.14	10.12	10.96
July 2017	Actual	2.05	3.87	10.24	11.09	9.95	11.93
	% Ach	120%	105%	93%	100%	98%	109%
August	Target	2.23	3.31	10.08	11.1	9.91	10.91
2017	Actual	2.32	3.44	9.57	10.19	9.46	11.49
(calculated)	% Ach	104%	104%	95%	92%	95%	105%
Sontomber	Target	2.52	3.29	10.76	10.76	10.6	10.9
September 2017	Actual	2.67	3.64	9.74	10.28	10.13	10.86
2017	% Ach	106%	111%	91%	96%	96%	100%

Table 3: Subsidiary-wise coal production and off-take

Source: CIL Monthly reports. The reports are annexed as Annexure 4.

Note: No report found for Aug'17. The figures in the table for that month are calculated based on aggregate data for other months.

10. The Central Electricity Authority (CEA) maintains daily coal stock position reports on its website⁵. The tables 4, 5, 6 and 7 present station-wise collated summary of these reports for four major stations of MSPGCL, namely, Bhusawal (1420 MW), Chandrapur (2920 MW), Koradi (2400 MW) and Khaperkheda (1320 MW), which account for more than 75% of MSPGCL's coal based thermal capacity. From these tables it can be seen that at the beginning of August 2017 the coal stock position at stations such as Bhusawal and Khaperkheda was quite comfortable with stock being available for more than 30 days. However, as the stocks start depleting towards mid to late August, it is not clear whether MSPGCL was requisitioning additional coal or not. For Koradi, for the entire month, consistently the remarks column states that coal supply from both CIL and SCCL was more than 100% of pro-rata ACQ. For stations such as Chandrapur and Koradi, from 1st August 2017 itself the stock is less than 10 days. However, the station is not identified as "Critical" or "Super critical" in terms of coal stock position. It is the same case with Khaperkheda. For both Chandrapur and Khaperkheda, the days when the actual stock is less than 5 days, the remarks column mentions "Less program submitted by plant" and "Less program submitted for MCL" respectively, which makes it unclear whether MSPGCL was lifting its entire share of coal supply for these plants. Thus, these reports seem to suggest that coal supply was available but perhaps not requisitioned. All the daily coal stock reports for August 2017 are annexed as Annexure 5 of the petition.

		Namatina			Actual Sto	ck			Reasons for critical coal stock/ Remarks
Date	Capacity	Normative Stock	Requirement for the day (In	In '0	00 Tonnes'			Critical(*)/ Super	
Date	(MW)	Reqd. (Days)	'000 Tonnes')	Indigenous	Import	Total	In days	Critical(**)	
1-Aug-17	1420	20	10	293	0	293.09	29		
2-Aug-17	1420	20	10	288	0	288.49	29		
3-Aug-17	1420	20	10	283	0	282.79	28		
4-Aug-17				Data n	ot available	5			
5-Aug-17				Data	or available				
6-Aug-17	1420	20	10	268	0	267.63	27		
7-Aug-17	1420	20	10	263	0	262.95	26		

Table 4: Daily coal stock position as reported by CEA for Bhusawal TPP for August 2017

⁵ <u>http://cea.nic.in/dailycoal.html</u>

8-Aug-17	1420	20	10	258	0	258.41	26						
9-Aug-17	1420	20	10	254	0	253.71	25						
10-Aug-17	1420	20	10	249	0	248.82	25						
11-Aug-17													
12-Aug-17		Data not available											
13-Aug-17	1420	20	10	225	0	224.72	22						
14-Aug-17				Data n	ot available	2		I					
15-Aug-17	1420	20	10	205	0	204.92	20						
16-Aug-17	1420	20	10	195	0	194.77	19						
17-Aug-17	1420	20	10	186	0	185.51	18						
18-Aug-17	1420	20	10	166	0	165.94	17						
19-Aug-17	1420	20	10	155	0	155.29	16						
20-Aug-17	1420	20	10	140	0	139.59	14						
21-Aug-17	1420	20	13	122	0	121.87	9						
22-Aug-17	1420	20	13	115	0	115.23	9						
23-Aug-17	1420	20	13	102	0	101.7	7						
24-Aug-17	1420	20	13	70	0	69.63	7						
25-Aug-17				.									
26-Aug-17				Data n	ot available	2							
27-Aug-17	1420	20	13	41	0	41	3	**	CIL Supply 66% of pro-rata ACQ.				
28-Aug-17	1420	20	13	18	0	18	1	**	CIL Supply 66% of pro-rata ACQ.				
29-Aug-17	1420	20	13	11	0	11	1	**	CIL Supply 66% of pro-rata ACQ.				
30-Aug-17	1420	20	13	48	0	48	4	*	CIL Supply 66% of pro-rata ACQ.				
31-Aug-17	1420	20	14	30	0	30	2	**	CIL Supply 66% of pro-rata ACQ.				

Source: CEA website http://cea.nic.in/dailyarchive.html

Table 4: Daily coal stock position as reported by CEA for Chandrapur TPP for August 2017

		Normati	Requiremen		Actual S			Critic	
Date	Capacity	ve Stock	t for the day	In '0	00 Tonne	es'	In	al(*)/ Super	Reasons for critical coal
	(MW)	Reqd. (Days)	(In '000 Tonnes')	Indigenou s	Imp ort	Total	day s	Critic al(**)	stock/Remarks
1-Aug-17	2920	20	36	216	0	215.67	7		
2-Aug-17	2920	20	32	213	0	212.81	7		
3-Aug-17	2920	20	36	208	0	207.7	6		Less program submitted by plant
4-Aug-17				Dat	a not ava	ulahle			
5-Aug-17				Data		inable			
6-Aug-17	2920	20	36	198	0	197.52	5		Less program submitted by plant
7-Aug-17	2920	20	36	191	0	191.34	5		Less program submitted by plant
8-Aug-17	2920	20	36	186	0	185.81	5		Less program submitted by plant
9-Aug-17	2920	20	36	181	0	180.85	5		Less program submitted by plant
10-Aug-17	2920	20	36	178	0	178.02	5		Less program submitted by plant
11-Aug-17		•	•						•
12-Aug-17				Dat	a not ava	ilable			
13-Aug-17	2920	20	36	179	0	178.62	5		Less program submitted by plant
14-Aug-17				Dat	a not ava	ilable			·
15-Aug-17	2920	20	36	181	0	181.13	5		Less program submitted by plant
16-Aug-17	2920	20	36	170	0	170.04	4		Less program submitted by plant
17-Aug-17	2920	20	36	161	0	160.59	4		Less program submitted by plant
18-Aug-17	2920	20	36	155	0	154.62	4		Less program submitted by plant
19-Aug-17	2920	20	36	151	0	151.43	4		Less program submitted by plant
20-Aug-17	2920	20	36	157	0	156.55	4		Less program submitted by plant
21-Aug-17	2920	20	39	156	0	156.38	4		Less program submitted by plant

22-Aug-17	2920	20	39	161	0	161.45	4	Less program submitted by plant
23-Aug-17	2920	20	39	153	0	153.38	4	Less program submitted by plant
24-Aug-17	2920	20	39	159	0	158.72	4	Less program submitted by plant
25-Aug-17				Date	a not ava	ailable		
26-Aug-17				Data		mable		
27-Aug-17	2920	20	39	173	0	172.91	4	Less program submitted by plant
28-Aug-17	2920	20	39	180	0	180.13	4	Less program submitted by plant
29-Aug-17	2920	20	39	188	0	187.83	5	Less program submitted by plant
30-Aug-17	2920	20	39	190	0	189.53	5	Less program submitted by plant
31-Aug-17	2920	20	27	200	0	200.32	7	

Source: CEA website <u>http://cea.nic.in/dailyarchive.html</u>

Table 6: Daily coal stock position as reported by CEA for Koradi TPP for August 2017

	Ĺ	Normat	Boquiromon		Actual	Stock		Critic	
	Capacit	ive	Requiremen t for the day	In '	000 Tonn	es'		al(*)/	Reasons for critical coal
Date	y (MW)	Stock Reqd. (Days)	(In '000 Tonnes')	Indigen ous	lmpor t	Total	In days	Super Critic al (**)	stock/Remarks
1-Aug-17	2400	25	19	117	0	116.81	6		CIL Supply 158% and SCCL supply 103% of pro-rata ACQ
2-Aug-17	2400	25	19	115	0	115.39	6		CIL Supply 158% and SCCL supply 103% of pro-rata ACQ.
3-Aug-17	2400	25	23	113	0	112.56	5		CIL Supply 158% and SCCL supply 103% of pro-rata ACQ.
4-Aug-17 5-Aug-17					Data not a	available			
6-Aug-17	2400	25	23	128	0	128.32	5		CIL Supply 158% and SCCL supply 103% of pro-rata ACQ.
7-Aug-17	2400	25	23	116	0	115.8	5		CIL Supply 159% and SCCL supply 108% of pro-rata ACQ
8-Aug-17	2400	25	23	112	0	111.6	5		CIL Supply 159% and SCCL supply 108% of pro-rata ACQ
9-Aug-17	2400	25	23	114	0	113.75	5		CIL Supply 166% and SCCL supply 108% of pro-rata ACQ.
10-Aug-17	2400	25	23	119	0	118.71	5		CIL Supply 166% and SCCL supply 108% of pro-rata ACQ
11-Aug-17					Data not a	available			
12-Aug-17 13-Aug-17	2400	25	23	125	0	124.61	5		CIL Supply 166% and SCCL
14-Aug-17					Data not a				supply 108% of pro-rata ACQ
15-Aug-17	2400	25	23	121	0	121	5		CIL Supply 166% and SCCL supply 108% of pro-rata ACQ.
16-Aug-17	2400	25	23	122	0	122	5		CIL Supply 166% and SCCL supply 108% of pro-rata ACQ.
17-Aug-17	2400	25	23	110	0	110	5		CIL Supply 166% and SCCL supply 108% of pro-rata ACQ
18-Aug-17	2400	25	23	100	0	100	5		CIL Supply 166% and SCCL supply 108% of pro-rata ACQ
19-Aug-17	2400	25	23	93	0	93	4		CIL Supply 166% and SCCL supply 108% of pro-rata ACQ
20-Aug-17	2400	25	23	91	0	91	4		CIL Supply 166% and SCCL supply 108% of pro-rata ACQ
21-Aug-17	2400	25	25	90	0	90	4		CIL Supply 166% and SCCL supply 108% of pro-rata ACQ.
22-Aug-17	2400	25	25	91	0	91	4		CIL Supply 166% and SCCL supply 108% of pro-rata ACQ.
23-Aug-17	2400	25	25	83	0	83	3		CIL Supply 170% and SCCL supply 109% of pro-rata ACQ.
24-Aug-17	2400	25	25	80	0	80	3		CIL Supply 170% and SCCL supply 109% of pro-rata ACQ.
25-Aug-17 26-Aug-17					Data not a	available	-		
27-Aug-17	2400	25	25	76	0	76	3		CIL Supply 170% and SCCL supply 109% of pro-rata ACQ.
28-Aug-17	2400	25	25	76	0	76	3		CIL Supply 170% and SCCL supply 109% of pro-rata ACQ.
29-Aug-17	2400	25	25	76	0	76	3		CIL Supply 170% and SCCL supply 109% of pro-rata ACQ
30-Aug-17	2400	25	25	82	0	82	3		CIL Supply 170% and SCCL supply 109% of pro-rata ACQ
31-Aug-17	2400	25	19	82	0	82	4		CIL Supply 167% and SCCL supply 108% of pro-rata ACQ.
Source: CE	1 wohsito	http://co:	a.nic.in/dailva	chive htm					

Source: CEA website http://cea.nic.in/dailyarchive.html

	Capac	Normative	Requirem ent for		Actual S	Stock		Critical (*)/	
Date	capac ity	Stock	the day	In	'000 Tonn	es'	In	(*)/ Super	Reasons for critical
	(MW)	Reqd.(Days)	(In '000 Tonnes')	Indigeno us	Import	Total	day s	Critical (**)	coal stock/Remarks
1-Aug-17	1340	25	7.3	228	0	227.79	38		
2-Aug-17	1340	25	7.3	274	0	273.74	37		
3-Aug-17	1340	25	7.3	267	0	266.55	37		
4-Aug-17					Data not av	ailahla			
5-Aug-17									
6-Aug-17	1340	25	7.3	259	0	258.65	35		
7-Aug-17	1340	25	7.3	248	0	248.14	34		
8-Aug-17	1340	25	7.3	233	0	232.54	32		
9-Aug-17	1340	25	7.3	224	0	224.27	31		
10-Aug-17	1340	25	7.3	217	0	217.03	30		
11-Aug-17					Data not av	vailable			
12-Aug-17				-		allable			
13-Aug-17	1340	25	7.3	183	0	183.44	25		
14-Aug-17					Data not av	vailable			
15-Aug-17	1340	25	7.3	157	0	157.38	14		
16-Aug-17	1340	25	7.3	151	0	151.36	13		
17-Aug-17	1340	25	7.3	136	0	135.76	12		
18-Aug-17	1340	25	7.3	123	0	122.54	11		
19-Aug-17	1340	25	7.3	110	0	110.41	10		
20-Aug-17	1340	25	7.3	110	0	110.17	9		
21-Aug-17	1340	25	18.3	96	0	95.92	5		Less program submitted for MCL.
22-Aug-17	1340	25	18.3	88	0	87.95	5		Less program submitted for MCL.
23-Aug-17	1340	25	18.3	84	0	83.85	5		Less program submitted for MCL.
24-Aug-17	1340	25	18.3	77	0	76.98	4		Less program submitted for MCL.
25-Aug-17					Data not av	vailable			
26-Aug-17				r			1		1
27-Aug-17	1340	25	18.3	66	0	66	4		Less program submitted for MCL.
28-Aug-17	1340	25	18.3	64	0	63.99	3		Less program submitted for MCL.
29-Aug-17	1340	25	18.3	64	0	63.57	3		Less program submitted for MCL.
30-Aug-17	1340	25	18.3	73	0	73.18	3		Less program submitted for MCL.
31-Aug-17	1340	25	8.76	77	0	77.38	9		

Table 7: Daily coal stock position as reported by CEA for Khaperkheda TPP for August 2017

Source: CEA website http://cea.nic.in/dailyarchive.html

11. Further, as per a news report dated 15th October 2017⁶, the Secretary, Ministry of Coal, has been quoted as follows:

"Power plants are to be squarely blamed for the current coal stock crisis, Coal Secretary Susheel Kumar has said. A quarter of the country's coal-based plants, including state-run generation companies and firms like Damodar Valley Corporation, Lanco Infratech and GMR Group, are operating with critical coal stocks. <u>The coal ministry had</u> warned power plants in June of the critical coal stock position but power companies' preferred to save money rather than build up stocks, Kumar told ET in an exclusive interview.

Coal dispatch to the power sector rose 22% in September 2017 compared to September 2016. And this month, so far, the increase is 21.3% year-on-year. Despite that, there is a shortfall in the stocks of thermal power plants. But there is no shortage of coal. Even today coal stock at Coal India pitheads is 30.85 million tonnes. The low stocks are because everybody wants more coal now. Nobody has the ability to make available such large stocks in such a short span. That is why following standard operating procedures is important." (Emphasis supplied)

 $[\]label{eq:linear} ^{6} https://economictimes.indiatimes.com/opinion/interviews/plants-that-didnt-follow-procedures-are-short-of-coal-susheel-kumar-coal-secretary/articleshow/61094516.cms$

12. Given such public statements by the Coal Ministry and considering the data regarding coal supply from various government sources, the matter necessitates urgent enquiry by the Commission in terms of lapses, if any, on part of MSPGCL in managing its coal procurement. This becomes especially important when one considers the fact that the clause 31.1 of the MERC MYT regulations allows generating companies interest on working capital which should be sufficient to help them stock at least 30 days of coal. The said clause states as follows:

"(a) In case of coal based/lignite-fired Generating Stations, working capital shall cover: —

(i) <u>Cost of coal or lignite and limestone towards stock, if</u> applicable, for fifteen days for pit-head Generating Stations and thirty days for non-pit-head Generating Stations, for generation corresponding to target availability, or the maximum coal/lignite stock storage capacity, whichever is lower;
(ii) <u>Cost of coal or lignite and limestone for thirty days for</u> generation corresponding to target availability;

(iii) Cost of secondary fuel oil for two months corresponding to target availability;" (Emphasis added)

Thus, in order to ensure reliable supply availability, the consumers are already paying a tariff that enables generating companies to stock adequate amount of coal. In spite of this if it is found that the situation of coal shortage has been brought about by acts of omission or commission on the part of the generating company in managing its coal procurement, as also indicated by the Coal Secretary to the Government of India or otherwise negligent acts, there can be no justification of asking the consumer at large to bear the consequences of such failures on part of the generating company.

13. Further, the order dated 6th October 2017 in case no 135 of 2017 also records as follows:

"5.2. The Commission asked MSEDCL regarding the contractual obligation of MSPGCL and IPPs to supply power in the event of shortage of coal from contracted sources. MSEDCL responded that, as per the PPAs, the Plants should be available upto 85% during the Contract Year and not month to month. Generally, it is found that the Availability is 100% during the monsoon period when MSEDCL's requirement of power is lower. Once the demand increases, these Plants could not provide power to the extent required due to shortage of coal."

Considering such statements from MSEDCL, the Commission needs to analyse if outages were planned without due regard for the demand-supply situation in the state, since it is well understood that post monsoon the state demand would increase and hence ordinarily no planned maintenance should be undertaken during such period. Therefore, it is important for the commission to examine how MSEDCL is ensuring accountability of generators for ensuring adequate availability during such periods and whether the processes in this regard can be improved to avoid such issues in future.

Jurisdiction

14. The Section 86 (1)(a) and (b) of the Electricity Act 2003, states as follows:

"Section 86. (Functions of State Commission):

(1) The State Commission shall discharge the following functions, namely: -

(a) determine the tariff for generation, supply, transmission and wheeling of electricity, wholesale, bulk or retail, as the case may be, within the State:

Provided that where open access has been permitted to a category of consumers under section 42, the State Commission shall determine only the wheeling charges and surcharge thereon, if any, for the said category of consumers;

(b) regulate electricity purchase and procurement process of distribution licensees including the price at which electricity shall be procured from the generating companies or licensees or from other sources through agreements for purchase of power for distribution and supply within the State;

The above sections grant wide powers to the state Commission to enable and empower it to effectively regulate all aspects of the electricity utilities so as to ensure smooth and economical functioning of the power sector. The emphasis on the need for improving economy and efficiency while also protecting consumer interest is explicitly mentioned in the preamble of the 2003 Act, which states as follows:

"An Act to consolidate the laws relating to generation, transmission, distribution, trading and use of electricity and generally <u>for taking</u> <u>measures conducive to development of electricity industry,</u> promoting competition therein, protecting interest of consumers and supply of electricity to all areas, rationalization of electricity tariff, ensuring transparent policies regarding subsidies, promotion of efficient and environmentally benign policies</u>, constitution of Central Electricity Authority, Regulatory Commissions and establishment of Appellate Tribunal and for matters connected therewith or incidental thereto." (Emphasis added)

Under the Section 61(c) of the 2003 Act, the state Commission while deciding the terms and conditions for tariff determination, is required to consider "factors which would encourage competition, efficiency, economical use of the resources, good performance and optimum investments;" Similarly, Section 61(d) emphasises on the need to safeguard the interest of the consumers.

15. All the above provisions highlight the functions of the state Commission in terms of ensuring that the entities regulated by it are adhering to and complying with these norms and principles in both letter and spirit. The issues highlighted above demonstrate potential failures in planning and coordination by the concerned companies leading to additional burden of high cost power purchase on the consumers. Since both the generation and the distribution company are "cost-plus" entities whose tariff is determined by this Commission under the provisions of the sections listed above, it is therefore submitted that this Commission has the jurisdiction to entertain the present Petition and also grant the relief on terms prayed herein.

Ground in support of the case

..."

- 16. As stated above, the Commission regulates all aspects of MSEDCL's operation and functioning, including its power purchase planning (both quantum and cost) and the tariff it charges to the consumers. Similarly, MSPGCL is a generating company with installed coal based capacity of 10,380 MW, all of which is contracted with MSEDCL and is regulated by the Commission under the Sections 62 of the 2003 Act, namely the purchase of electricity by the Distribution licensee from a generating company. Under these provisions, the Commission regulates the operational performance of this capacity and also decides the generator's responsibility and so long as MSEDCL is paying the full fixed cost, it is entitled to demand normative availability of all the capacity that it has contracted.
- 17. For all the regulated capacity, for which tariff is determined by the Commission under section 62 of the 2003 Act, the generators are allowed interest on working capital, which takes into account the amount to be paid for maintaining adequate coal stock. In this regard, the clause 31.1 of the MYT regulations 2015 states as follows:

"31. Interest on Working Capital—

31.1 Generation

(a) In case of coal based/lignite-fired Generating Stations, working capital shall cover: —

(i) <u>Cost of coal or lignite and limestone towards stock, if</u> applicable, for fifteen days for pit-head Generating Stations and

<u>thirty days for non-pit-head Generating Stations</u>, for generation corresponding to target availability, or the maximum coal/lignite stock storage capacity, whichever is lower; (ii) <u>Cost of coal or lignite and limestone for thirty days for</u> generation corresponding to target availability; (iii) Cost of secondary fuel oil for two months corresponding to target availability;" (Emphasis added)

Thus, as stated before, the consumers through their tariff determined by the Commission are already paying interest on working capital that allows the generating company to maintain adequate coal stock.

18. With such regulatory provisions in place, it is the responsibility of the generating company and the Commission to ensure that these norms are adhered to and no supply disruption takes place on account of this reason. The facts laid out in the paragraphs above, prima facie indicate that these provisions may not have been strictly followed. Further, the data presented above indicates that MSPGCL did not take adequate and timely actions to remedy the situation because of which plant availability worsened to an extent that more than 60% of its installed capacity was unavailable. If the generating company has failed to procure sufficient coal in a timely manner, the consumers cannot be penalized with either the inconvenience of load shedding or tariff burden of high cost power purchase arising on account of such failure. Hence, the Commission needs to intervene in this matter and establish the reasons for the coal shortage and whether the claims made by the generating companies in this regard are tenable.

Data needed for ascertaining the reasons for the claimed shortage of coal

- 19. Given the discrepancies highlighted above, the situation demands an urgent and thorough analysis and examination of the coal supply management of MSPGCL by the Commission. This is not just important from the point of view of analysing what led to the crisis like situation in September 2017, but also to understand how such failures can be prevented in future. Therefore, to make such analysis possible, the Commission should direct MSPGCL to submit the following information:
 - a. Station-wise daily indents issued by MSPGCL to the concerned coal companies for coal requisition since 1st January 2017 to 15th October 2017
 - b. Station-wise coal supply approved by the concerned coal company in response to the indents issued by MSPGCL for the period mentioned above
 - c. Station-wise actual daily coal realization reported for the same period
 - d. Station-wise daily coal stock position of MSPGCL for the same period
- 20. In addition to the above, MSPGCL be directed to clarify the following points and submit appropriate data as may be necessary:
 - a. Station-wise details of how MSPGCL is utilising the coal supply contracted for the capacity (4522 MW) that is under economic and/or reserve shut down?
 - b. Has MSPGCL signed any supplementary agreement with the CIL and SCCL under the flexible coal allocation policy of May 2016?
 - i. If yes, a copy of the agreement should be placed on record. Additionally, MSPGCL should also state whether or not such an arrangement has lead to any cost optimization along with the reasons for the same and the quantum of savings, if any.
 - ii. If no, the reasons for not availing the facility be placed on record.
 - c. For all its stations that are facing coal supply shortage, what are the steps taken by MSPGCL in order to enforce coal supply as per the contractual provisions of the FSAs?
 - d. What has been the response of the coal companies to such efforts of MSPGCL?

- 21. Similarly, MSEDCL be directed to submit the following information:
 - a. Daily dispatch schedules approved by MSEDCL from 1st January 2017 to 15th October 2017
 - b. Actual daily dispatch for the same period and reasons for deviations from original schedule, if any.
 - c. Details of generating units that have been under planned or forced outages during the same period.
 - d. What are the contractual steps, if any, taken by MSEDCL to ensure adequate normative availability for the capacity contracted by it during high demand periods?

All the data requested above be submitted in soft copies in Microsoft Word documents or Excel spreadsheets, or in text searchable PDF format.

Prayers

22. In light of the above points, we pray to the Commission as follows:

- a. Admit this petition and initiate appropriate proceedings to undertake thorough examination of the reasons responsible for the claimed coal shortage in the state.
- b. Direct MSPGCL and MSEDCL to submit data and information as detailed out in para nos 19, 20 and 21 above to make such analysis possible.
- c. All the data requested above be submitted in soft copies in Microsoft Word documents or Excel spreadsheets, or in text searchable PDF format.
- d. Share the data submitted by MSPGCL and MSEDCL, with the petitioner as well as the consumer representatives and allow all the concerned parties adequate time and opportunity to comment on the same.
- e. Pursuant to such a process and based on the analysis of the data and facts placed on record, the commission should establish the reasons for the purported shortage of coal and whether the same could have been avoided with better planning.
- f. Based on the above analysis the Commission may pass orders/directions/instructions, if any, to MSPGCL and MSEDCL to avoid reoccurrences of such events in future.
- g. Condone any inadvertent technical or procedural error in filing this petition, if any.
- h. Not to reject this petition without giving the petitioner a hearing.
- i. Pass any other order as may be necessary.

Place: Pune Date: 18th October 2017

Signature of the Petitioner