#### 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

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Maharashtra State Electricity Distribution Co. Limited... Respondent-2Plot No G-9, Prakashgad,... Floor, Anant Kanekar Marg,Sth Floor, Anant Kanekar Marg,... Bandra (East), Mumbai - 400 051E-mail : ceppmsedcl@gmail.com

#### Consumer Representatives:-

Cc: The General Secretary, Thane Belapur Industries Association, Rabale Village, Post Ghansoli, Plot P-14, MIDC, Navi Mumbai 400 701 E-mail: tbia@vsnl.com

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>

# Submission by Prayas (Energy Group):

### Background and context

1. Presently, MSEDCL has contracted capacity that is in excess of its demand. As per its MYT petition in case No. 48 of 2016, MSEDCL has proposed backing down of a large part of its contracted capacity, for which fixed cost would be paid by the consumers (refer Table 1 for details). Based on the projections regarding the surplus capacity, the Commission vide its order dated 3.11.2016 in case No. 48 of 2016 ('MYT Order'), directed MSEDCL to 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. Accordingly, it is understood that MSEDCL may sell a part of its excess capacity to BEST on round the clock (RTC), intermittent and peak basis, for the next four-five years<sup>1</sup>.

Table 1: Details of backing down as submitted by MSEDCL

Particulars	FY 16-17	FY 17-18	FY 18-19	FY 19-20
Backed down capacity (MW)	6379	8961	7257	6463
Fixed cost (Rs. Cr)	3998	4357	4027	3710

Source: Annexure 7 of MSEDCL MYT petition in case no 48 of 2016

2. While MSEDCL plans to enter into such contracts for the sale of its surplus capacity, since September 2017 it has filed two petitions (MERC case nos. 135 of 2017 and 181 of 2017) seeking approval for short-term power purchase at a cost higher than the ceiling rate of Rs. 4 per unit approved by the Commission in the MYT order. In both these petitions, MSEDCL has argued that a large part of its contracted capacity has not been available, largely on account of coal availability related issues. In this regard, the MERC order dated 5<sup>th</sup> January 2018 in case no 181 of 2017, records as follows:

"The approval of the Commission vide Order dated 6.10.2017 in Case No.135 of 2017 helps **MSEDCL to procure power through short term tenders and Power Exchanges in view of reduction in availability mainly due to coal shortage scenario** and to meet the rising demand.

Considering the present availability of coal sock at generating stations and expected demand for coming months, it is likely that present power supply scenario to be continued. MSEDCL's contracted generating units of capacity around 2600 MW is under forced outage due to coal shortage. Most of the other contracted generators are running much below to their capacity; hence around 14500 MW to 15000 MW generation is available against long term contracted thermal capacity.

... MSEDCL conducted the meeting of all the long term generators to review the availability of power on 13.9.2017, 26.10.2017, 27.10.2017 & 24.11.2017; however generators showed their inability to supply their full contracted capacity power." (Emphasis added)

3. Given the surplus situation, a significant part of MSPGCL capacity is under planned back-down and hence the coal allocated to these units should be available for the units that are under operation. However, MSPGCL has claimed that it does not receive coal supply that would be adequate to ensure availability of even its operational units. While on one hand MSPGCL blames the coal companies for the lack of coal supply, on the other it seems to be simultaneously auctioning part its coal allocation to other private generating companies under the 'flexible utilisation of coal' scheme, popularly known as coal tolling<sup>2</sup>.

https://indianexpress.com/article/cities/mumbai/best-to-buy-power-from-state-distribution-company-5212260/ <sup>2</sup> Reference: News report dated December 2017 published in the Financial Express

 $<sup>^{1}</sup>$  Reference: News report dated 11  $^{\mathrm{th}}$  June 2017 published in the Indian Express

https://www.financialexpress.com/india-news/maharashtra-to-buy-400-mw-of-electricity-at-rs-2-76unit/958138/

4. These developments are unsettling and pose serious challenges for the consumers. While the consumers are paying for the fixed cost of all the contracted capacity, including the units that are being backed down or are under economic shutdown, the frequent short-term power purchase is likely to impose additional cost burden. Further, the lack of generation availability coupled with MSEDCL's contractual commitment to sell power to other licensees can lead to load-shedding and/or poor supply quality for its regulated consumers.

Thus, from the point of view of tariff increase as well as supply quality, the issue of lack of coal availability for MSEDCL's contracted capacity becomes very important and merits urgent attention.

## Lack of clarity regarding the cause of the coal shortage

- 5. As submitted earlier, 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. In case of MSPGCL, out of its total coal based installed capacity of 10,170 MW, about 4,522 MW was supposed to be backed down in FY 17-18<sup>3</sup> for economic reasons. The flexible utilisation policy allows MSPGCL to divert the coal allocated for such backed down capacity to its other operational units. However, in spite of this flexibility and planned backing down of almost 40% of its installed capacity, MSPGCL claims to not receive coal that would be sufficient to ensure proper availability of the remaining 60% of its capacity.
- 6. According to SEVA portal, annual dispatch from Coal India Ltd (CIL) to MSPGCL has increased by ~17% during Apr-Dec between FY 17 and FY 18 (~18.08 MT vs ~21.16 MT). As against this, as per CEA data MSPGCL's coal based generation in Apr-Dec 17 was 34.4 BUs, that is about 13% more than in Apr-Dec 16 (30.3 Bus). Thus, the increase in coal dispatch is higher than the increase in generation. The CEA also publishes data regarding daily coal stock position and availability. Our analysis of this data for the month of August 2017, which was the month preceding the major shortfall in generation availability that was reported on account of lack of coal supply, has shown that coal shortage may not be the main reason for the lack of plant availability. Consider for example that for stations such as Chandrapur and Koradi, from 1<sup>st</sup> August 2017 itself the stock was less than 10 days. However, the stations were not identified as "Critical" or "Super critical" in terms of coal stock position. Same was the case with Khaperkheda. For both Chandrapur and Khaperkheda, the days when the actual stock was 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 in a timely manner.
- Additionally, the public statements made by the Ministry of Coal seem to suggest that coal production is not an issue. As per a news report dated 15th October 2017, the Secretary, Ministry of Coal, has been quoted<sup>4</sup> 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 coalbased plants, including state-run generation companies and firms like Damodar Valley Corporation, Lanco Infratech and GMR Group, are operating with critical coal stocks. The coal ministry had 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"

Similarly, in a recent interview<sup>5</sup>, the coal minister has been quoted as saying:

"As on March 31, 2017, there may be 68 or 69 million tonnes of stock. At the level ...we were worried that if there is a fire over there it would

 <sup>&</sup>lt;sup>3</sup> As per the data submitted by MSEDCL in its petition under case no 48 of 2016 – Annexure: 7 Back down details
 <sup>4</sup> Reference: <u>https://economictimes.indiatimes.com/opinion/interviews/plants-that-didnt-follow-procedures-are-short-of-coal-susheel-kumar-coal-secretary/articleshow/61094516.cms
 <sup>5</sup> Source: <u>https://energy.economictimes.indiatimes.com/news/coal/rapid-rise-in-coal-demand-led-to-shortages-feeling-</u>
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<sup>&</sup>lt;sup>5</sup> Source: https://energy.economictimes.indiatimes.com/news/coal/rapid-rise-in-coal-demand-led-to-shortages-feelingpiyush-goyal/64545045

cause a massive loss. Post that there has been surge in demand which we are now meeting both through enhanced production and enhanced dispatch"

Considering such statements by the coal ministry and the data reported by the CEA, it is not clear whether there was indeed any coal supply shortage or whether adequate efforts were not taken by the generators to requisition sufficient quantity of coal in a timely manner.

#### Need for regulatory oversight and monitoring

8. The tariff for the generating companies determined by the Commission under section 62 of the Act allows interest on working capital, which takes into account the amount to be paid for maintaining adequate coal stock. In this regard, the MERC MYT regulations, 2015, state 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. Cost of coal or lignite and limestone towards stock, if 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. Cost of coal or lignite and limestone for thirty days for generation corresponding to target availability;
- iii. Cost of secondary fuel oil for two months corresponding to target availability;"

Thus, in order to ensure reliable supply availability, consumers are already paying a tariff that enables the generating companies to stock adequate amount of coal. If the coal shortage is on account of any lapses in coal procurement, the costs arising on account of such failures cannot be passed on to the consumers. Therefore, the Commission needs to monitor coal procurement and utilisation practices.

### Data needed for monitoring coal procurement, utilization and generation

9. Given the implications for tariff and supply quality, and considering the contradictory claims made by the coal companies and generating companies, urgent steps are needed in ensuring complete transparency and clarity in this crucial area. This can be achieved if appropriate data is available in the public domain, as that would allow the Commission as well as the consumers to evaluate such claims in a rational and objective manner.

In order to facilitate such transparency, we request the Commission to direct MSPGCL and MSEDCL to publish and maintain the following data on their respective websites.

#### MSPSCL should publish the following data on its website (refer Annexure 1) a. On a daily basis, for each station/ unit:

- i. indents issued by MSPGCL to the concerned coal companies for coal requisition
- ii. Coal supply approved by the concerned coal company in response to the indents issued by MSPGCL
- iii. Actual daily coal realization and coal stock position
- iv. Rake requisitions and realisation / actual receipt
- v. Details of coal procurement from other sources such as imports, e-auctions, washing, etc.
- b. Station-wise details of how MSPGCL is utilising the coal supply contracted for the capacity that is under economic and/or reserve shut down?
- c. Agreements, if any, signed under the flexible coal allocation policy (case-4 bidding) of May 2016 along with the details of anticipated savings.
- d. For all its stations that are facing coal shortage (below the level of ACQ

guaranteed in the FSA), what are the steps, if any, taken to enforce coal supply as per the contractual provisions of the FSAs?

#### MSEDCL should publish the following data on its website

- a. On a daily basis, for each station/ unit contracted by it:
  - i. Dispatch schedule approved
  - ii. Actual daily dispatch and reasons for deviations from original schedule, if any.
  - iii. Details of generating units that are under planned or forced outage.
  - iv. Source, duration, cost and quantum of short-term power procured
- b. Contractual steps, if any, taken to ensure adequate normative availability for the capacity contracted by it during high demand periods?

The Annexure 1 lists the formats in which the above data should be published. It should be published on the website in an easily readable format, e.g. excel sheets. A lag of one day may be allowed to collate information and publish it in the required format.

Such transparency would not just be useful in improving the accountability of the coal and generating companies, but it would also help in identifying and avoiding lapses, if any, in the coal procurement and utilization practices. More importantly, it would help in preventing such incidents from reoccurring in the future.

10. We request the commission to take this submission on record and to allow us to make further submissions in this matter, if any.

Place: Pune Date: 15<sup>th</sup> June 2018

Ashwini Chitnis Fellow Prayas (Energy Group)

# Annexure 1: Formats for data to be published by MSPGCL

1. Indents / requisitions of domestic coal based on FSA / MoU

Source: Coal company / Mine	Mode of transport	Coal Requisition			Actual Receipt			Price (Rs / ton)		Coal entitlement as per FSA / MoU	
		Date	Quantity in 1000 tons	Grade / GCV in kcal/kg	Date	Quantity in 1000 tons	Grade / GCV in kcal/kg	Base price	Freight	Pro- rata daily ACQ	Grade / GCV in kcal/kg

### Data to be submitted for each station / unit that has a valid FSA / MoU

# 2. Data regarding coal stock, consumption, generation

## Data to be submitted for each station / unit

Date			Gross	Gross SHR			
	Opening stock	Receipt	Consumption	Closing stock	GCV (closing stock)	generation (kWh)	(kcal / kWh)

# 3. Details regarding coal imports, if any

Date of	Source: Name of the coal company / trader, countryQuantity in 1000 tonsGrade / GCV in kcal/kgPort of arrivalInterna mode o transport	Internal mode of	Price (Rs	/ ton)	Destination station /			
receipt		2000 10115	kcal/kg	anna	transport	Base price	Freight	unit

# 4. Details regarding coal procured through e-auction

		-	-	-			-
Date of auction	Source: Coal company / mine	Quantity won in 1000 tons	Grade / GCV in kcal/kg	Mode of transport	Price (F	Destination	
					Base price	Freight	station / unit

## 5. Rake requisitioning data

	Requis	itioning		Receipt				
Date	No of rakes	Source location	Destination	Date	No of rakes	Source location	Destination	

### 6. Details regarding washed coal, if used

		Raw coal feed			Washed coal			
Date	Quantity in 1000 tons	Grade / GCV in kcal/kg	Price (Rs/ ton)	Quantity in 1000 tons	Grade / GCV in kcal/kg	Price (Rs. /ton)	Rejects sold? (Y/N)	If Y, price (Rs / ton)

# 7. Optimal coal utilization between MSPGCL plants

Date	Source (mine/subsidiary)	Original allocation (plant / unit)	Revised destination (plant / unit)	Quantity in 1000 tons	Grade / GCV in kcal/kg	Price (F	Mode of	
						Base price	Freight	for

### 8. Details regarding case-4 bidding, if undertaken

		Coal offered by MSPGCL					Contract details					
Date of biddi ng	Quanti ty (MT / year)	Grad e / GCV in kcal/ kg	Coal compa ny / mine from which coal is to be diverte d	MSPGC L Unit / plant that had original allocati on	Capaci ty (MW)	Name of the successf ul bidder	Capaci ty (MW)	Contra ct term in years	Ceilin g tariff in Rs/k Wh	Discover ed tariff in Rs/kWh	Locati on	Mod e

- 9. Agreements, if any, signed under the flexible coal allocation policy of May 2016, should be published on the website along with the details of anticipated savings.
- 10. For all its stations that are facing coal supply shortage, details of contractual steps, if any, taken by MSPGCL to enforce coal supply as per the contractual provisions of the FSAs should be published on its website.