

# MSPGCL Petition for final True-up for 2010-11 & Approval of ARR and Tariff for the year FY11-12 & FY12-13

Submission

by

Prayas Energy Group, Pune

12<sup>th</sup> April 2012

# Summary of MSPGCL Tariff Proposal

Particulars	FY 2010-11	FY 2011-12	FY 2012-13
Fuel Related Expenses/Lease Rentals in Rs Cr	8199	9667	10853
Aggregate Revenue Requirement in Rs Cr	11366	13782	15205
Net Generation in MU	41925	43689	46587
Avg cost in Rs/unit	2.71	3.15	3.26

# Fixed and variable cost of various stations

Station	FY 2010-11			FY 2011-12			FY 2012-13		
	Audited			Estimates			Projections		
	FC	VC	Total	FC	VC	Total	FC	VC	Total
Bhusawal	0.91	2.75	3.66	1.04	3.32	4.36	1.10	3.45	4.55
Chandrapur	0.77	1.87	2.64	0.65	2.07	2.72	0.64	2.11	2.75
Khaperkheda	0.92	1.87	2.79	0.88	2.28	3.16	0.99	2.50	3.49
Koradi	1.01	2.26	3.27	0.95	2.86	3.81	0.89	3.11	4.00
Nasik	0.77	2.93	3.70	0.71	3.72	4.43	0.80	4.06	4.86
Paras	4.37	3.63	8.00	-	-	-	-	-	-
Parli	0.76	2.81	3.57	0.98	3.05	4.03	0.76	2.89	3.65
Uran	0.33	1.75	2.08	0.36	2.10	2.46	0.36	2.12	2.48
Paras Unit 3	2.23	2.06	4.29	2.46	2.11	4.57	1.92	1.81	3.73
Parli Unit 6	2.07	2.29	4.36	2.86	2.73	5.59	2.11	2.26	4.37
Paras Unit 4	1.83	2.19	4.02	2.49	2.13	4.62	2.07	1.80	3.87
Parli Unit 7	2.06	2.56	4.62	2.85	2.79	5.64	1.86	2.22	4.08
Hydro	0.96	0.00	0.96	1.08	-	1.08	1.24	-	1.24

*7 out of 12 thermal stations have total cost of generation higher than Rs.3.50 per unit!*

# Key reasons for increase in cost

1. Inability to comply with stipulated performance norms
  - Sharp decline in PLF, availability and hence net generation
  - Steep increase in station heat rates, auxiliary consumption and hence overall fuel cost
2. Loss of generation on account of poor quality and inadequate availability of domestic coal
3. Increase in coal price and/or imports

# Adherence to performance norms

# Timeline of orders and judgments related to performance norms

Sept 2006

- ARR order charting out performance norms for FY 05-06 and FY 06-07

April 2007

- MYT Order for Control Period FY 07-08 to FY 09-10

April 2008

- ATE directed MERC to carry out a study to reasonably assess performance parameters such as heat rate, PLF etc

Nov 2008

- CPRI study commissioned

Dec 2009

- CPRI submitted final report to MERC

# Excerpts from CPRI report conclusions

- *Measurement of important parameters which affect the **input costs like coal, oil, water need to be measured and not estimated.***
- *Both receipt and consumption **need to be separately monitored and reconciled through computerized system** in respect of coal, fuel oil, water flows through the plant.*
- *There **must not be human intervention in the measurement and recording systems of coal, fuel oil and water resources which affect the station input costs.***
- *Transit loss, specific fuel consumption and GCV are interlinked and **realistic quantification of these will only be possible if a fuel monitoring system is in place.***
- ***In brief, all the seven stations have potential for heat rate improvement through serious change & outlook management and technology absorption & adoption.***

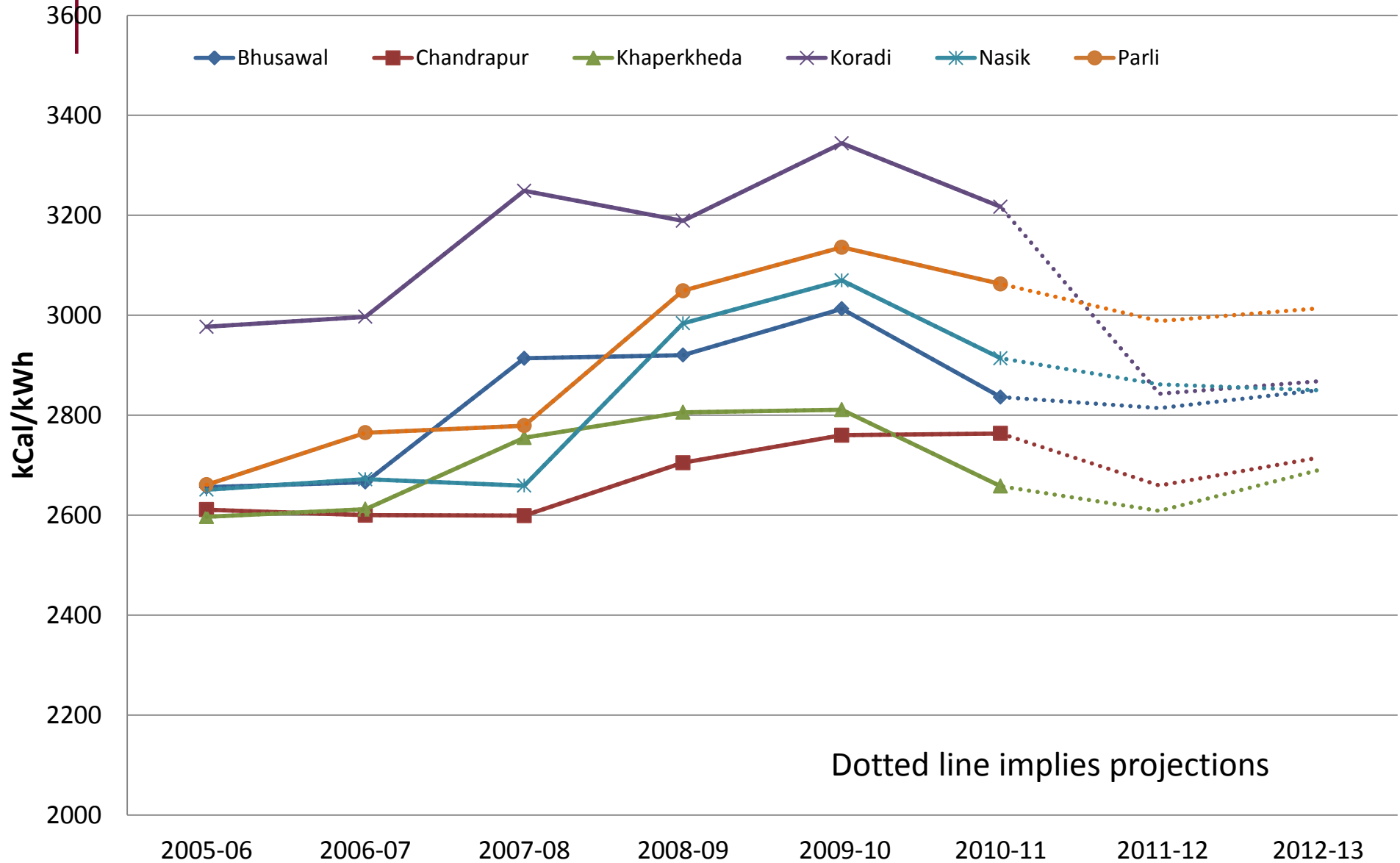
# Excerpts from the present petition

- *“...the need of commercial independence of MSPGCL should be factored while suggesting the SHR based on the recommendation of CPRI.”*
  - *“MSPGCL believes that it should have the independence to undertake its own due-diligence in selection of schemes in the overall interest of the consumers. And accordingly requests the Commission not to consider the CPRI recommendations in such binding manner.”*
  - Till date MSPGCL has not come out with any alternative but binding performance norms
- Reluctance to accept accountability for performance



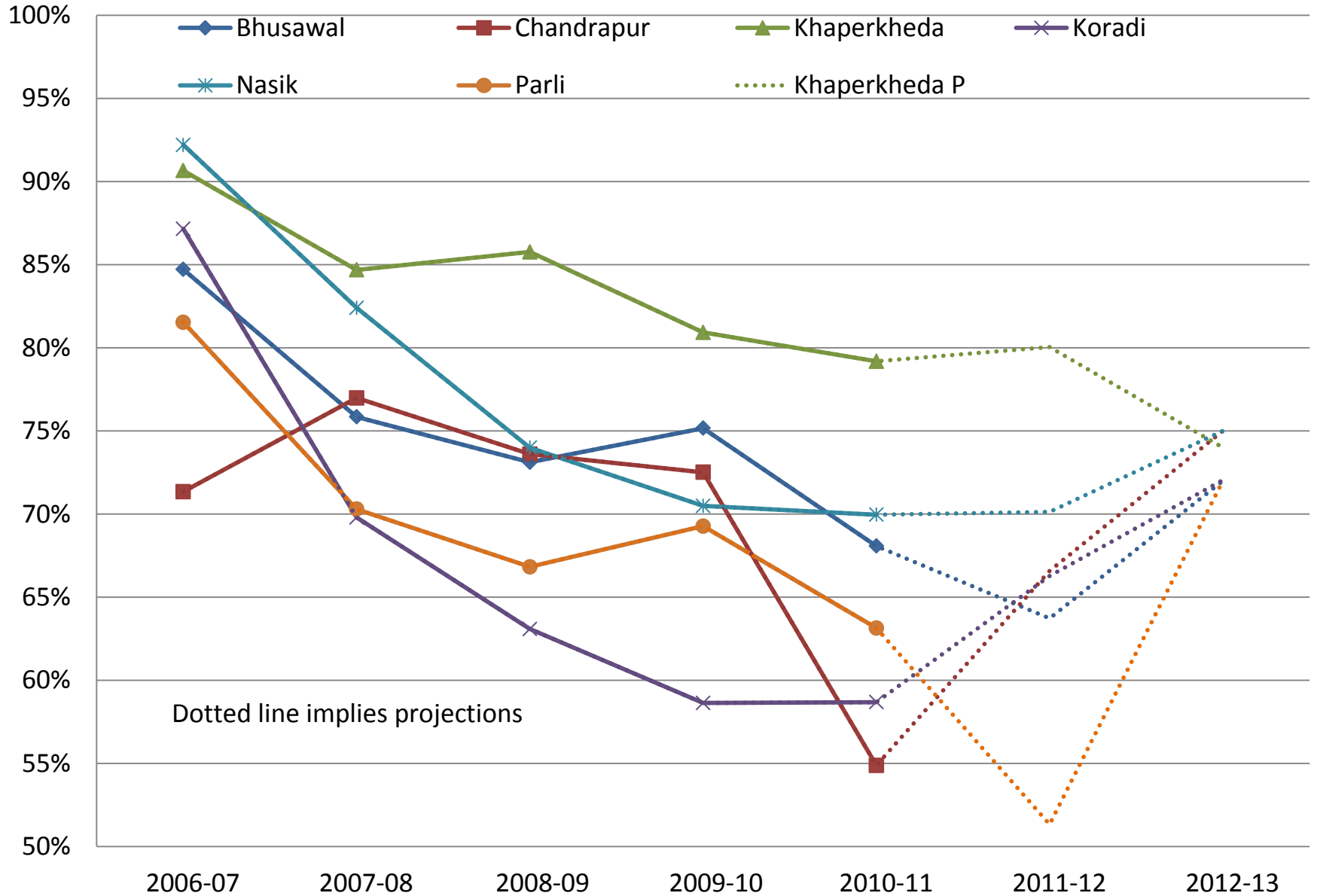
# Actual performance during the intervening period

# Station heat rate in kCal/kWh

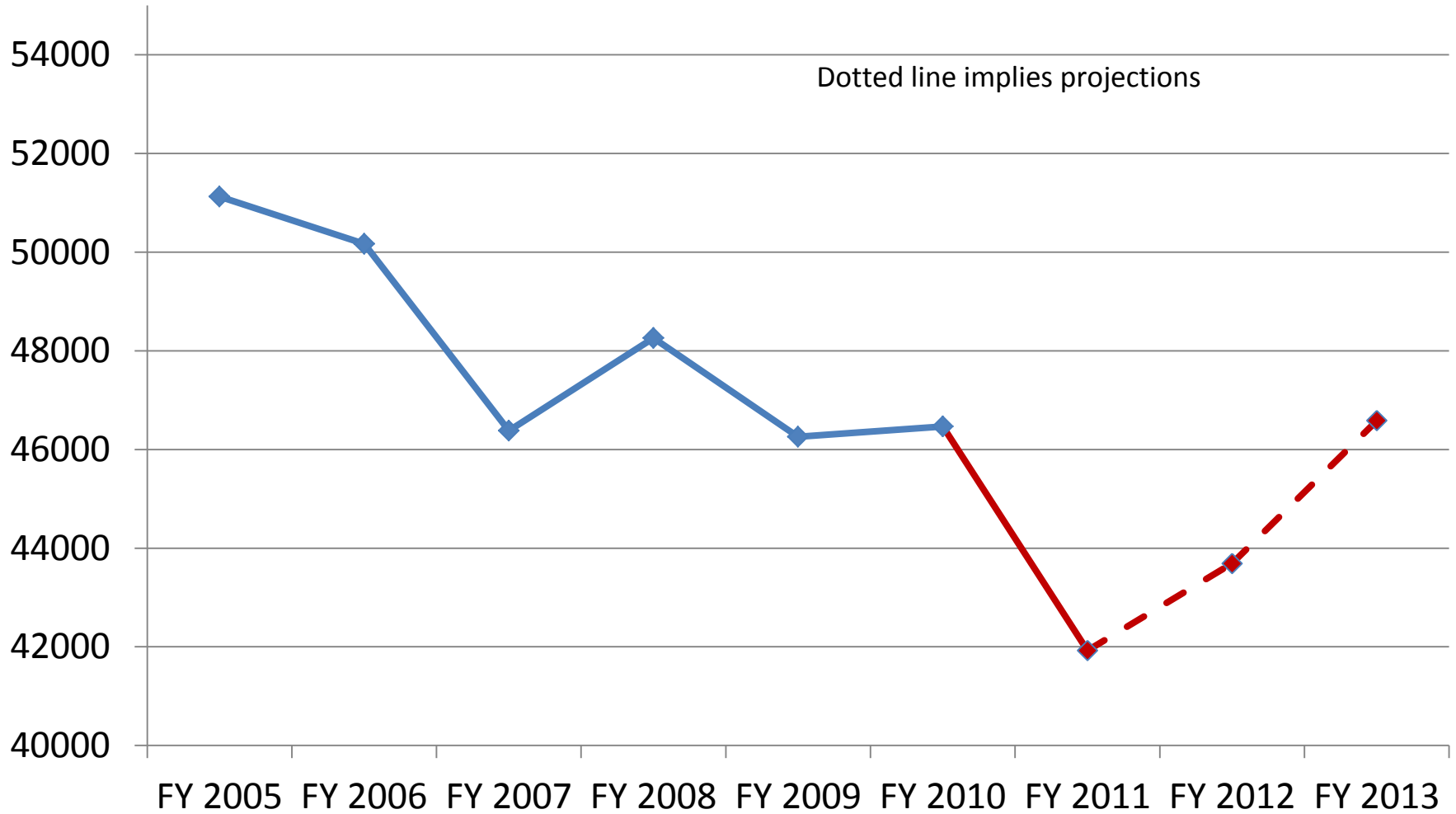


Dotted line implies projections

# Plant load factor in %



# Net Generation in MU



# Impact of not adhering to CPRI projections

Year	Excess burden of fuel cost in Rs CR
FY 2008-09	374
FY 2009-10	693
FY 2010-11	376
FY 2011-12	125
FY 2012-13	551
<b>Total</b>	<b>2119</b>

- Impact of Rs. 1,052 Cr for FY 10-11 to FY 12-13 alone!

# Coal related issues

# Coal Supply

Name of the company	Percent contribution
WCL	50%
MCL	20%
SECL	13%
SCCL	5%
Import	7%
e-Auction	5%
Total	100%

- 70% of washed coal rakes were rejected as required CV of 4200 kCal/kg was not met
- Petition attributes ~1100 MU of generation loss in FY 10-11 alone to poor quality of coal
  - impact of roughly Rs. 200 Cr considering medium term power purchase of Rs. 4.5/u

# Implications of coal issues

- Fuel cost constitutes ~75% of the total cost of generation and hence is the most important cost to be regulated
  - Excerpts from CPRI study:
    - *“heat rate should strictly indicate heat consumption by the units and coal losses (if any) should be separately accounted as a weight loss. Coal losses before bunker cannot be attributed to the units and must not be included therein.”*
- No concrete data is available to assess loss of coal and quality of coal at each unit level
- Consumers cannot bear costs arising out of MSPGCL's inability to enforce commercial contracts with its suppliers



# Prayas Submission...1

- Commission should present detail analysis of fuel cost in terms stating how much of it is on account of:
  - Increase in landed cost of coal
  - Changes in coal mix, quantum of imports
  - Changes in calorific value of coal received, if any
  - Operational issues such as equipment failure, forced outages/backing down etc
- Increase on account of operational issues should not be passed through
  - For this evaluation performance norms stipulated by CPRI should form the basis

# Prayas Submission...2

- Costs arising out of inability of MSPGCL to enforce its commercial contracts with coal companies or washeries cannot be passed through to consumers
  - MSPGCL must take appropriate measures to enforce its contracts and ensure accountability of its suppliers
- Commission should appoint agency for undertaking third party independent audit of coal quality and quantity at all MSPGCL stations

# Thank you

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