Before the Maharashtra Electricity Regulatory Commission

Comments, Suggestions and Objections on Maharashtra State Electricity Distribution Company Limited's Petition for Multi Year Tariff for FY 2013-14 to FY 2015-16
(MERC Case No. 121 of 2014)

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Aims and objectives of Multi Year Tariff (MYT)

- Motivation behind introducing MYT can be said to be to:
  - Provide regulatory certainty to consumers, utilities and investors
  - To minimise perception of regulatory risk
  - Facilitate sound planning practices and processes
  - Address risk sharing mechanism between utility and consumers based on controllable and uncontrollable factors
  - Improve operational efficiency and reduce tariff in the long run

- Therefore, for any MYT exercise to the successful, there needs to be:
  - Reliable baseline data for making future projections
  - Rigorous and scientific demand forecast
  - Long term power purchase and capital expenditure plans which should be followed with necessary coordination between different utilities and generators
  - Continuous monitoring and evaluation of trajectories for various performance parameters.
  - Co-relating MYT exercise with supply and service quality and financial performance of the utility, benefits of which should accrue to consumers in the form of predictable costs and reliable service.

Inordinate delay, lack of consistent approach and willful negligence by MERC

- Petition filed in the last financial year of the control period after a delay of almost 2 years
  - No scope for mid-term review, on account of the delay

- MERC has failed in:
  - Undertaking suo-motu public process for implementing the MYT and/or
  - Holding MSEDCL accountable by using legal provisions such as section 142 and 146

- Given the absence of crucial information and lack of planning, it is highly inappropriate to call this tariff determination exercise an MYT
  - Utility has categorically objected to MYT based planning and has considered all tariff components uncontrollable
  - Commission has approved such petition to form basis for public debate which itself is a travesty of the MYT process
  - → Hence any burden arising from this inefficiency of the commission and such willful negligence and delay cannot be passed on to the consumers in the form of carrying cost for deferred payments and/or regulatory assets

- This is NOT MYT
  - → This process must be termed as true-up of FY 2013-14, performance review of FY 2014-15 and tariff determination for FY 2015-16
  - → FY 2013-14 final true-up should happen in the same process and no further costs pertaining to this financial year should be allowed

Inconsistencies in the petition: Failure of technical validation process

Role and importance of Technical Validation session

- Identifying data gaps, if any regarding all the major heads of the tariff
- Ensuring the necessary clarity by removing any ambiguities and/or information asymmetries
- Ensuring adequate information to facilitate further analysis and an informed public debate
- Technical Validation Session (TVS) for this case was held on 24th Dec 2014
  - Number of data gaps and serious lacunae were brought to the MERC's notice
  - Second TVS based on new information was demanded by all consumer representatives

→ MERC chose not to conduct the second Technical validation session in spite of the serious issues being raised

Assumption for sales projections and implications on revenue

Categories	Year on year growth	3 Year CAGR	5 Year CAGR	CAGR Considered
HT Industrial	**-11%**	**-4%**	**2%**	**7%**
HT Commercial	**-5%**	**-1%**	**16%**	**7%**
HT Others	4%	6%	6%	5%
LT Domestic	**5%**	**6%**	**8%**	**10%**
LT Commercial	**-2%**	**1%**	**6%**	**7%**
LT Agriculture	4%	10%	11%	4%
LT Industrial	6%	5%	7%	7%
LT Others	9%	12%	8%	10%
MSEDCL Total	**-1%**	**3%**	**7%**	**7%**

- Sales projections have crucial bearing on surplus and also overall revenue requirement
- Discrepancy between HT Industrial projected sales for 2012-13 and actuals was about 3500 MU regarding which MERC stated as follows : *'Rs. 1750 Crore is on account of increase in open access sales'*
- HT Industrial and HT commercial categories have seen a 11% and 5% drop in sales between FY13 and FY14 and given the high tariffs, this trend is bound to continue
- However, projections in the petition are independent of these changes and consider 7% annual growth

Treatment of surplus for FY 2013-14

Particulars	As per MSPGCL actuals	As per MSEDCL actuals
Power Purchase Quantum Available from MSPGCL	40713	41336
Total power available for sale		85631
Actual sales		85631
Surplus or deficit power		***484***

- MSEDCL has claimed sale of 483 MUs surplus for FY 2013-14 at Rs. 2.03 per unit
- The audited actuals for MSPGCL and MSEDCL do not match for this year, there is difference of 623 MUs, possibly on account of post-facto accounting settlement
- '*Sale of surplus*' claimed by MSEDCL is perhaps incidental and not a planned exercise

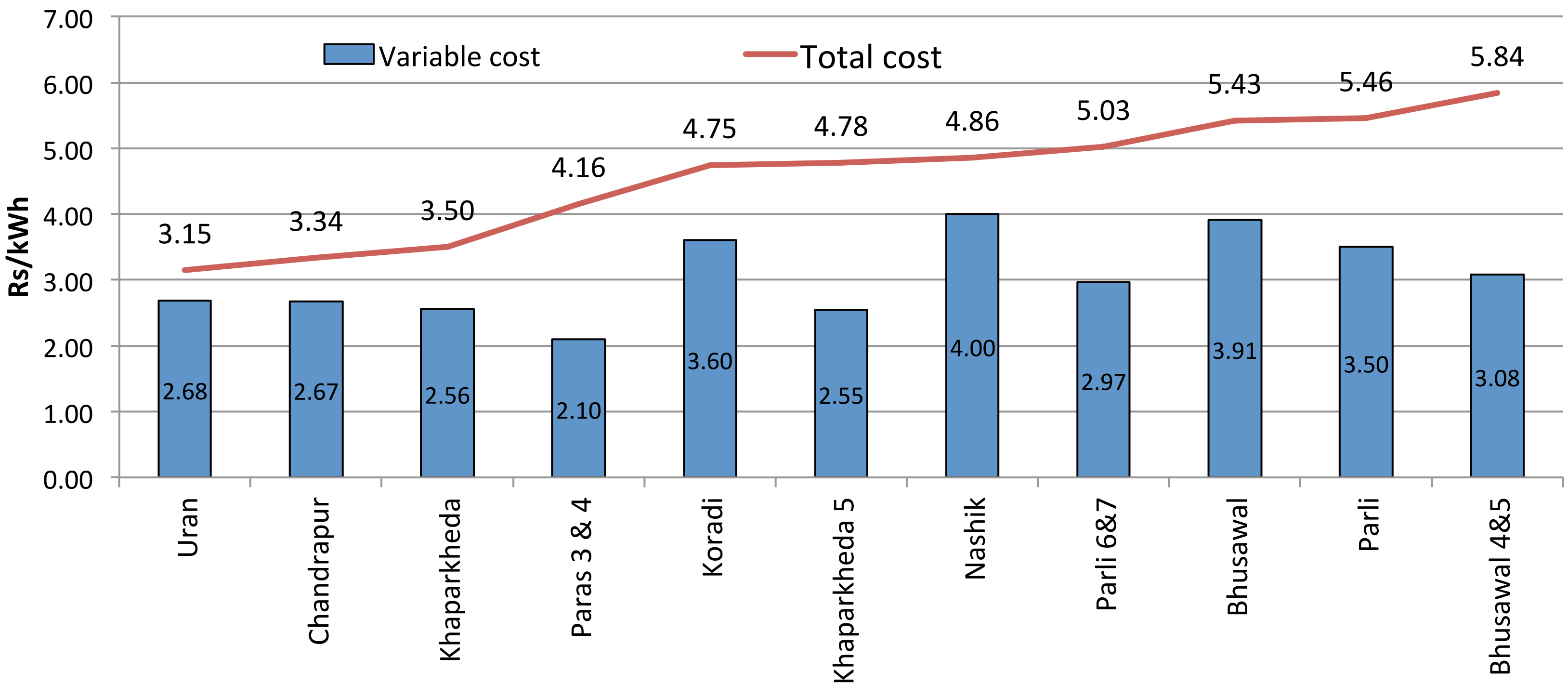
Large discrepancies regarding quantum and cost of power to be procured from MSPGCL

Particulars	MSPGCL estimates			MSEDCL estimates		
	FY14	FY15	FY16	FY14	FY15	FY16
Installed capacity (MW)	11137	10819	11695	9980	13210	13210
Power purchase (MU)*	40713	41645	54879	41336	44398	51087
Cost (Rs. Cr)*	16559	18359	*21777*	14862	16891	*16446*
Per unit cost (Rs./kWh)	4.07	4.41	3.97	3.6	3.8	3.22

Particulars	FY14	FY15	FY16
Increase in power purchase cost if MSPGCL estimates are used/approved by MERC (Rs. Cr)	*1697*	*1468*	*5331*

- If MSPGCL estimates are used for FY16, there will be a power surplus of 16,346 MUs but as per MSEDCL there will be a power surplus of 13,200 MUs.
- If MSPGCL estimates for cost are used then ARR for FY14, FY15 and FY16 will increase by Rs. 8496 Cr
- No clarity regarding assumptions used for deciding when the upcoming plants will be commissioned and hence the extent of surplus being available

Treatment of MSGPCL power stations while determining Merit Order Stack for Cross Subsidy Surcharge determination



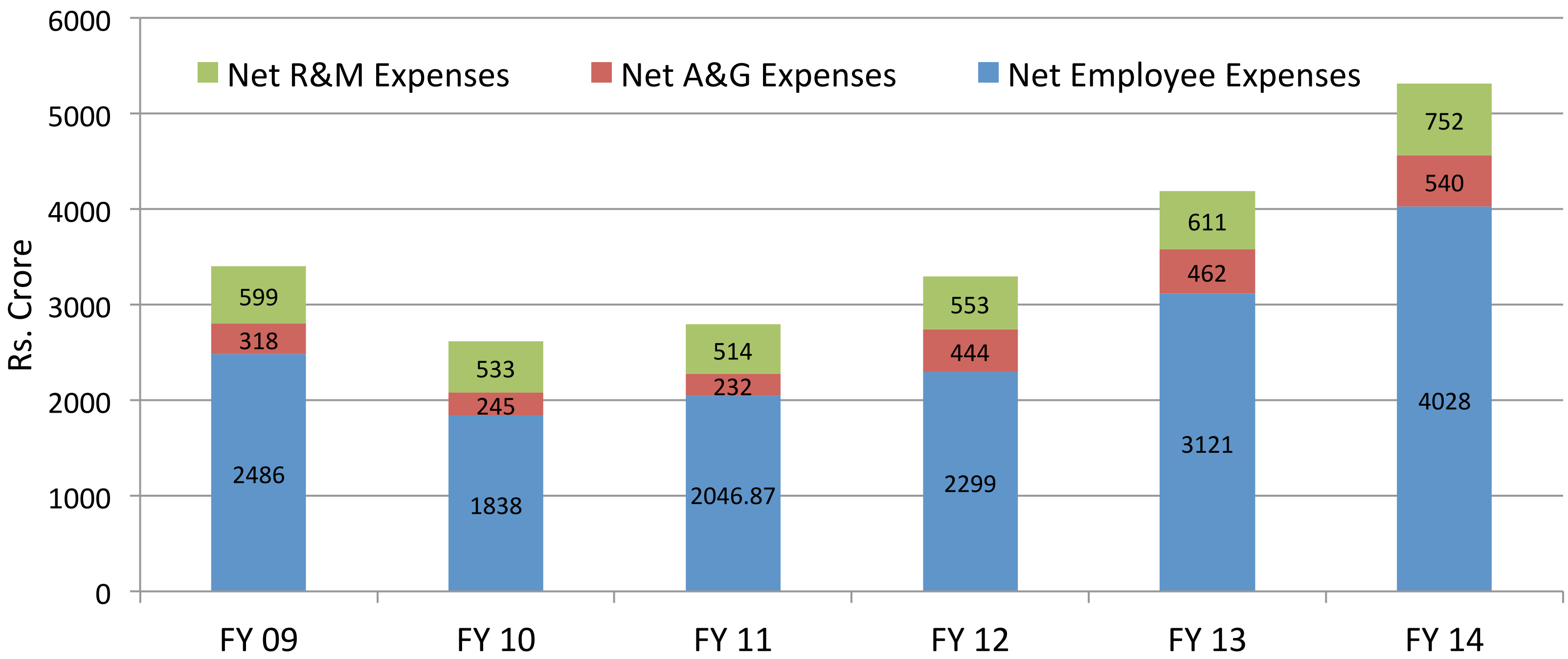
- All MSPGCL stations are lumped together and their average cost is considered
- This is not a true depiction of the merit order especially since there is a large variation in the cost of generation across MSPCGCL stations
- This is also not consistent with the approach envisaged in open access regulations

Potential tariff burden on account of 'compensatory tariff'

Projects	Case No.	MW	Compensatory charge	Annual tariff Impact in Rs Cr
Adani Power Maharashtra Ltd	68 of 2012 and 63 of 2014	800	1.01	566
Adani Power Maharashtra Ltd	189 of 2013 and 140 of 2014	2285	1.95	1093
Indiabulls Power Limited	154 of 2013 and 147 of 2014	1200	1.55	391

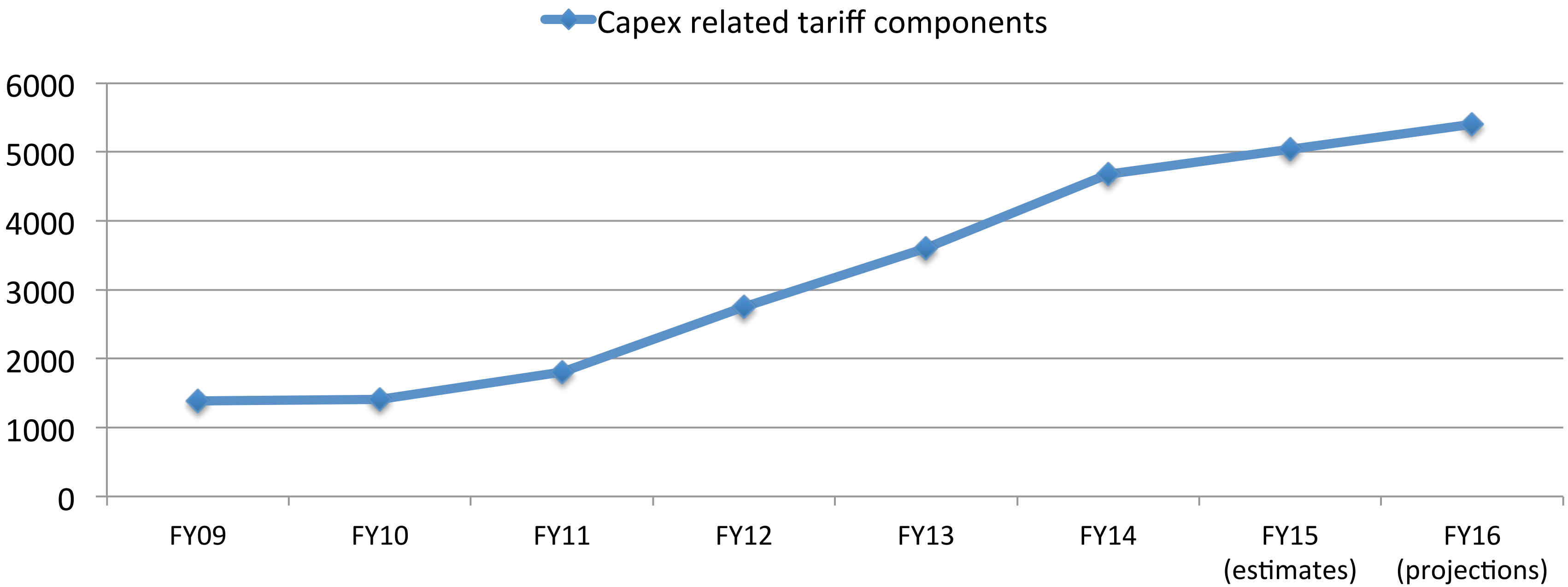
- For several projects contracted based on competitively bidding, MERC has allowed increase in tariff over and above the PPA agreed rates
- These decisions of MERC are presently being challenged before the Appellate Tribunal for Electricity
- **If these costs are allowed, additional tariff burden of Rs. 2,050 Cr per year will be imposed on MSEDCL consumers**

Lack of information of crucial parameters for operational efficiency…1



- Operation and maintenance related costs have not been treated as controllable parameters
- No analysis or explanation regarding the sharp increase in employee expenses

Lack of information of crucial parameters for operational efficiency…2



- Steep increase in capital expenditure related costs since FY 2012
- No analysis or evaluation of how this has contributed to improvements in supply and service quality, if any

Obfuscation and confusion regarding real tariff increase

Sr no	Order	Date	Comments	Tariff increase (Rs. Crore)	
				MSEDCL demanded	MERC approved
1	**Case no 19 of 2012**	16-Aug-12	Consolidated revenue gap for the 3 years, FY 2010-11, FY 2011-12 and FY 2012-13, and the impact of other claims	7,623	6,921
2	**Case No. 95 of 2013**	5-Sep-13	Suo-motu determination of supplemental charges of MSEDCL	-	5,432
3	**Case no 38 of 2014**	3-Mar-14	Interim Order for approval of truing up for FY 2011-12 and FY 2012-13, and other costs.	6,984	5,022
4	**Case no 38 of 2014**	11-Jun-14	Final order in the above matter. Regulatory asset of Rs. 1639 Cr was created	9,312	6,661
			Total	*14,607*	*19,041*

- Repeated true-ups of same financial years
  - Order dated 11 June 2014 allowed Carrying Cost on Deferred Recovery of Rs. 1,051 crores, which has been calculated considering amounts pertaining to orders dating from 2008 onwards
- Suo-motu order in case no 95 of 2013 has been set aside by the Appellate Tribunal
  - No clarity regarding treatment of costs that have been allowed through the said order

Ambiguity regarding real extent of tariff increase

- Revenue gap is built on the assumption of continuation of revenue subsidy but does not say so explicitly:
  - Since January 2014 revenue support of Rs. 606 crore per month was given to the MSEDCL
  - This was in addition to the annual revenue subsidy of around Rs. 4,432 given for agriculture and power-loom consumers
  - This revenue support avoided the tariff increase imposed by the Suo-order in case no 95 of 2013 and on account of case no 38 of 2014

- The revenue subsidy of around Rs. 7,200 Cr effectively ensured that the consumers did not have to pay for the tariff increase approved by MERC since August 2012

- However, this additional revenue support has been withdrawn and hence real impact in terms of tariff increase that will be felt by the consumers on account of proposed revision 27% and not 8% as being projected
  - This crucial information is not explicitly mentioned in the petition

Petition does not serve purpose of meaningful public consultation

- Serious flaws regarding performance estimation
  - Sales projection, cross-subsidy surcharge determination
- Lack of clarity regarding crucial assumptions
  - MSPGCL capacity addition
  - MSPGCL generation: cost and quantum
  - Surplus estimation
- Lack of information regarding crucial operational information:
  - Reasons for the steep increase in employee and capital expenditure related costs
  - No analysis regarding compliance with standards of performance and/or supply and service
- Ambiguity regarding subsidy support and hence real extent of tariff impact itself is not clear

Neglect of supply and service quality concerns

No analysis from MERC regarding supply and service quality related concerns

Supply quality Indicators	FY 11	FY 12	FY 13	FY 14
Instances where voltage was outside specified range	18362	6852	5301	8415
SAIFI (no.)	not reported	10.33	8.26	12.05
SAIDI (minutes)	not reported	76.72	85.3	82.36
CAIDI (minutes)	not reported	7.43	10.33	6.84

- No analysis of what the reliability indices mean
- Till date no public process regarding compliance with standards of performance has been undertaken
- Consumers are routinely denied compensation approved by CGRF and Ombudsman by simply challenging these orders before the High Court
- Even in the absence of any stay order from High Court, payment of compensation is not made
- MERC is well aware of this issue but has chose not to take any concrete action against such practices
- Several progressive suggestions were made by various consumer representatives when the amendment of standards of performance regulations was undertaken
  - Neither were these suggestions accepted nor any reasons have been given for not considering them

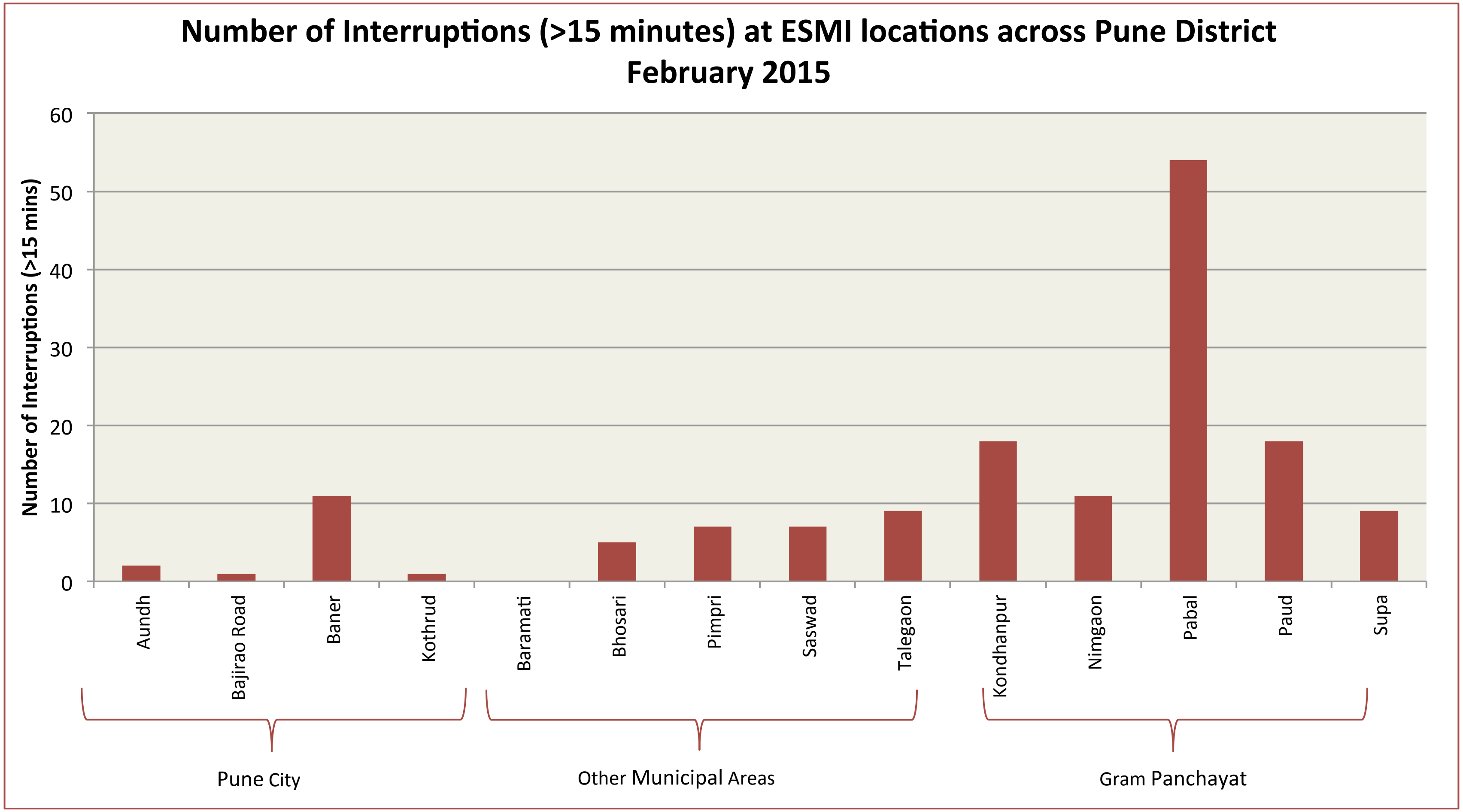
No analysis and/or monitoring of supply availability and load shedding by MERC

- Till date MERC has not published any analysis based on the hourly feeder data published by MSEDCL

- No tracking and/or reconciliation of load relief and actual supply to agriculture consumers

- Indicative data shows disparity between even urban and peri-urban areas

Indicative data regarding supply quality



Average hours lost due to interruption at ESMI locations across Pune District
February 2015

Pune City : 4 hours
Other Municipal Areas : 6 hours
Gram Panchayat : 30 hours

Precarious financial position of MSEDCL and possibility of further losses

Shift to Open Access

Indicative Revenue loss (in crores) on account of Open access in FY16	Current Tariffs	Proposed Tariffs
Revenue Loss from sales migration	2804	2741
Revenue Gained from various charges		
Demand Surcharge	2	5
Standby Charge	62	66
Cross Subsidy Surcharge	420	1241
Wheeling Charges	73	301
Net revenue loss	**2246**	**1128**

- Modest shift of 11% of sales from HT Industrial Category, 13% of sales HT Commercial consumers and 1% of sales from other HT categories in FY16 to open access from non-renewable generation sources can impose serious financial burden

→ With increased open access, MSEDCL is bound to make a net revenue loss despite the imposition of various charges as per current tariffs and also in the case of higher wheeling and CSS charges as proposed by MSEDCL

Other reasons for sales migration

- Increased demand for renewables
  - increasing viability of renewable energy options, consumers can choose to obtain supply via open access with a reduced cross subsidy surcharge or via roof top systems through net metering

- Increased switching to captive sources:
  - If 4% of HT Industrial sales,3% of HT Commercial sales and 0.4% of HT sales from other categories shift to sourcing power from captive power plants, the net revenue loss to MSEDCL could be Rs. 954 Cr

- Proposed Electricity Act Amendment bill 2014
  - Mandated migration of all +1MW cross subsiding consumers away from MSEDCL
  - Possibility of cross-over for high paying consumers with a connected load of less than +1 MW to new supply licensees
  - Proliferation of Renewable Energy Suppliers and Generators providing power at rates viable to cross subsidising consumers without the imposition of CSS

Lack of clarity in demand and estimated generation which can lead to great variation in surplus

Surplus of FY16	MSEDCL projections	Scenario: MSPGCL trend based performance, sales migration	Scenario: MSPGCL projections, sales migration
Power Purchase from MSPGCL	51087	49864	54879
Surplus for FY16	13200	12185	16346
Migration of sales	0	4358	4358
Net Surplus	13200	16543	20704

- Surplus estimation is dependent upon:
  - Sales projections and
  - Capacity addition plans
- Since MSEDCL and MSPGCL have different assumptions regarding capacity addition plans, estimation of surplus can differ significantly
- Further, how one assumed the rate of migration of HT sales will impact surplus availability

Sale of surplus and impact on revenue

FY16	Without sales migration	With sales migration
Quantum of surplus (MU)	13200	17558
Average cost of power purchase (Rs./kWh)	3.48	3.48
Average rate to recover cost (Rs./kWh)	3.98	4.06
Net revenue loss from sale of surplus power at APPC (Rs. Cr)	660	1018

- In order to recover the cost of surplus power, MSEDCL will need to sell the power at Rs. 4.06/unit
  - Surplus quantum is based on MSEDCL estimates
- This rate will increase with the quantum of surplus and will be even more if estimates assuming MSPGCL performance estimates
- Even if MSEDCL manages to sell surplus power at average cost of power purchase, there will still be significant loss in revenue due to the high cost of power purchase
- Such a revenue loss as estimated in the table above should not be passed onto consumers.

Scale of the problem

Particulars (Figures in Rs. Cr)	Current Tariff	Proposed Tariff
Revenue Gap projected by MSEDCL for FY 14, FY 15 and FY 16	3,442	3,442
Regulatory Asset	1853	1853
Increase in revenue needed to offset even 50% of the costs projected by MSPGCL for FY14 ,FY15 and FY16	4249	4249
Revenue loss from sale of surplus power at Avg cost of power purchase in FY 2016	1018	1018
Revenue gap without considering sales migration	10,562	10,562
Revenue loss from migration of sales to :		
Open Access	2511	1484
Captive Generation	914	897
Renewable energy sources	132	126
Additional impact if costs due to compensatory tariff are allowed for FY 16	2050	2050
Potential accumulated losses	**16,169**	**15,119**

Recovering such a large revenue gap is unsustainable

- Increase in tariffs:
  - Tariffs are already quite high for MSEDCL consumers.
  - MSEDCL would need to increase tariffs by 34% from the current level which is unsustainable.
  - High tariffs would force more sales migration accentuating the problem.

- Creation of a regulatory asset:
  - May avert tariff shock in near future but will not help in addressing MSEDCL's financial position as seen in states like Tamil Nadu, Uttar Pradesh and Rajasthan whose distribution companies are buckling under the pressure of the financial loss burden
  - Accumulated losses and its carrying cost will only increase with every year.

- Subsidy support from State Government:
  - Estimated MSEDCL net revenue gap is 5 times the State Budget revenue gap in 2013-14 and is as high as 1.3% of State Gross Domestic Product.
  - GoM has already committed to provide about Rs. 5,500 crores as subsidy in the budget for FY16
  - Additional support to meet this revenue gap would be as high as almost 2/3rd the fiscal deficit of the state in 2013-14.

THANK YOU

Prayas Energy Group

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