

*Final True Up for FY 15-16 & FY 16-17,  
Provisional True up for FY 17-18  
Mid Term Review for FY 18-19 to FY 19-20*

## **Case 195 of 2017**

**Submission by Prayas (Energy Group)**

Public Hearing at Pune

Before the Maharashtra Electricity Regulatory Commission

9<sup>th</sup> August , 2018

# Outline

- MYT: background and context
- Power purchase related issues
- Agricultural sales estimation and losses
- Capex, O&M, and supply & service quality
- Tariff design
- PEG Suggestions

# Why MYT?

## Objective

- Provide regulatory certainty to consumers, utilities and investors
- Minimise perception of regulatory risk
- Facilitate sound planning practices
- Address risk sharing mechanism between utility and consumers
- Improve operational efficiency and reduce tariff

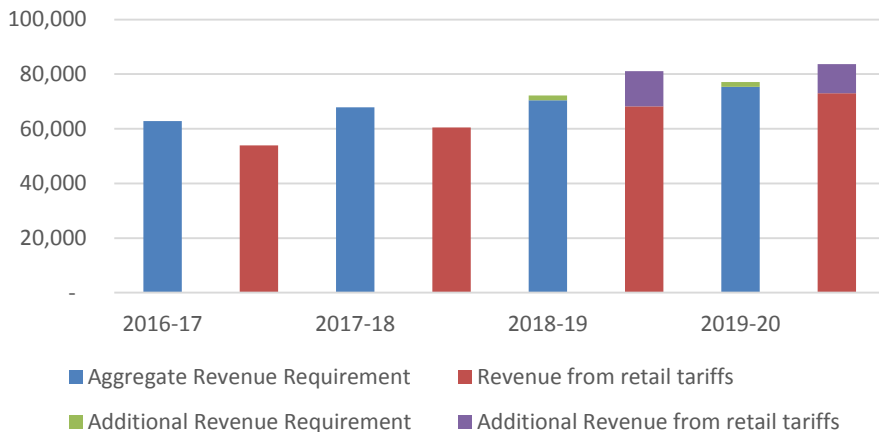
## Necessary Elements

- Reliable baseline data
- Rigorous and scientific demand forecast
- Long term power purchase, capital expenditure plans based on analytically sound assumptions
- Continuous monitoring and evaluation of performance trajectories
- Co-relating supply and service quality and financial performance of the utility

The current MYT process has not been able to achieve the objective of better planning, and regulatory certainty for either the consumers or the licensees.

# Gist of the present proposal

Particulars	Rs. Cr
Revenue gap for FY 16	5,546
Revenue gap for FY 17	6,704
Revenue gap for FY 18	5,420
Total revenue gap being carried forward (FY 16- FY18)	17,670
Carrying cost on gap from FY16- FY18	3,880
Claims by MSEDCL from previous periods	1,411
Revenue gap to be recovered in FY19 and FY20	22,961
<i>Estimated revenue gap for FY 19, FY 20 with proposed tariffs</i>	<i>3,567</i>



- Significant increase in tariff over and above current ARR has been proposed to meet pending payments, claims, and past years' revenue gap with carrying cost.
- For FY19 and FY20, MSEDCL has proposed additional Rs. 23,658 crores over and above approved tariffs.
- MSEDCL's financial position is precarious
  - Working capital loans at Rs. 11,330 crores in 2017-18.
- Even with this increase in tariffs, revenue gap may get carried forward for future periods due to:
  - Increase in costs
  - Non-realisation of anticipated revenue due to sales migration

# Current MYT process

- **Conducted as per the MYT regulations, 2015**
  - Provided trajectories for cost and performance norms
  - Additional costs on account of power purchase to be recovered via fuel adjustment charges and annual adjustments for transmission costs
  - All other adjustments in costs to take place during the Mid-Term Review.
- **Tariff order issued November 2016**
  - 4 year MYT Period : 2016-17 to 2019-20
  - For the first time, tariffs for 4 years were determined in one order
- **Review petition by MSEDCL**
  - Filed on 16<sup>th</sup> December 2016
  - Sought relief for an additional Rs. 24,200 crores
  - On many issues, MERC decided to relook at issues during the Mid Term Review Process

# POWER PURCHASE PLANNING

# Power purchase planning

- One of the most crucial parameters, accounts for more than 70% of the total cost
  - Power surplus situation, but large part of the contracted capacity unavailable when needed
    - Short-term power purchase at price higher than the ceiling rate
    - Potential commitment to sell power to BEST (both RTC and peak) for the next few years
  - Coal shortage, need for greater clarity
    - Are there any shortcomings in coal procurement practices of generating companies?
    - Why has the flexibility in coal usage not resulted in improved coal availability or cost savings?
    - MSPGCL is simultaneously undertaking case-4 bidding for allocating its share of coal to other generators
- Serious implications for tariff and supply quality
- Payment of fixed costs and cost of short-term power purchase
  - Possibility of load-shedding

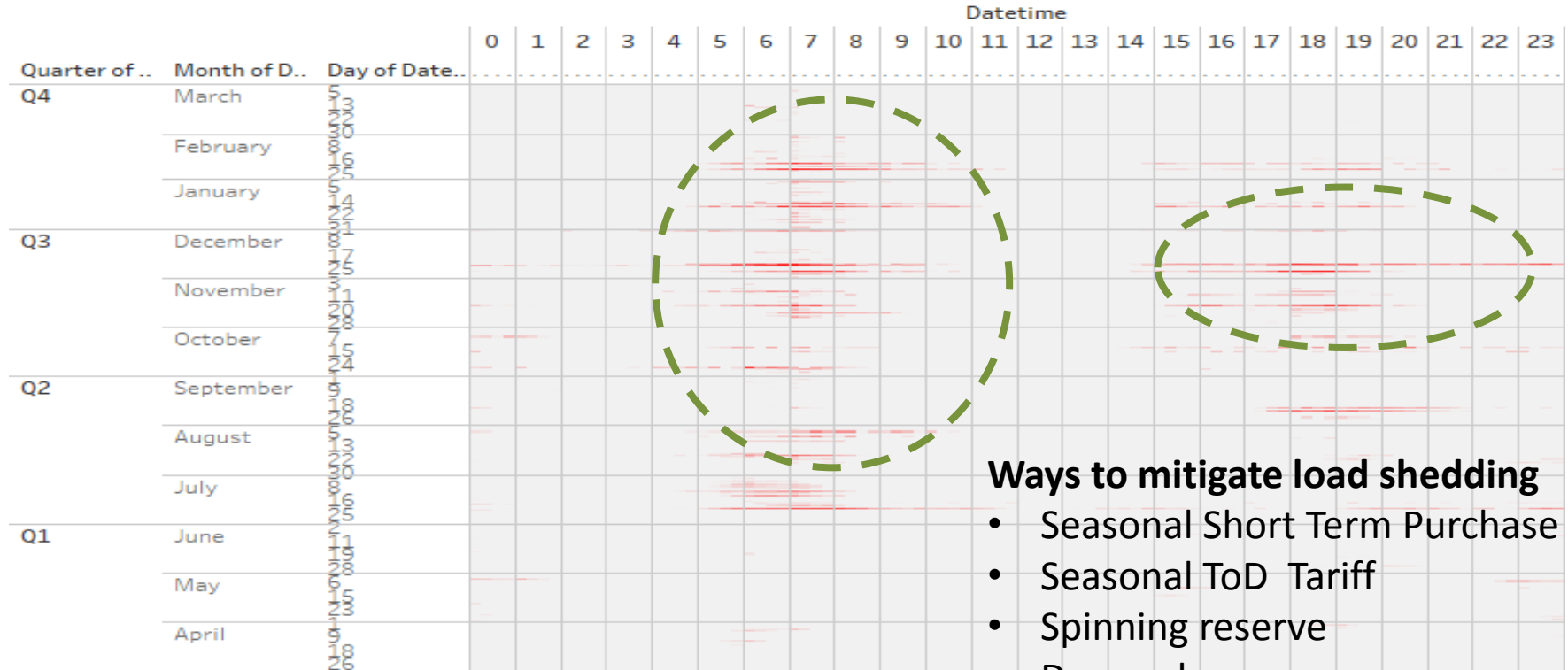
# Planning under uncertainty

- Need for better estimation of seasonal and diurnal variation in shortage and surplus
- Advanced tools can be used to simulate grid operation, unit commitment and economic dispatch, etc. to minimise system cost within specified constraints. These could be used to develop scenarios to analyse uncertainties such as:
  - Changes in Load: MUs and profile due to consumer migration
  - Changes in generation characteristics: technical minimum, ramp rates, availability and their implications for costs and scheduling
  - Different levels of RE and thermal capacity addition
  - Role of storage, open cycle GT, demand-side management, etc. in the changing grid context



# PEG analysis using production cost optimisation tool

## Load Shedding Distribution for FY 22

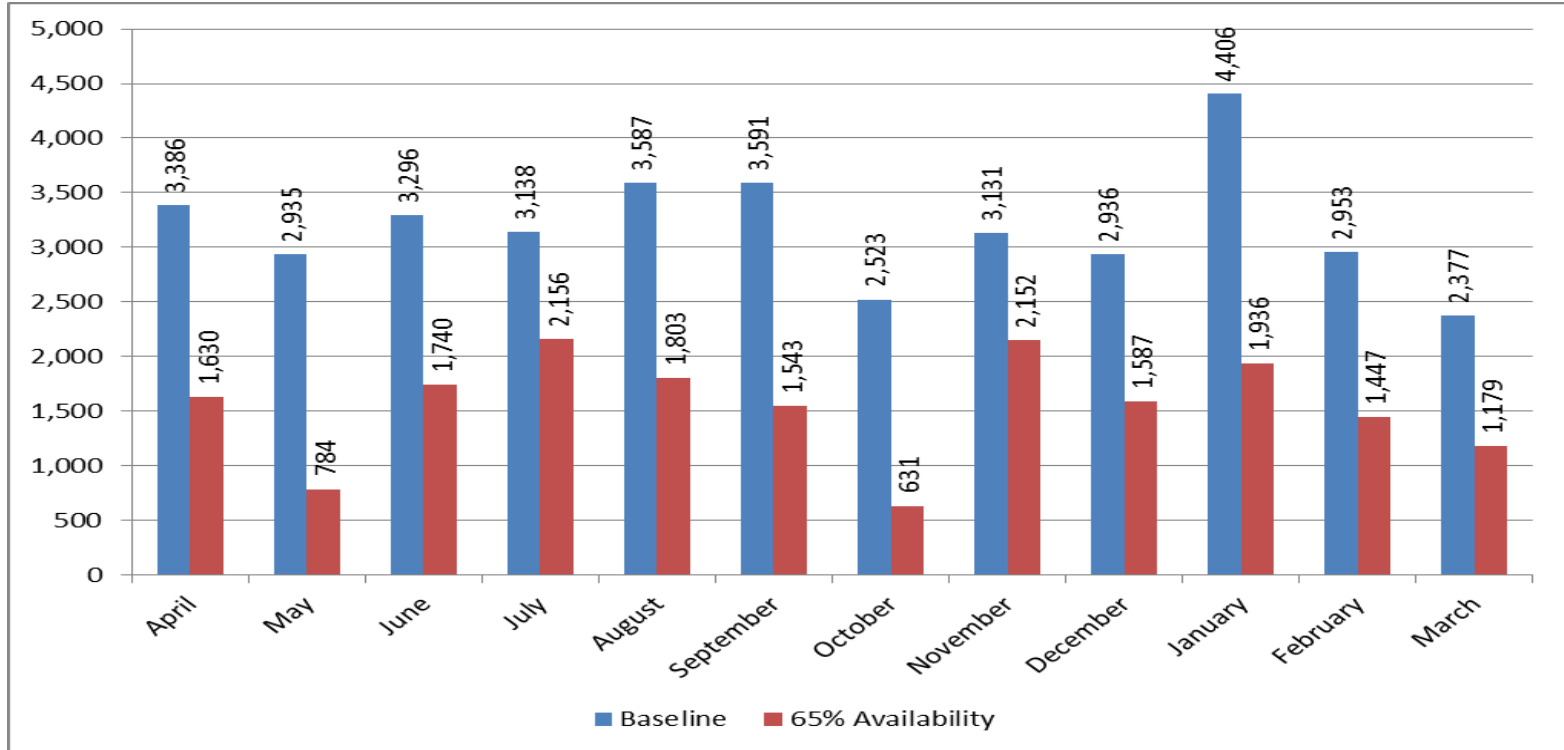


### Ways to mitigate load shedding

- Seasonal Short Term Purchase
- Seasonal ToD Tariff
- Spinning reserve
- Demand response

# PEG analysis using production cost optimisation tool

- Surplus MUs (FY 2022)
- Better insights about implications for medium / long term sales contracts



# PEG submission

- Need to think of innovative ways to ensure that backed down capacity is available when needed. Some suggestions for this could be:
  - Fixed cost of units that are not considered for generation due to high energy charges should be allowed only if these units are able to declare full availability during any three month peak season declared by MSEDCL
  - Since the period is known in advance, the generating companies should ensure fuel availability at these stations during this time.
- Coal supply and availability
  - As per news report MSPGCL has allocated share of its coal to third party generation units under Case-IV bidding. The bidding was conducted on reverse auction of the highest variable cost units of MSPGCL. However, in case of coal shortage, MSPGCL units with variable costs lower than the capacity discovered under the reverse auction may get backed down. This would not be optimal. Therefore, till the time the generating companies continue to claim any coal shortage related issues, no coal diversion to third parties under Case-IV bidding should be allowed without an explicit regulatory approval.
  - MERC should undertake an independent and detailed analysis of whether the flexibility in coal supply management allowed to the generating companies is indeed leading to cost savings and if not, suggest measures that need to be undertaken to ensure the same.

# **AGRICULTURAL SALES ESTIMATION**

# Agriculture demand estimation and Losses

- Commission's finding in case no 48 of 2016
  - *There is no convincing justification for the large increase of 23% in AG Sales and 19% in the AG Index, in spite of only 4-5% growth in the number of consumers and Connected Load in FY 2014-15 over the previous year. At the same time, the Commission notes that the detailed study and findings of the Agriculture Consumption Committee would be available by March, 2017...However, awaiting the findings of the Committee would lead to delay in the recognition of a more realistic present level of Distribution Loss and consequently defer the actions required to reduce it. (Emphasis added)*
- In it's the same order, MSEDCL has stated as follows in response to several objections and suggestions pertaining to distribution loss estimation:
  - *A Committee of experts has been constituted to look into the actual as against the billed Agriculture load and Agriculture consumption. The Indian Institute of Technology (IIT), Mumbai has been appointed to assist the Committee for carrying out the study. Based on the report of the Expert Committee and directives from the Commission, appropriate action would be taken.*
- Two years since the MYT order, the said agriculture consumption committee report is still not finalized.

# Studies undertaken by MSEDCL for estimating agriculture consumption are not rigorous and do not address the key concerns that have been raised in this regard in the previous proceedings

- In the present petition, MSEDCL has proposed two methodologies for estimating agricultural consumption. It is a welcome step that MSEDCL has at least made an attempt at assessing unmetered consumption using a different approaches, however there are several lacunae in the two studies submitted by it:
  - MSEDCL Study based on EHV substation data:
    - The study considers EHV input and estimated agriculture sales. Considering that circle level agricultural sales are estimated based on input energy, it is expected that there would be a strong correlation between the EHV input data and the estimated agriculture consumption. Further, agriculture feeder is itself defined based on estimated agriculture consumption.
    - Considering this, the correlation between the two does not provide any new information or insight regarding the actual consumption pattern at a given circle.
    - Taking into account the nature of the agriculture sales estimation, the EHV input data needs to be analysed in a detailed and disaggregated manner. For this purpose consumer category-wise consumption profiles of all the consumers linked to a given EHV feeder would need to be analysed. Further, such disaggregated data should then be correlated with other factors such as, agro climatic zones, cropping patterns, irrigation infrastructure, groundwater levels, etc. This has not been done in the MSEDCL study.
    - MSEDCL analysis is based on half yearly data and hence seasonal variations may not be captured adequately.
  - MSEDCL AG sales estimation based on rainfall and agricultural production
    - The analysis presented by MSEDCL claims two major findings: a) there is significant correlation between Rabi crop and agricultural sales, and b) rainfall has negative correlation with agricultural sales
    - There is no analysis or comparison of disaggregated regional data regarding rainfall, cropping pattern and agricultural sales.
    - If MSEDCL claims regarding the steep increase in agriculture sales are to be believed, then the same should reflect in corresponding changes in agricultural GDP, especially the GDP of irrigated crops. However, the study has not made any attempt to correlate these aspects.
  - In the proceedings related to case no 48 of 2016, significant discrepancies between the agricultural sales reported by MSEDCL for its various circles had been highlighted. The prima facie contradiction is that MSEDCL has reported high hours of operation in areas such as Nandurbar, Parbhani, Yoetmal, Beed, Latur, etc. which are draught prone in comparison with water rich and better irrigated areas such as Kolhapur, Sangli and Satara where water intensive crops are grown. None of the studies presented by MSEDCL throws any light on this crucial issue.
- Considering the various shortcomings listed above, it would be inappropriate to draw any conclusions based on the studies submitted by MSEDCL.

# Need for a rigorous and credible methodology

- Estimation of unmetered agricultural sales has been a contentious issue ever since the establishment of the MERC. In the past few years, wide variations have been reported in the unmetered sales estimates. During the regulatory proceedings before the MERC several serious issues there have been highlighted by different stakeholders from time to time, many of which have not been resolved till date.
  - Given this history and significance of the issue, it is imperative to establish a credible and robust methodology for this purpose.
- We submit that it is the **Commission's responsibility** to provide such an independent and credible mechanism. For this purpose, the commission should do the following:
- Undertake a detailed state-wide agriculture pump census to estimate the number of connections and connected load.
  - Undertake a statistically sound survey for estimating consumption data. This data should be collected from all the districts and across a year to capture regional and seasonal variations. The survey should also capture data that would allow correlation with relevant factors such as region-wise cropping patterns, groundwater availability, irrigation infrastructure, landholdings, etc.
  - Process: the MERC should publish terms of reference for this exercise and seek public comments on the same. The report and its findings should be finalised based on public consultation. All the data should be in public domain and like NSSO data, it should be available to the public for further research analysis.
- We also submit that till the time that such a rigorous, credible and independent exercise is not undertaken, the agricultural sales and distribution loss trajectory approved by Commission in case no 48 of 2016 should continue to be followed.

# **CAPEX, OPEX, AND SUPPLY & SERVICE QUALITY**



# Capital Expenditure

- Reconciliation of GFA due to reassessment of capitalisation
  - MSEDCL has sought following adjustment of GFA due to change in capitalisation

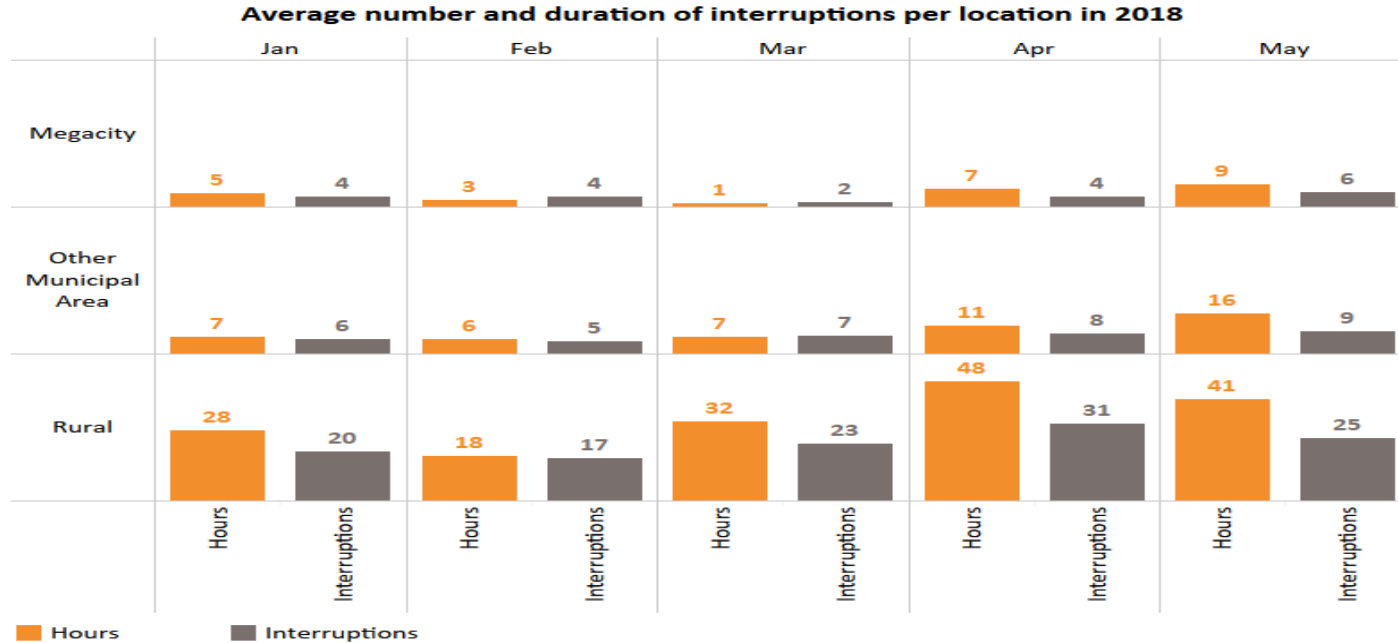
Adjustment due to different in capitalisation approved for	Amount (Rs. Cr)	Commissions decision in Case 176 of 2016
2007-08	815	Disallowed in Case 116 of 2008
2009-10	208	Rejected in Case 21 of 2012
2011-12	112	Allowed in Case 38 of 2014

- These costs were disallowed on account of non-submission of cost benefit analysis.
  - Given this context, the commission should first evaluate whether such post-facto change can even be considered. If indeed the proposals were corrected and later implemented, it is not clear why these costs were not claimed in the past tariff processes.
- **Accountability for capital expenses**
    - In Case 176 of 2016, MSEDCL stated it will provide details for **policy for asset verification** during MTR process, but this has not been provided. The MERC should direct MSEDCL to submit this as soon as possible.
    - Since there is a link between capital expenditure and improvements in supply and service quality, it is important to evaluate effectiveness of capex projects in terms of the claimed cost-benefit analysis. For this purpose, we submit that MERC should set-up process for third party evaluation of capex projects implemented by all distribution companies and their cost –benefit analysis.

# Operation and Maintenance

- 2015 MYT regulations
  - Has linked O&M norms to inflation and treated as a controllable cost
  - This is a progressive step towards greater efficiency
  - Regulations amended in 2017 to change estimation on O&M for base year and to change inflation rates applied. This is based on repeated petitions by MSEDCL
- O&M trends show that actual O&M is much lower than the norms
  - There is a Rs. 900 – Rs. 1000 crore difference, a trend indicative of improved operational efficiency
  - This variation should be factored in while deciding the O&M benchmarks for next control period.
- Improvements in operational efficiency do not seem to be translating into improved supply and service quality:
  - Metering and billing issues continue to dominate consumer grievances
  - Average annual growth in billing complaints – 38% between FY15 and FY18 (As per Quarterly SoP reports)
  - 78% of total complaints unaddressed as on March 2018 (As per Quarterly SoP reports)
- The Commission should ensure that savings in O&M expenses do not come at the cost of repair and maintenance related work.

# Concerns regarding supply quality



Data based on Electricity Supply Monitoring Initiative from 35 locations in Maharashtra – [www.watchyourpower.org](http://www.watchyourpower.org)

As the data highlights, it is not just rural areas, but even the urban and peri-urban areas are affected by power cuts and interruptions.

# PEG submission regarding supply and service quality related issues

- It is important to ensure proper accountability for supply and service quality. In this regard, we submit the following:
  - In order to ease billing operations, MSEDCL can consider providing rebates to consumers opting in for e-bill.
  - During the tariff process, a number of consumer raise issues pertaining to their individual experience regarding supply and service quality. This is because there is no forum to raise these issues. Therefore, the commission should at least once in a year hold public hearings on supply and service quality related issues to provide consumers and MSEDCL a fair hearing.
  - Additionally, the MERC can also consider implementing the provision of automatic compensation in case of non-compliance with some of the common parameters of standards of performance. Faults such as fuse-off, line breakdowns, DT Failure, etc. can be tracked through technology and compensation can be paid without manual intervention. This mechanism ensures that there is more pressure on the DISCOM to ensure prompt service and better supply quality. As per Section 57 (2) of the Electricity Act, 2003, the DISCOM has to be provided a reasonable opportunity to be heard while determining compensation. The annual public hearing on supply and service quality mentioned above can also provide DISCOMs with the reasonable opportunity of being heard in accordance with Section 57 (2) of the Electricity Act, 2003. Any adjustments based on reasonable claims can be made subsequent to this order. In case automatic compensation is not provided, SERC can initiate suo-motu proceedings to investigate the matter and provide appropriate directions and penalties.
  - The commission should constitute a process to undertake party independent audits of compliance with the standards of performance by all the distribution licensees in the state. The results of such an audit can be published and discussed during the public process pertaining to supply and service quality.

# Proposed tariff increase

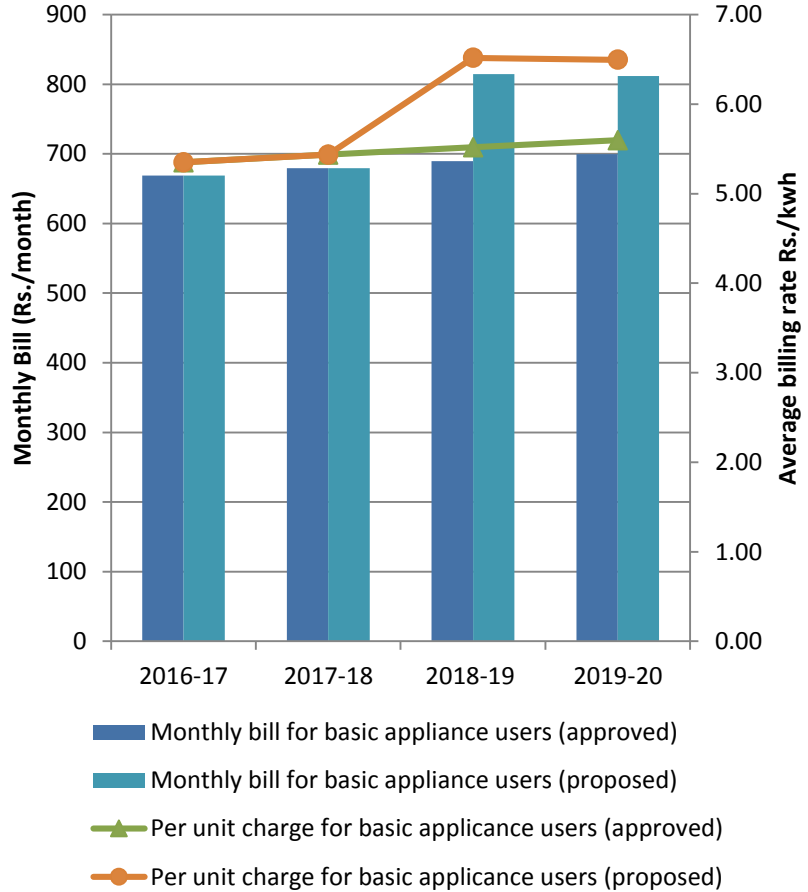
Consumer categories	Actual Average Billing Rate (ABR) per	% Increase in ABR as	Average Tariff increase		Tariff increase sought over and		Average ABR
	2016-17	2017-18	approved by MERC	2019-20	above MERC approved ABR	2019-20	in 2019-20
Agriculture LT	2.59	13%	13%	5%	<b>27%</b>	<b>21%</b>	4.21
Commercial HT	11.88	5%	9%	1%	<b>22%</b>	<b>21%</b>	16.45
Commercial LT	10.82	2%	0%	0%	<b>27%</b>	<b>26%</b>	13.88
Industrial HT	7.03	2%	12%	0%	<b>21%</b>	<b>20%</b>	9.65
Industrial LT	7.22	-3%	13%	1%	<b>33%</b>	<b>32%</b>	10.54
Domestic	6.25	3%	5%	2%	<b>18%</b>	<b>16%</b>	7.98

- Increase in ABRs due to projected increase in fixed and variable costs, but largely due to increase in fixed charges
- With proposed tariffs, commercial consumers will be paying an average of Rs. 13-14/unit and Industrial consumers will be paying Rs. 10-11/ unit
- Solar + storage options viable at this rate for many consumers
- Tariff for small consumers also hiked significantly which would hamper necessary and income generating consumption for small users.

# TARIFF DESIGN

# Domestic tariffs

- Significant increase in domestic tariffs in MSEDCL proposal
  - Fixed charge for 0-100 slab doubled and 101-300 slab tripled
  - 8% increase in fixed charge approved by MERC for 2018-19
  - Variable charge increase by 3% and 7% for 0-100 and 101-300
  - Less than 1% increase in energy +wheeling charge approved
- This could have several impacts on the bills of consumers with basic consumption as shown in the adjoining figure.
- EMARC-Monitoring and Analysis of Residential Electricity Consumption
  - PEG initiative to understand load patterns, appliance use in residences
  - Based on data from advanced IoT metering systems in survey households
  - Currently has data for 40 households in Pune city for the month of June
  - Data categorised based on appliance ownership
  - Sample of households using only **basic appliances** (TV, Fridge, Lights, Fans) with an average of 3 rooms consumes an average of **125 units per month**



# PEG suggestions for domestic tariff design

## Shortcoming in proposed approach

- Increase in fixed charges for small consumers undesirable
  - Dis-incentivises efficient energy use
  - Reduces accountability of supply quality
- Consumption-linked increase in fixed charges undesirable
  - Unfair to consumers who consume marginally > lower limit for slab
  - Can lead to meter tampering

## PEG suggestions

- Increase in fixed charges for domestic consumers can be based on connected load
  - Tariff slabs can have load based segregation of consumers
  - Fixed charges for each load slab and increase telescopically
  - Slab-wise fixed cost should also reflect for general category consumers
- Protection of General Category from tariff shocks
  - LT Industrial, commercial, domestic consumers using <3600 units/annum should be charged domestic tariffs of appropriate slab
  - Tariff increase for these consumers should be as per the tariff approved by MERC (Rs. 65/ mo.- FY19 ,Rs. 70/mo.- FY20.)
  - Wheeling plus energy charge growth to be linked to inflation factor
- Increase in intra-category cross subsidy
  - Tariffs for consumers using > 300 units per month can have higher increase in tariff
  - This will increase intra-category cross subsidy



# Rooftop solar and net-metering

- Changes proposed in the petition:
  - limiting rooftop capacity to 15% of DT capacity from existing 40%,
  - limiting capacity to 50% of the contract demand/sanctioned demand
  - Capping generation cumulatively to 90% of electricity consumption at the end of relevant billing cycle.
  - Levying new wheeling charge of Rs 1.26/kWh on rooftop LT consumers
  - Suggested move towards gross metering from net-metering.
- Need to understand rooftop solar demand
  - MSEDCL should report number and size of such applications, systems installed, in pipeline wherein go ahead given, solar generation being used for MSEDCL RPO etc., on their website
  - Further to highlight the issues it is facing, MSEDCL should conduct a study to highlight how rooftop solar currently affects its operations and the grid.
- Rooftop solar and metering still in nascent stage
  - Changes in current net metering and tariff regime to take place once load for net metered consumers crosses, say, **500 MW**
- When such demand is significant, MERC can initiate a public process to revise the regulations. For this purpose, it should:
  - Publish a white paper detailing impact of such arrangements, possible tariff and regulatory changes needed to address emerging realities
  - Such a discussion paper should be publicly available
  - Based on the discussion paper, MERC can conduct a public process to assess need for changes in the regulations

# PEG Suggestions: Rooftop solar and net-metering

For the purpose of the Discussion paper, following proposals can be discussed along with MSEDCL's.

- ToD based metering for net metered residential consumers
  - Applicable for residential consumers with connected load > 2 kW. Existing arrangement to continue for others
  - Additional cost of ToD meter is only about Rs. 4000
- Review buy-back rate for purchase of excess power by MSEDCL from net-metered consumers
  - Presently MSEDCL pays applicable retail tariff, i.e rates > Rs 6/unit
  - Suggested that MSEDCL buy power at prevailing market price for solar power
  - This would be about the price for large MW scale solar adjusted for transmission charges and losses ( Rs 3.1-3.6/unit)
- Aggregate/virtual net-metering for public bodies
  - Significant mismatch between solar potential and usage for many premises of public bodies
  - Virtual net metering/aggregate billing can help public bodies obtain credits for PV installed off-site and shared
  - Mechanism can help supply PWW, government offices, urban and rural local bodies, public schools, auditoriums, street lights, crematoriums and hospitals
  - DISCOMs can meet RPO requirement and probably improve collection efficiency (currently <70%)

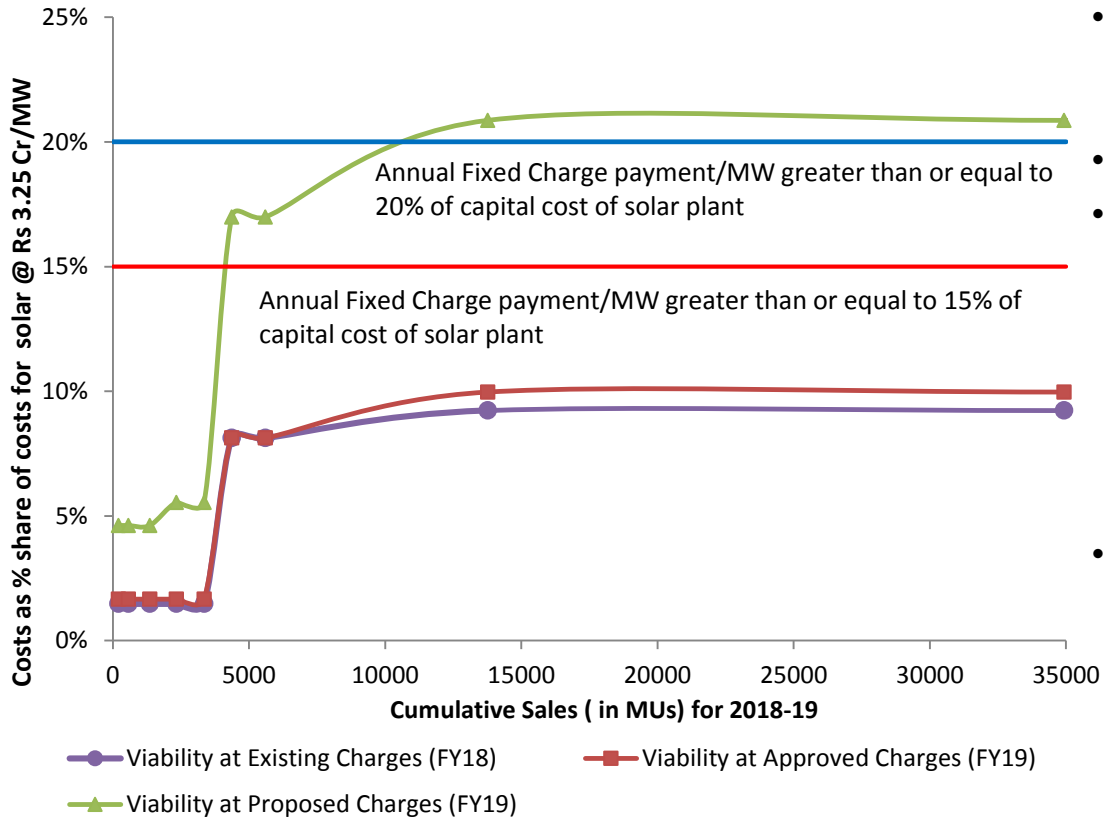
# Tariffs for Electric Vehicles

- MSEDCL proposal called for separate category for Electric Charging Stations
  - Energy charge at Rs.6/unit
  - Fixed and wheeling charge as applicable to respective HT/LT Category
  - Individual consumers charging at premises charged as per parent category
- PEG submits that this tariff needs to be re-evaluated in the next control period based on uptake and use.
- MSEDCL has also proposed to establish charging stations for this purpose
  - Identified 4000 locations where land is available for this
- PEG submits that the EV charging business of MSEDCL should be treated as an unregulated business.
  - The capital expenditure for the charging stations and its O&M, if any, should not be a part of the ARR.
  - Such charging stations if set-up by MSEDCL should pay appropriate lease/rent for any MSEDCL land being used for this purpose. Such rent should be reflected in the ARR under appropriate head.

# HT Tariffs: Doubling of fixed charges

- Proposed fixed charges increase > 100% in 2018-19
  - To reflect break up of costs of MSEDCL
  - MERC has articulated need for sufficient fixed cost recovery in 2003
  - However, such a proposal in the current scenario, needs to take into account fall in RE prices
- Can an increase in fixed charge instead of variable charge prevent sales migration?
  - Already, 70% of non-agricultural sales to consumers paying energy +wheeling charges > Rs. 5/unit
  - Rooftop/ Captive solar systems are competitive at this price
  - With current proposal, 80% of non-agricultural consumers will pay energy +wheeling charges > Rs. 5/unit
- Current realities → counter-intuitive results
  - Availability of competitive supply options can lead to reduced demand
  - This can affect revenue recovery significantly

# Implications



- Average annual per MW fixed cost payments will increase from Rs. 33 lakhs to Rs. 75 lakhs with doubling
- Current per MW cost for solar is Rs. 3.25- 4 cr.
- Annual fixed payments with proposed charges **comparable to 17% -21% of per MW solar cost**
  - Capital costs can be recovered in 5-6 years
  - Current fixed payments @ 8-10% of per MW cost of solar → cost recovery in 10-15 yrs.
- With proposed fixed costs
  - 96% of HT consumers will find this option lucrative to reduce demand, even without net metering
  - 24% of LT commercial also have per kW fixed payments comparable to 9% of per kW solar costs

# Sales Migration charges...1

- Discouraging short-term open access (STOA)
  - STOA, especially day-ahead open access has significant impacts on scheduling and power procurement planning
  - This is due to opportunistic switching of consumers between DISCOM and market
  - Such switching can also affect power supply for small consumers
  - To discourage open access, MSEDCL has proposed:
    - Higher open access charges for STOA consumers
    - Change billing mechanism for transmission charges for STOA
- PEG Submission
  - We agree in principle with the MSEDCL proposal.
  - In addition, we submit that the following measures also need to be considered in this context:
    - Open Access for a duration of less than one year should be discouraged and gradually stopped in a phase-wise manner (say, three years).
    - Simultaneously, open access eligible consumers should be encouraged to move to medium and/or long term open access. To ensure this, greater certainty with regard to terms and conditions applicable to open access consumers and certainty in levy of CSS as well as additional charges is extremely crucial.
    - Transactions of distribution Open Access consumers should be subjected to deviation and settlement mechanism. Under the current mechanism, the DISCOM bears the price for the deviations by embedded open access consumers.
  - Implementing some of these changes would require amendments to the distribution open access regulations and the commission should initiate due process for this.

# Sales Migration charges...2

- Cross subsidy Surcharge (CSS)
  - MSEDCL's proposal
    - Calculate CSS as per the formula given in the National Tariff Policy, 2016 without the prescribed ceiling.
    - If MSEDCL suggestion is implemented, the CSS for most categories would be greater than Rs.4/unit, which is high enough to completely stop open access and hence should not be allowed.
- PEG suggestion
  - While the current CSS does not fully compensate MSEDCL for loss of revenue, it is important to ensure that the CSS is fair and rational for the open access eligible consumers as well.
  - Also, there should be a reasonable certainty regarding the CSS quantum and it should reduce in a phase-wise manner with increase in efficiency of DISCOM. In absence of these measures, consumers will find it difficult to enter into long or medium term arrangements for open access.
  - In order to provide certainty of CSS to consumers and to ensure incentives to increase efficiency for the DISCOM, we propose the following:
    - CSS should be fixed in nominal terms at Rs. 3/unit for 2018-19 and the value will reduce in real terms over time.
    - Alternatively, a progressively reducing trajectory for CSS can be defined for the 3 to 5 years for consumers availing open access for a duration longer than 1 year

# PEG Suggestions

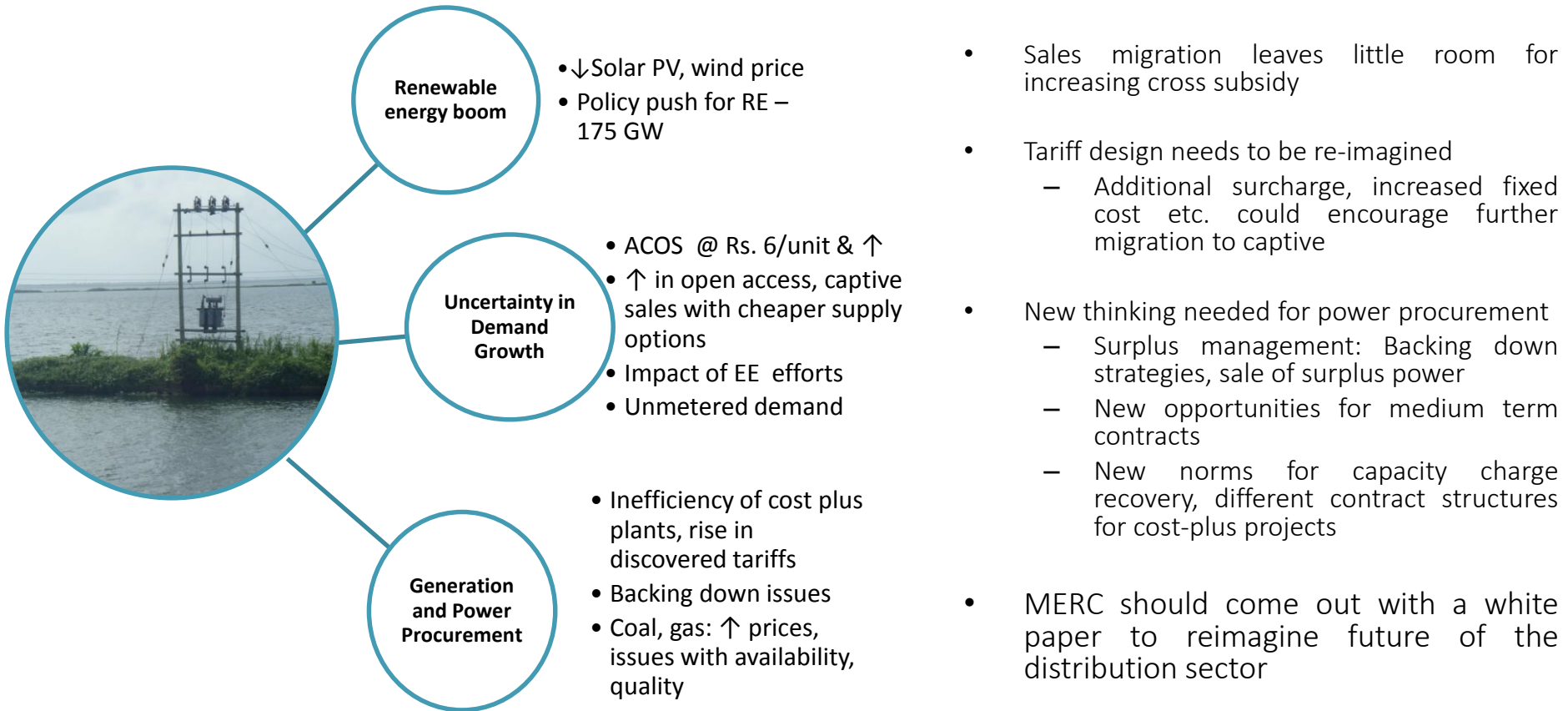
- Levy of additional surcharge (AS) on captive
    - Proliferation of group captive arrangements has resulted in loss of revenue for MSEDCL
    - Given the applicability of CSS for open access there is danger than consumer may opt for captive arrangement only to avoid CSS
    - Hence there is a need to levy compensatory surcharge on captive consumers as well to ensure financial viability of DISCOM
  - However, such a surcharge
    - Should reduce in a phase-wise manner, over time and
    - Cannot be linked to the power procurement strategies/decisions of MSEDCL, the way additional surcharge for short term open access consumers is.
- PEG suggests that the duty on captive generators be increased and the additional revenue generated from such increase in duty be transferred to MSEDCL to ensure viability
- PEG also supports levy of standby charges as proposed by MSEDCL on captive consumers.



# Other tariff related changes

- Changes in billing demand definition
  - Suggested due to prevent consumers from exceeding contracted demand in the night and claiming load factor/ToD incentives
  - Can disincentivise opportunistic switching by short –term open access consumers
  - MSEDCL proposal is in the right direction, however increase in demand charges should be more gradual. Therefore, if this change in billing demand definition is accepted, it should not be accompanied with doubling of fixed charges, which is also proposed by MSEDCL.
- Proposed change to kVAh based billing
  - Incentivises consumers to reduce reactive power drawal.
  - Can help increase system stability for all consumers.
  - However, implementation issues during roll-out need to be looked into
  - The proposed change should be implemented with a sufficient advance notice, at least six months after issuance of the order allowing such a change. This would allow both the consumers and the DISCOM enough time to adjust to this major change in billing.
- Introduction of rebate of Rs. 1/unit for old and new industries
  - Provision of rebates to industry is a positive step to curb sales migration
  - Provision of separate tariff category for new industries → legal and procedural hurdles
  - Instead, rebate for existing industries can be applicable to new industries for the first year
  - Rebate to be revised in the second year based on past year's consumption

# Utility Business Model at crossroads



# Thank you

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