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An Insight into Discom's Business and Investment Decisions

Energy Finance Conference, IIT Madras

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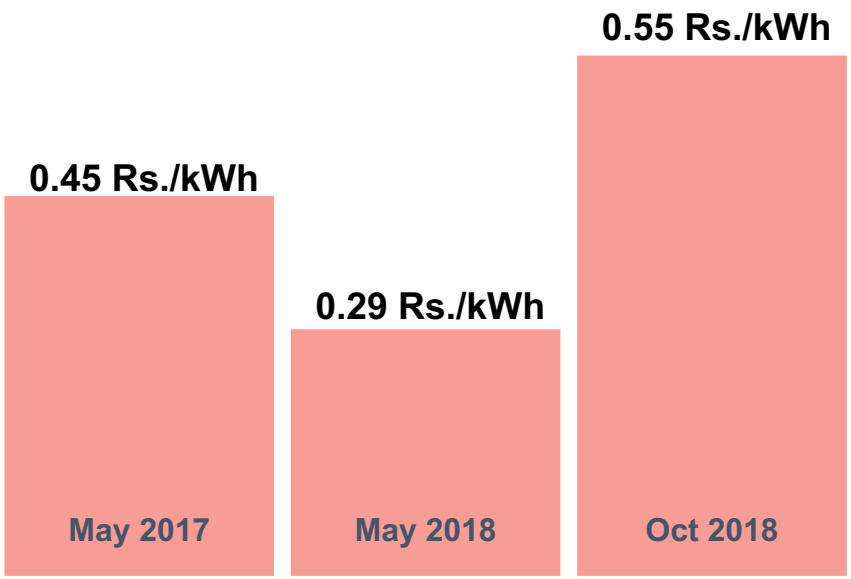
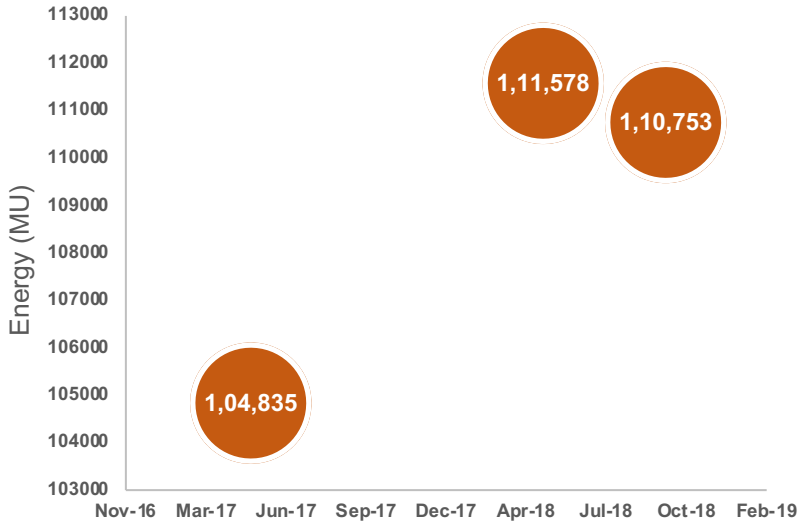
Revenue Gap is a reality

Revenue Gap = ACS - ARR



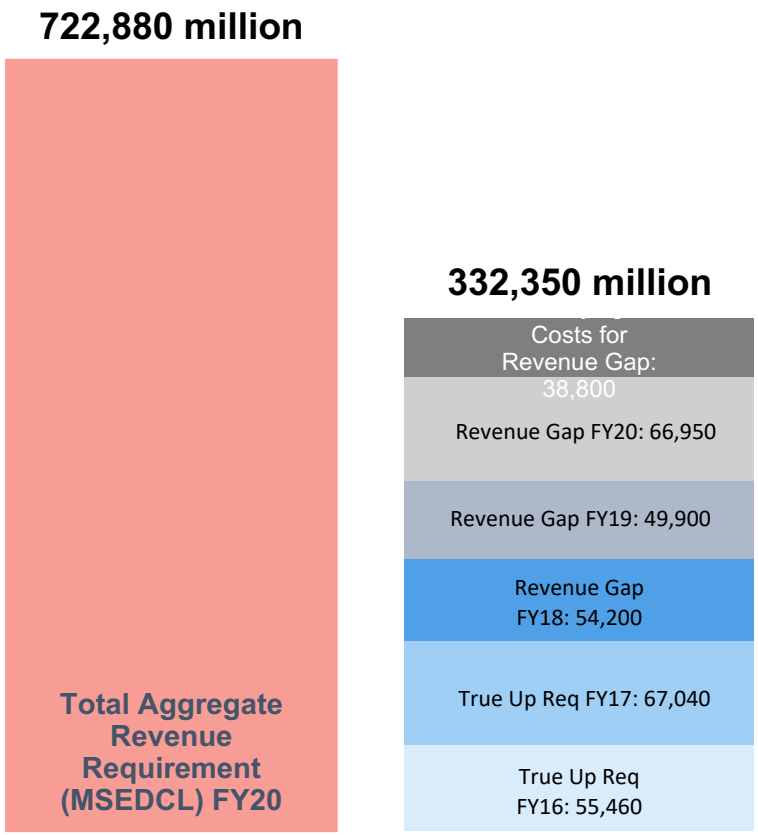
Source: NIPFP, UDAY Power Debt in Retrospect and Prospects: Analyzing the Efficiency Parameters, Nov 2018

Increasing Total System Losses



Source: CEA, Executive Summary Reports

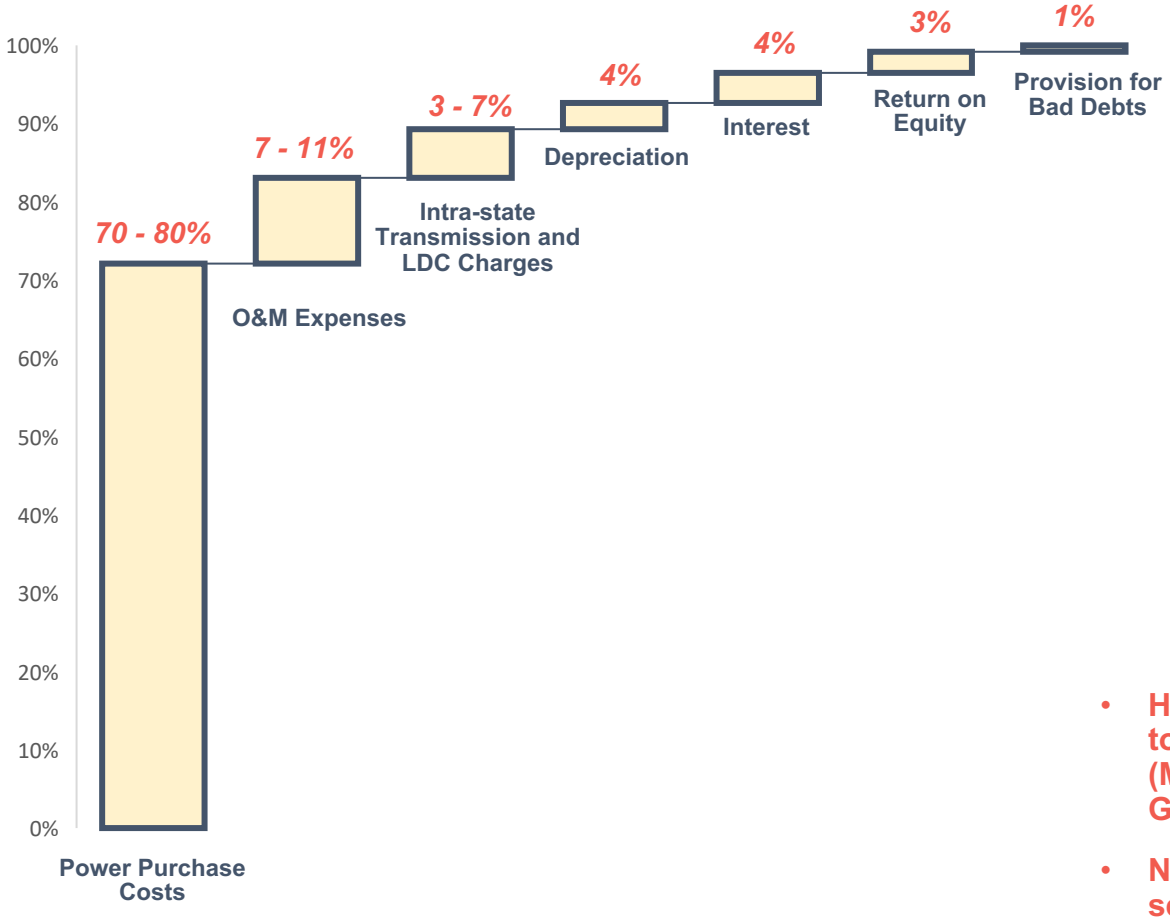
“Real” Gap is even higher



Source: MERC Tariff Order Sept 2018

- **Avg. Cost of Supply = 6.52 Rs./kWh**
- **Avg. Billing Rate = 6.35 Rs./kWh**
- **Backlog Recovery (say 5 YR) ~ +0.70 Rs./kWh**

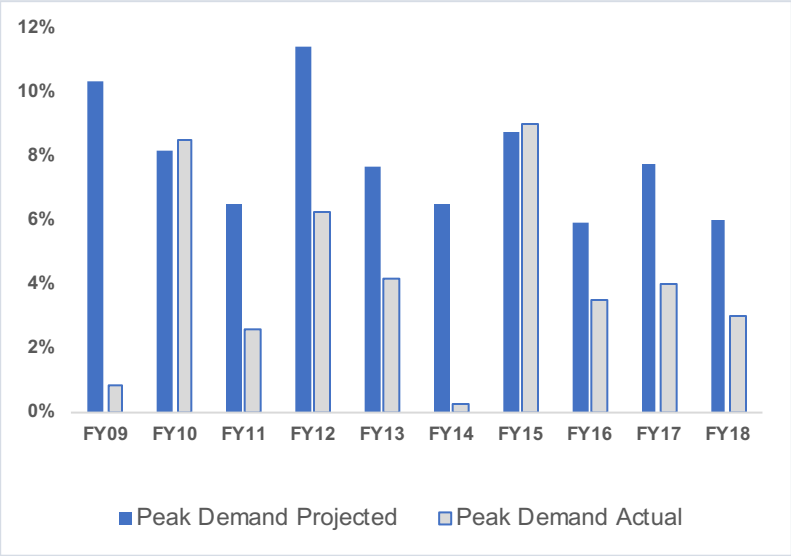
Costs have gone up too….



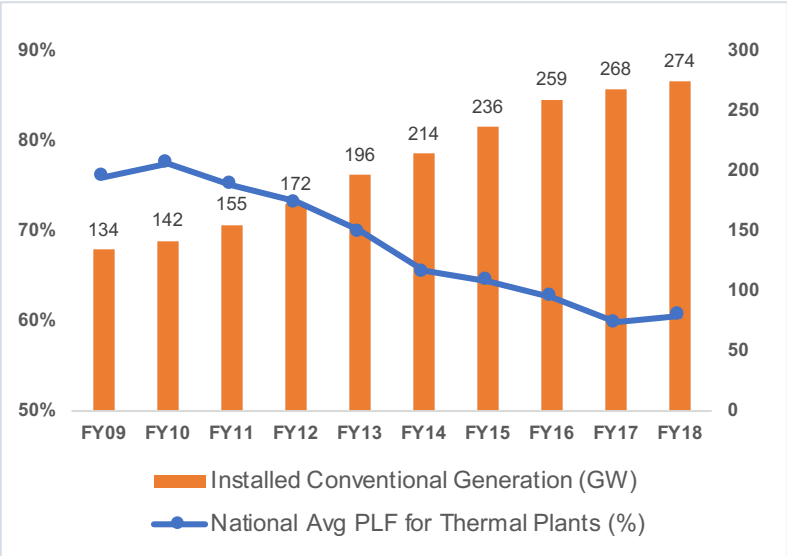
	All India APPC (Rs./kWh)
FY15	3.40
FY16	3.40
FY17	3.48
FY18	3.53
FY19	3.60

- **High volume states comprising ~40% of total sales have APPC higher than 3.60 (Maharashtra, Uttar Pradesh, Tamil Nadu, Gujarat)**
- **Not in-sync with falling RE prices and seasonal-diurnal PX prices**

….while capacity remains under-utilized



Source: CEA Load Generation Balance Reports



Source: CEA, MoP

Learnings, anyone?

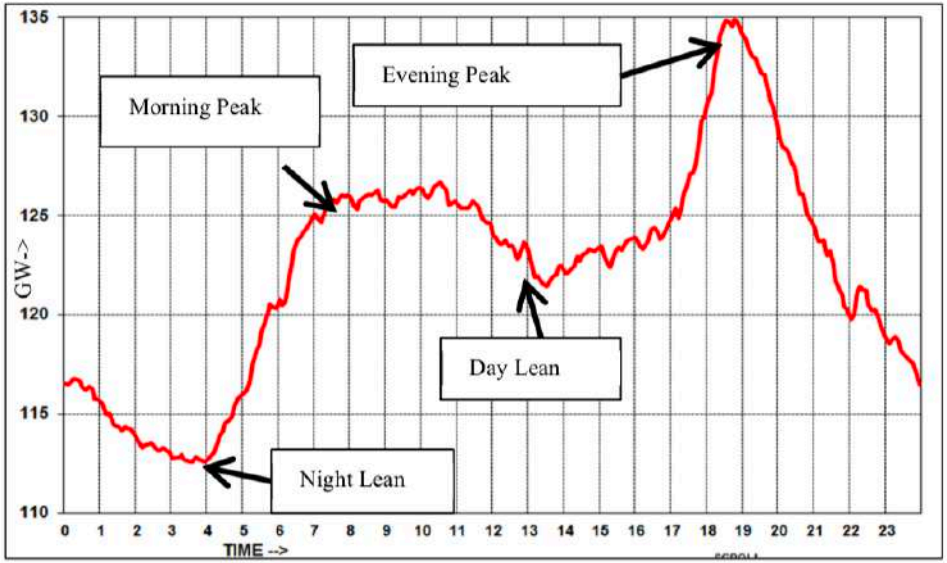
"…..regarding **stranded capacity charge liability**, the Petitioner informed that there is a problem of under-utilization of existing thermal capacity"

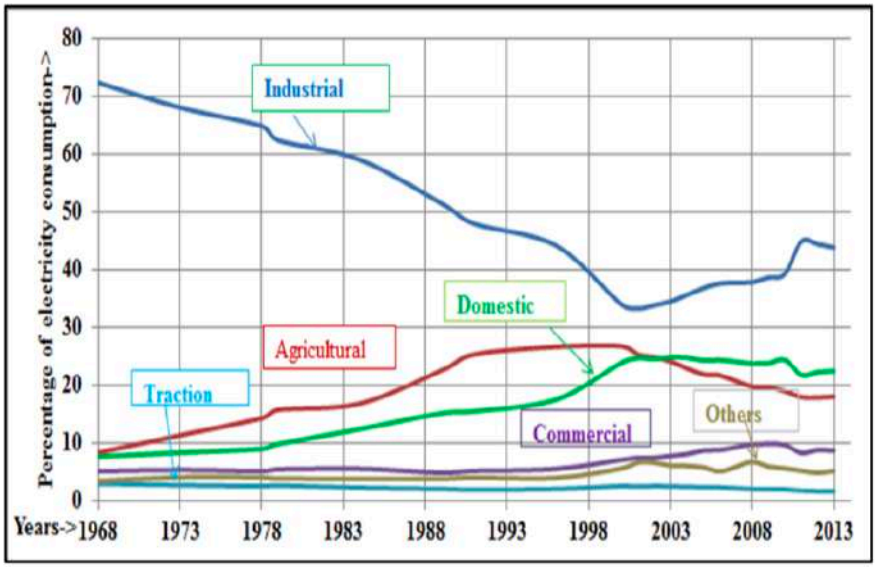
"……burden of fixed charges was projected to be around **47,970 million during FY20** with a rising trend and peaking to **107,500 million in FY23**."

"This translates into **avoidable burden of 0.44 Rs./kWh** which is passed on to the consumers."

Source: UPERC, Order on LT Procurement Plan of UP Discoms for FY20 – FY30

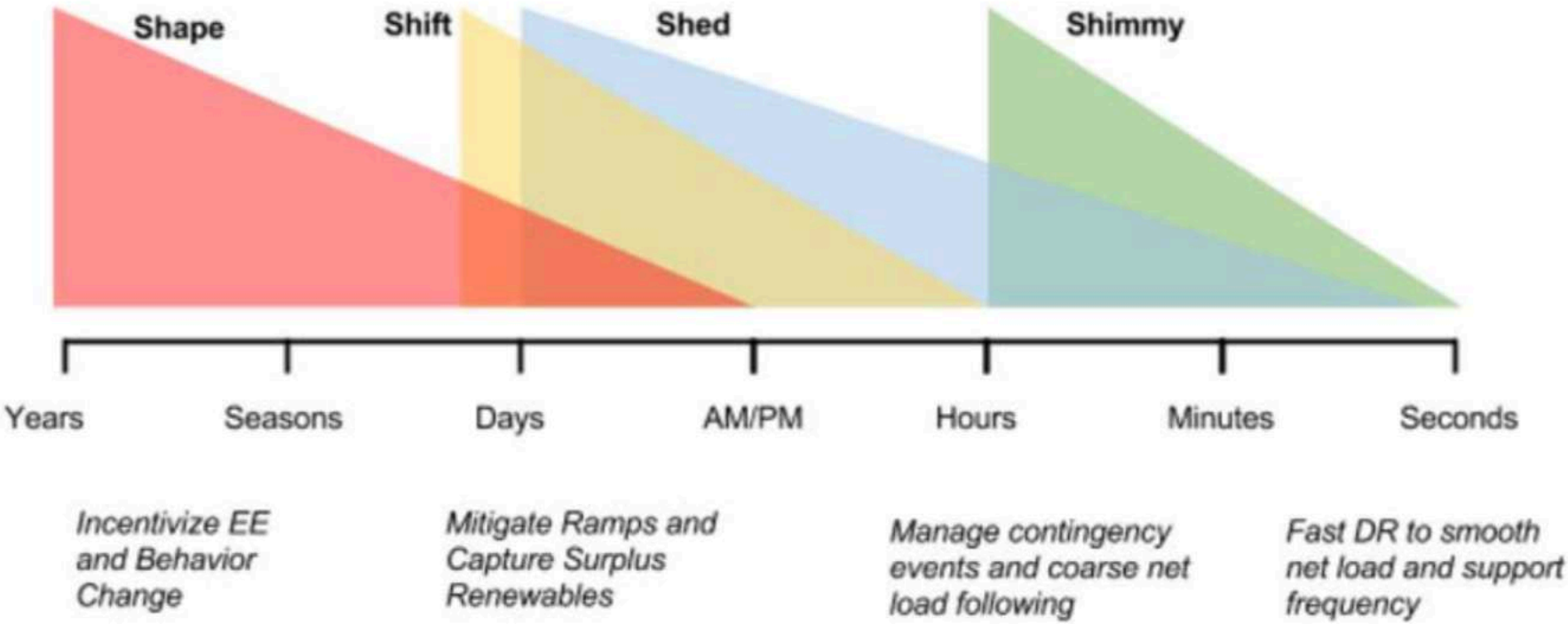
Overbuilding is OLD
Flexibility is the NEW mantra!





Source: POSOCO

Different Strategies for Different Time-periods



Source: LBNL, Charting California's Demand Response Future, 2016

Pre-requisites and Busting the Myths

- Dynamic Pricing – at wholesale and retail level
  - Consumers understand time-based-value
- Incentivize controlled loads – for avoided costs
  - Supply-side options miss accounting for societal costs
- Net value realization – no loss to utility
  - Prioritize actions to target lowest hanging fruit

Summary

- **Flexibility** helps meet reliability needs at lower cost while adding significant amounts of renewables.
- Technology changes, new capabilities and forms of grid interactivity are valuable **opportunities** for the electric sector.
- This is an excellent opportunity for regulators to provide **policy guidance** to help realize the many benefits of a more flexible grid.

“We sit and we wait for a miracle. No, a miracle is an opportunity and a miracle requires hard work. [For utilities] it will be in the area of new services.”

Michael Liebreich, ***founder Bloomberg New Energy Finance***

BNEF Future of Energy Summit, 2016

About RAP

The Regulatory Assistance Project (RAP)® is an independent, non-partisan, non-governmental organization dedicated to accelerating the transition to a clean, reliable, and efficient energy future.

Learn more about our work at raponline.org

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