

**MINUTES OF THE 53<sup>RD</sup> MEETING**  
**OF THE**  
**FORUM OF REGULATORS (FOR) HELD AT NEW DELHI**

**VENUE** : “CONFERENCE” HALL  
UPPER GROUND FLOOR (FRONT SIDE)  
C.E.R.C.  
CHANDERLOK BUILDING  
36, JANPATH, NEW DELHI.

**DATE** : 18<sup>TH</sup> MARCH, 2016

**LIST OF PARTICIPANTS** : AT ANNEXURE-I (ENCLOSED)

The meeting was chaired by Shri Gireesh B. Pradhan, Chairperson, Central Electricity Regulatory Commission (CERC) and Forum of Regulators (FOR). The Chairperson, CERC / FOR welcomed the Members of the Forum to the Meeting being held for the first time at the new conference facility brought up within CERC premises. He formally welcomed Shri D.S. Bains, Chairperson, PSERC and Shri Krishna Saini, Chairperson, DERC who attended the FOR meeting for the first time.

Thereafter, the Forum took up agenda items for consideration.

**AGENDA ITEM NO. 1 :**      **CONFIRMATION OF THE MINUTES OF THE 52<sup>ND</sup> MEETING OF "FOR" HELD ON 02<sup>ND</sup> FEBRUARY, 2016 AT INDIA HABITAT CENTRE (IHC), NEW DELHI.**

The Forum noted and endorsed the minutes of the 52<sup>nd</sup> Meeting of "FOR", held on 2<sup>nd</sup> February, 2016 at New Delhi.

**AGENDA ITEM NO. 2 :      DISCUSSION ON THE ISSUES RELATED TO POWER SECTOR IN THE ECONOMIC SURVEY, 2015-16.**

A detailed presentation was made by Dr. Sushanta K. Chatterjee, Joint Chief (RA), CERC on issues related to power sector raised in Chapter-11 titled “Powering One India” of the Economic Survey, 2015-16. The copy of presentation is **provided** as **Annexure-II**.

***Highlights of the Chapter:***

- a. Record addition to generation capacity. 2014-15 marked the highest ever increase in generation capacity: 26.5 GW, much higher than the average annual addition of around 19 GW over the previous five years.
- b. Capacity enhancements in the power sector resulting in reduction in India’s peak electricity deficit to 2.4 per cent.
- c. Introduction of initiatives to improve the health and performance of power distribution companies—UDAY, the Ujwal DISCOM Assurance Yojana
- d. Indian Railways is attempting to shift to open access for power purchase.
- e. Major policy push for Renewable Energy Generation and revision of targets from 32 GW to 175 GW by 2022.

f. Notwithstanding these major successes, the Economic Survey observed that, given the complexity of the Power Sector, daunting challenges would remain, viz.

- Complexity of tariff schedules preventing economic actors from responding sufficiently to price signals.
- Average tariffs in some cases are set below the average cost of supplying electricity.
- High industrial tariffs and variable quality of electricity adversely affects “Make in India”
- Price and non-price barriers come in the way of single-nationwide electricity prices through open access.
- Determination of progressive tariff schedules for domestic consumers.

g. The Survey discussed some longer term policy issues for the power sector, which include,

- Power tariff schedules are currently complex. By contrast, other energy products are characterised by a single price—or at most a few prices—across end users.
- Given high tariffs on industry, firms may be shifting from purchasing electricity from utilities to generating their own power.

- Cross-subsidy surcharges and non-price regulatory measures are key tools for balancing DISCOMS' equity and access considerations, but they may also hinder the creation of a nationwide electricity market.

***Analysis presented:***

1. In several States tariff structure is too complex, lacking transparency. Each consumer category is further split into many sub-categories and such structure is preventing the consumers from responding to tariff signals.
2. Tariffs are non-cost reflective. The analysis brought out that for various states, at the current level of T&D losses, the average tariffs are less than the average cost of supply. Even with T&D losses considered at 10% the average tariff in respect of several states would be less than average cost of supply.
3. Across various states, the industrial tariff has been observed to be high coupled with low-quality of supply. A detailed analysis across nations on parameters of GDP, Tariff level and Quality of Supply indicates that India stands low on per capita GDP, high on industrial tariff and low on quality of supply. As industrial sector contributes significantly to the GDP, further increase in industrial tariff, cross subsidy surcharge etc. would negatively impact the GDP.
4. Price barriers such as high industrial tariff, high cross subsidy surcharge and non-price barriers such as low quality and erratic supply, ease of procuring power through open access has led to a shift to captive generation. Between

2006-07 and 2014-15, electricity procurement from utilities grew by 4.6% annually, which is lower than the 9.3% growth in captive power generation.

5. Analysis of cross subsidy surcharges across states indicates that CSS varies across states and in some cases as high as Rs. 3.42 per unit. Analysis also brought out that as the industrial tariff crosses the limit of Rs.6 per unit, the consumers tend to move towards power procurement through Open Access.
6. These barriers by States have not only resulted in making “Open Access” a non-starter, but are also causing serious impediments to the “Make in India” vision of the Government.
7. A model on “Progressivity of Tariff” has been suggested in the Economic Survey. This model broadly advocates for rationalizing the sub-categories / slabs to a small number within domestic consumer category. The model also suggests to make domestic consumer category self-reliant by effectively managing the requirement of cross subsidy of a few sub-categories within the category itself.
8. While making the case, domestic category of one state was analysed. It was suggested that instead of several slabs within the domestic category, only three slabs (1-50 / 51-100 / 101 and above) could be considered. It was suggested that the first two sub-categories being highly elastic to the variation in price of electricity, their ABR may be kept at the present level. However, the third sub-category which is observed to be inelastic / less-elastic may be provided with a tariff which not only covers at least the overall ACS of the domestic category.

9. Such tariff structure would obviate the need for passing on the deficit between ACS and Average Tariff of domestic consumer category to other categories of consumers.

***Decision:***

The Forum noted the issues related to the electricity sector brought out in the Economic Survey, 2015-16 and the presentation on the chapter. Some ERCs observed that they had already introduced some degree of progressivity in the tariff setting. However, it is noted that the actual degree of change in behaviour based on price signals given, needs to be studied with the active cooperation of the State Regulators. It was also decided to carry out a detailed study on crucial issues related to the electricity sector including progressivity of tariffs brought out in the Economic Survey 2015-16 through a consulting agency. The report of the consulting agency may be placed before the Forum for further deliberations.

**AGENDA ITEM NO. 3 :            CONSIDERATION            OF            THE  
RECOMMENDATIONS   OF   THE   FOR  
WORKING GROUP ON “DESIGNING THE  
NEW LOGO OF FORUM OF REGULATORS  
(FOR)”.**

During the 49<sup>th</sup> Meeting of the Forum of Regulators (FOR) held in Ahmedabad on 27.7.2015, the Forum felt the need for re-designing the logo of "FOR" which would reflect the crucial role being played by it in bringing harmony of regulation in power sector. A Working Group consisting of Chairpersons of

AERC, CSERC, DERC, JERC for all UTs, RERC, TNERC, and WBERC as Members was constituted. Chairperson, CERC/FOR was the Chairperson of the Working Group.

The Working Group engaged the National Institute of Design (NID), Ahmedabad (Gujarat) to assist the Working Group in designing the new logo. The Working Group met on two occasions and finalized its recommendations on re-designed logo. The Forum considered the recommendations of the Working Group on “Designing the new logo of Forum of Regulators (FOR)”.

The Working Group noted that Forum of Regulators (FOR) is responsible for Harmonization, Coordination, Ensuring Uniformity of Approach amongst the ERCs and is aimed at achieving greater regulatory certainty. In this backdrop, the Working Group considered various points for designing the logo, which *inter alia* include bilingual notation, power sector as nucleus, representation of collaborative approach of ERCs, representation of consensus decisions, India at heart, values FOR stands for, clear, simple yet striking representation etc. The Working Group shortlisted six options for consideration for the Forum.

A presentation (**provided** as **Annexure-III**) was made by the "FOR" Secretariat. The Forum considered all six alternatives presented by the Working Group and approved the following design.



The Forum noted the following design notations specified by the Working Group :

- Inner Circle represents forum/platform for discussion, knowledge creation/sharing, research, consensus building
- 30 White lines represent the Member ERCs
- Spark at nucleus represents Electricity sector
- Two dynamic converging sparks represent openness / acceptance to new ideas for research study of current topics etc.
- Dynamic arc emerging out and extending beyond circle represent outcome of harmonized decisions, knowledge sharing with external world, dissemination of best practices etc.
- Saffron, White, Green, Dark Blue represent colours of National Flag.

The Forum authorized the Chairperson, CERC / FOR to decide suitable date, time and venue for launch of the re-designed logo of "FOR".



**AGENDA ITEM NO.4 :        PROPOSAL    RECEIVED    IN    “FOR  
SECRETARIAT” ON CONSTITUTION OF  
“FORUM OF DISTRIBUTION UTILITIES”.**

The Forum considered the joint proposal regarding constitution of a “Forum of Distribution Companies” received from Shri R.N. Nayak, Former CMD, Powergrid, Ms. Gayatri Ramanathan, Former Consultant, MERC, Shri Rakesh Nath, Former Chairperson CEA & Former Member, APTEL, Shri Ajay Shankar, Former Secretary, DIPP & Former Special Secretary, MoP, Dr. Ajay Mathur, DG, TERI & Former DG, BEE. Shri Ajay Shankar, Former Secretary, DIPP & Former Special Secretary, MoP made a detailed presentation (**provided** as **Annexure-IV**) on the proposal.

Since the enactment of the Electricity Act, 2003, the generation and transmission sectors have witnessed significant growth. Post unbundling there are around 60 distribution companies in the country, however, most of the discoms remained State owned except in few pockets viz. Mumbai, Delhi, Ahemdabad, Surat and Kolkata. Despite distribution being a regulated business with 15.5 to 16% ROE, State-owned discoms have not fared well at all, however, the private entities stood profitable. The efforts made through “Distribution Franchise Model” have not succeeded given the paucity of funds for capital expenditure. The cumulative losses among all State-owned discoms is around Rs.3,80,000 cr. (as on March 15, 2015) with an aggregate debt of Rs.4,83,000 cr. The Average loss per annum is Rs.60,000 - 70,0000 cr and 90% of the losses are in Rajasthan,

Uttar Pradesh, Tamil Nadu, Haryana, Madhya Pradesh, Andhra Pradesh and Jharkhand. Further, losses in Rajasthan, Uttar Pradesh and Tamil Nadu alone are estimated at around Rs.15,000 - 16,000 cr per State per annum.

Reasons for such dismal performance by the distribution utilities *inter alia* include, high AT&C losses (more than 30%), more than 50% gap in supply cost and revenue realization, poor financial and operational management of the Discoms, poor distribution network infrastructure, lack of metering and poor maintenance leading to breakdowns and poor reliability of service etc. In spite of several schemes initiated by the Government (viz. UDAY, IPDS, DDUGJY, NSGM etc), the distribution sector continued to saddle with huge financial losses and therefore considered to be financially unviable.

However, in absence of a structured forum/association of distribution utilities, the issues collectively faced by the distribution utilities were not represented appropriately before the Central and State Governments, regulatory authorities etc. Existence of such an association could have facilitated sharing of global and industry-wide best practices, taking up common issues, preparing strategy, organizing specialized training for capacity building, etc. In this backdrop, it was proposed to set up an Association of Discoms with all the Distribution utilities as its members. The Association is expected to function as a platform to share best practices in power sector, exchange experiences on technology up-gradation processes, efficiency improvement, solutions for

operational issues, facilitate interaction with academia and research institutions, development of standards and benchmarks, capacity building etc.

The proposal for formation of the association being in its nascent stage, the Forum of Regulators (FOR) was requested to facilitate hand holding of the Association till it starts functioning on its own to achieve its goals. FOR was requested to provide its support in the form of its intellectual inputs, guidance besides granting a base corpus of Rs.30 lakhs for initiating the activities. Subsequently, the association is expected to gain strength as the distribution utilities join the association and become self-reliant.

### ***Discussion & Decision:***

The Forum considered the initiative proposed by Shri Ajay Shankar, Former Secretary, DIPP & Former Special Secretary, MoP, and others. The Forum welcomed the initiative for formation of an association/society consisting of all distribution utilities as its members. The Forum noted the activities of the association/society would *inter alia* include capacity building programmes, policy and regulatory advocacy, meetings and conferences of member bodies, building databases etc. As regards the proposal for handholding the initiative including financial assistance, several suggestions were made, including those of associating the distribution companies right from the very beginning to enlist their

involvement and financial commitment. The FOR secretariat was directed to examine and present an analysis in the context.

On conclusion of the meeting, Chairperson, CERC/FOR thanked all the dignitaries present in the meeting.

Dr. Sushanta K. Chatterjee, Joint Chief (RA) thanked the staff of “FOR” Secretariat for their arduous efforts in organizing the meeting.

The meeting ended with a vote of thanks to the Chair.

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**LIST OF PARTICIPANTS ATTENDED THE 53<sup>RD</sup> MEETING**  
**OF**

**FORUM OF REGULATORS ( FOR )**

**HELD ON 18<sup>TH</sup> MARCH, 2016 AT NEW DELHI.**

S. No.	NAME	ERC
01.	Shri Gireesh B. Pradhan Chairperson	CERC – in Chair.
02.	Shri S.K. Negi Chairperson	BERC
03.	Shri Narayan Singh Chairperson	CSERC
04.	Shri Krishna Saini Chairperson	DERC
05.	Shri Jageet Singh Chairperson	HERC
06.	Shri S.K.B.S. Negi Chairperson	HPERC
07.	Justice (Retd.) Shri N.N. Tiwari Chairperson	JSERC
08.	Shri R.K. Kishore Singh Chairperson	JERC for Mizoram and Manipur
09.	Dr. Dev Raj Birdi Chairperson	MPERC
10.	Shri Anand Kumar Chairperson	MSERC
11.	Shri D.S. Bains Chairperson	PSERC
12.	Shri Vishwanath Hiremath Chairperson	RERC
13.	Shri S. Akshayakumar Chairperson	TNERC
14.	Shri Niharendu Chakraborty Chairperson	TERC
15.	Shri Subhash Kumar Chairperson	UERC

16.	Shri Desh Deepak Verma Chairperson	UPERC
17.	Shri R.N. Sen Chairperson	WBERC
18.	Shri Dipak Chakravarty Member	AERC
19.	Shri K.M. Shringarpure Member	GERC
20.	Shri D.B. Manival Raju Member	KERC
21.	Dr. Sushanta K. Chatterjee Joint Chief (RA)	CERC
<b>SPECIAL INVITEES</b>		
22.	Shri A.K. Singhal Member	CERC
23.	Shri A.S. Bakshi Member	CERC
24.	Dr. M.K. Iyer Member	CERC
25.	Shri M.K. Anand Chief (Fin.)	CERC
26.	Shri T. Rout Chief (Legal)	CERC
27.	Smt. Geetu Joshi Chief (Eco.)	CERC
28.	Shri S.C. Shrivastava Chief (Engg.)	CERC



# **Powering “One India” Economic Survey 2015-16**

**53<sup>rd</sup> Meeting of the Forum of Regulators  
CERC, New Delhi-110001**

**18.3.2016**

# In this presentation

- Introduction
- Developments
- Policy Action on Distribution Front
- Challenges
- Policy Issues
- Suggestions



# Developments

- **Record addition to generation capacity – FY 2014-15**
  - marked increase in generation capacity 26.5 GW much higher than the average annual addition of around 19 GW over the previous five years.
- **Reduction in India's peak electricity deficit to 2.4 per cent.**
- **Attempt by Indian Railways to shift to Open Access.**
  - Consumption of 17.5 BU
  - Pays Rs. 12,300 Cr. i.e. More than 25% of its revenue budget
  - Anticipated cumulative saving of Rs. 742 Cr. In 2015-16 & Rs. 1,600 Cr. In 2016-17
  - IR was given the status of “Deemed Licensee” in May, 2014.
- **Major policy push for Renewable Energy Generation and revision of targets from 32 GW to 175 GW by 2022.**

## Policy Action on Distribution Front

- **Ujjwal Discom Assurance Yojana (UDAY)**
- **Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY)**
- **Integrated Power Development Scheme (IPDS)**
- **Domestic Efficient Lighting Program (DELP)**
- **Revised Tariff Policy, 2016**

# Challenges

- **Complexity of tariff schedules preventing economic actors from responding sufficiently to price signals**
- **Average tariffs in some cases are set below the average cost of supplying electricity.**
- **High industrial tariffs and variable quality of electricity adversely affects “Make in India”**
- **Price and non-price barriers come in the way of single-nationwide electricity prices through open access.**
- **Determination of progressive tariff schedules for domestic consumers.**

# Policy Issues

- **Transparency & Simplicity in Retail Electricity Tariffs (Structure)**
  - Consumer categories vary from State to State ([Sample](#))
  - Tariffs based on Usage
  - Prevents consumers from responding to tariff signals
- **Tariffs & Cost**
  - Debt overhang is a bottleneck
  - Failure to recover tariff result in losses ([AT-ACS](#))
  - Cost reflective tariffs are a necessary condition
  - States attempting to bridge the gap through UDAY Scheme

# Impact of Policies on “Make in India”

- **Make in India crucial to structural transformation of industrial sector**
- **High tariffs & erratic supply led to**
  - steady decline in growth of industrial electricity purchase
  - Gradual transition towards Captive Generation ( Indl. Tariff-Per Capita GDP; Indl. Tariff-Per Capita GSDP; CPP-Purchase from Utility)
  - Prevents consumers from responding to tariff signals
- **Tariffs & Cost**
  - Debt overhang is a bottleneck
  - Failure to recover tariff result in losses (AT-ACS)
  - Cost reflective tariffs are a necessary condition
  - States attempting to bridge the gap through UDAY Scheme

# Impact of Policies on “Make in India”

- **Making One India – Status of Open Access**
  - Increasing Cross Subsidy Surcharge
  - Imposition of Barriers by States
- **Other issues**
  - Increased generation capacity by PLF is decreasing
  - Diminishing financial ability of Discoms to purchase electricity

# Lower Tariffs for the Poor

- No specific policy guideline on intra-category cross-subsidy [\(suggested model\)](#)
- Regulators need to undertake broad welfare analysis while deciding cross-subsidy & Tariff Schedules
- Carryout optimality exercise
- [Progressivity of Domestic Category Tariffs](#) through intra-category cross-subsidization

# Key Take Aways

- **Transparency & Simplicity in Retail Electricity Tariffs Structure**
  - Other commodities like Diesel and Petrol have one price
  - Too many Categories and Sub-Categories in electricity tariffs
  - Makes it prone to leakages
- **Cost Reflective Tariffs necessary condition for Discom Recovery**
- **Slow exodus of Industry from Discoms**
  - Moving to captive generation and Open Access
  - May put a squeeze on Discoms in the long run
  - As cross-subsidization opportunity be reduced
- **Price and Non-Price Barriers impacting creation of a single power market**
- **Progressive Tariffs for Domestic Category can be designed**
  - Help reduce the Discom losses
  - Reduce the burden of Industry and other sectors



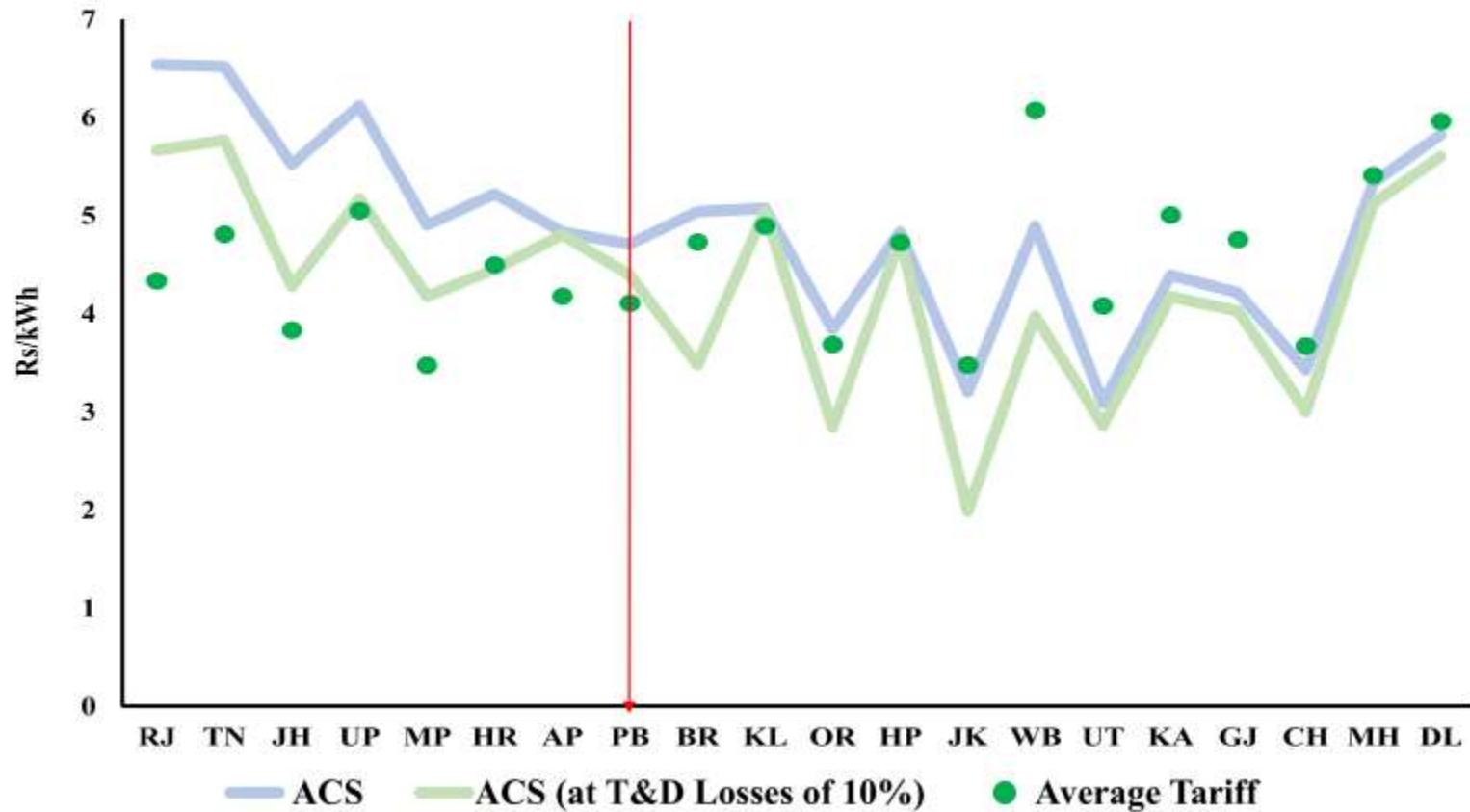
**Thank you**

# Representative Tariff Schedule

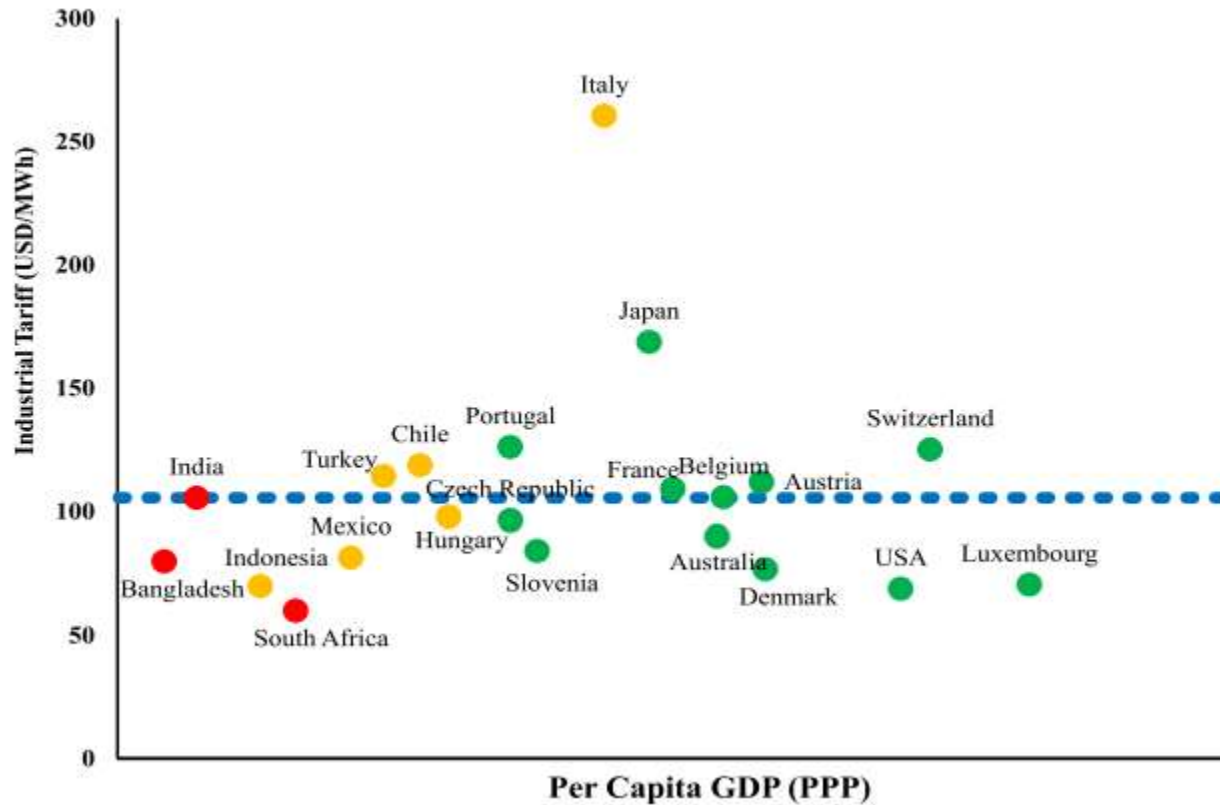
Consumer Category	Energy Charge (₹ /Unit)	Consumer Category	Energy Charge (₹ /Unit)	Consumer Category	Energy Charge (₹ /Unit)
LT-I:DOMESTIC (Telescopic)		LT-V:AGRICULTURE **		SEASONAL INDUSTRIES (off season Tariff)	
LT I(A):Upto 50 Units/Month	1.45	LT-V(A):AGRICULTURE WITH DSM MEASURES		11 kV	7.25
LT I(B):>50 and upto 100 Units/ Month		Corporate Farmers & IT Assesses	2.50	33 kV	6.59
First 50 Units	1.45	Wet Land Farmers (Holdings >2.5 acre)	0.50	132 kV & Above	6.33
51-100 Units	2.60	Dry Land Farmers (Connections > 3 nos.)	0.50	TIME OF DAY TARIFFS (6 PM to 10 PM)	
LT I(C):>100 and upto 200 Units/ Month		Wet Land Farmers (Holdings ≤ 2.5 acre)	0.00	11 kV	7.07
First 50	2.60	Dry Land Farmers (Connections ≤ 3 nos.)	0.00	33 kV	6.62
51-100	2.60	LT-V(B):AGRICULTURE WITHOUT DSM MEASURES		132 kV & Above	6.20
101-150	3.60	Corporate Farmers & IT Assesses	3.50	HT-I(B):FERRO ALLOY UNITS	
151-200	3.60	Wet Land Farmers (Holdings >2.5 acre)	1.00	11 kV	5.68
LT I(D):Above 200 Units/Month		Dry Land Farmers (Connections > 3 nos.)	1.00	33 kV	5.23
First 50	2.60	Wet Land Farmers (Holdings ≤ 2.5 acre)	0.50	132 kV & Above	4.81
51-100	3.25	Dry Land Farmers (Connections ≤ 3 nos.)	0.50	HT-II:OTHERS	
101-150	4.88	LT-V(C):OTHERS		11 kV	7.25
151-200	5.63	Salt farming units upto 15HP	3.70	33 kV	6.59
201-250	6.70	Rural Horticulture Nurseries upto 15HP	3.70	132 kV & Above	6.33
251-300	7.22	LT-VI:STREET LIGHTING AND PWS		TIME OF DAY TARIFFS (6 PM to 10 PM)	
301-400	7.75	LT-VI(A):STREET LIGHTING		11 kV	8.30
401-500	8.27	Panchayats	5.64	33 kV	7.64
Above 500	8.80	Municipalities	6.16	132 kV & Above	7.38
LT-II:NON DOMESTIC/ COMMERCIAL		Municipal Corporations	6.69	HT-III:AIRPORTS,BUS STATIONS AND RAILWAY STATIONS	
LT II(A):Upto 50 Units/Month	5.40	LT-VI(B):PWS SCHEMES		11 kV	6.91
LT II(B):Above 50 Units/Month		Panchayats	4.59	33 kV	6.31
First 50	6.63	Municipalities	5.64	132 kV & Above	6.01
51-100	7.38	Municipal Corporations	6.16	TIME OF DAY TARIFFS (6 PM to 10 PM)	
101-300	8.54	LT-VI(C):NTR Sujala Padhakam	4.00	11 kV	7.96
301-500	9.06	LT-VII:GENERAL		33 kV	7.36
Above 500	9.59	LT-VII(A):GENERAL PURPOSE	6.86	132 kV & Above	7.06
LT II(C):ADVERTISEMENT HOARDINGS	11.58	LT-VII(B):RELIGIOUS PLACES (CL ≤ 2 KW)	4.70	HT-IV: Govt., LIFT IRRIGATION, AGRICULTURE AND CPWS	
LT-III:INDUSTRY		LT-VIII: TEMPORARY SUPPLY	9.90	Govt. Lift Irrigation & Agriculture	5.64
Industry (General)	6.38	HT-I:INDUSTRY		Composite Water Supply Schemes	4.61
Seasonal Industries (off season)	7.09	HT-I(A): INDUSTRY GENERAL		HT-V:RAILWAY TRACTION	6.68
Pisciculture/Prawn culture	4.63	11 kV	6.02	HT-VI:TOWNSHIPS AND RESIDENTIAL COLONIES	5.96
Sugarcane crushing	4.63	33 kV	5.57	HT-VII:GREEN POWER	11.32
Poultry farms	5.63	132 kV & Above	5.15	HT-VIII:TEMPORARY	
Mushroom & Rabbit Farms	5.63	INDUSTRIAL COLONIES		RURAL ELECTRIC CO-OPERATIVES	
Floriculture in Green House	5.63	11 kV	5.96	Kuppam	0.24
LT-IV:COTTAGE INDUSTRIES & OTHERS		33 kV	5.96	Anakapally	1.38
a) Cottage Industries upto 10 HP	3.75	132 kV & Above	5.96	Chipurupally	0.22
b) Agro Based Activity upto 10 HP	3.75				



# Average Tariff vs. Average Cost of Supply (Rs./kWh)



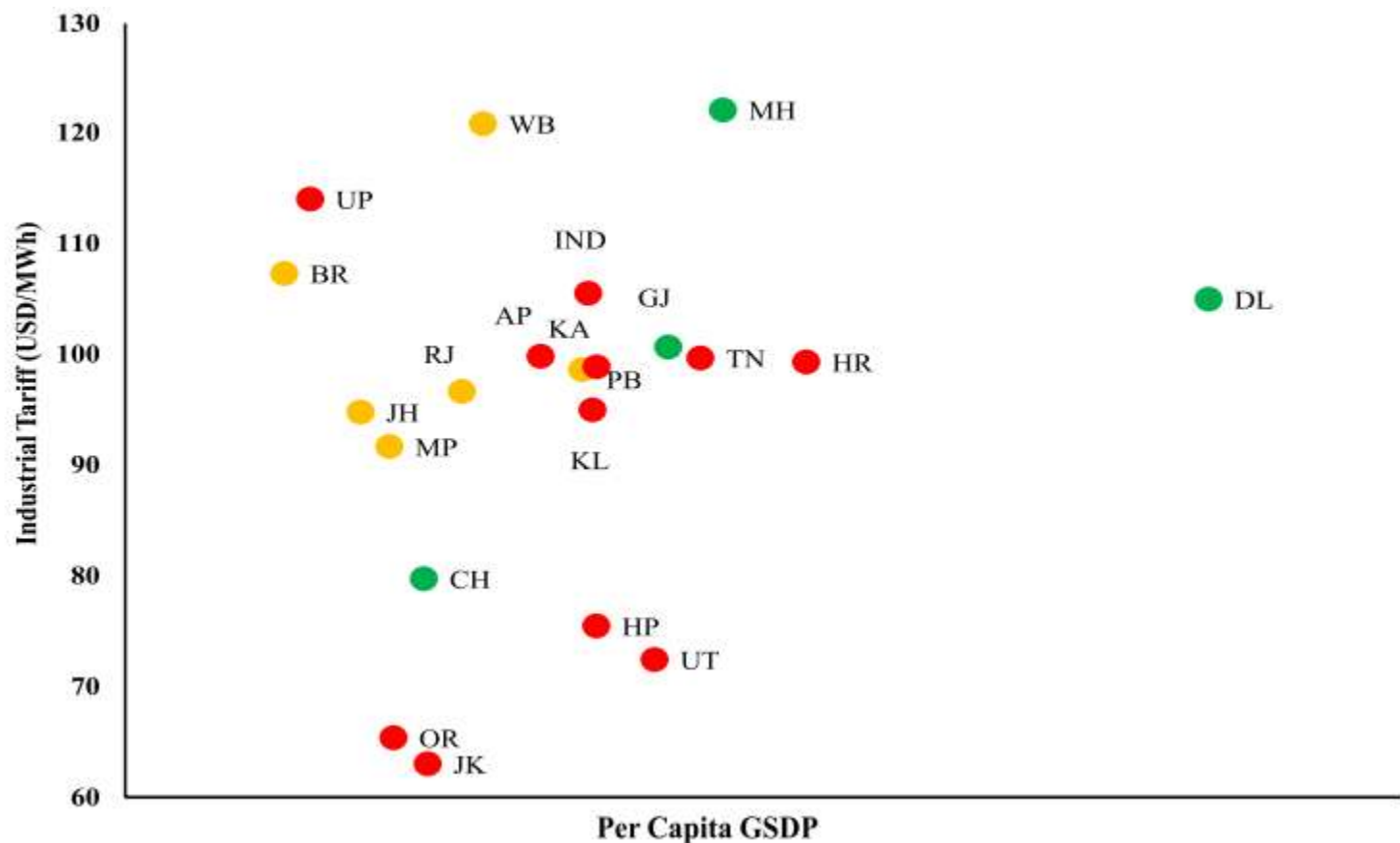
# Industrial Tariff (US\$/MWh) vs. Per Capita GDP (PPP)



Colours represent the quality of electricity supply (on a scale of 1 to 7)  
Source: World Economic Forum-Global Competitiveness Report 2015-16



# Industrial Tariff (US\$/MWh) vs. Per Capita GSDP

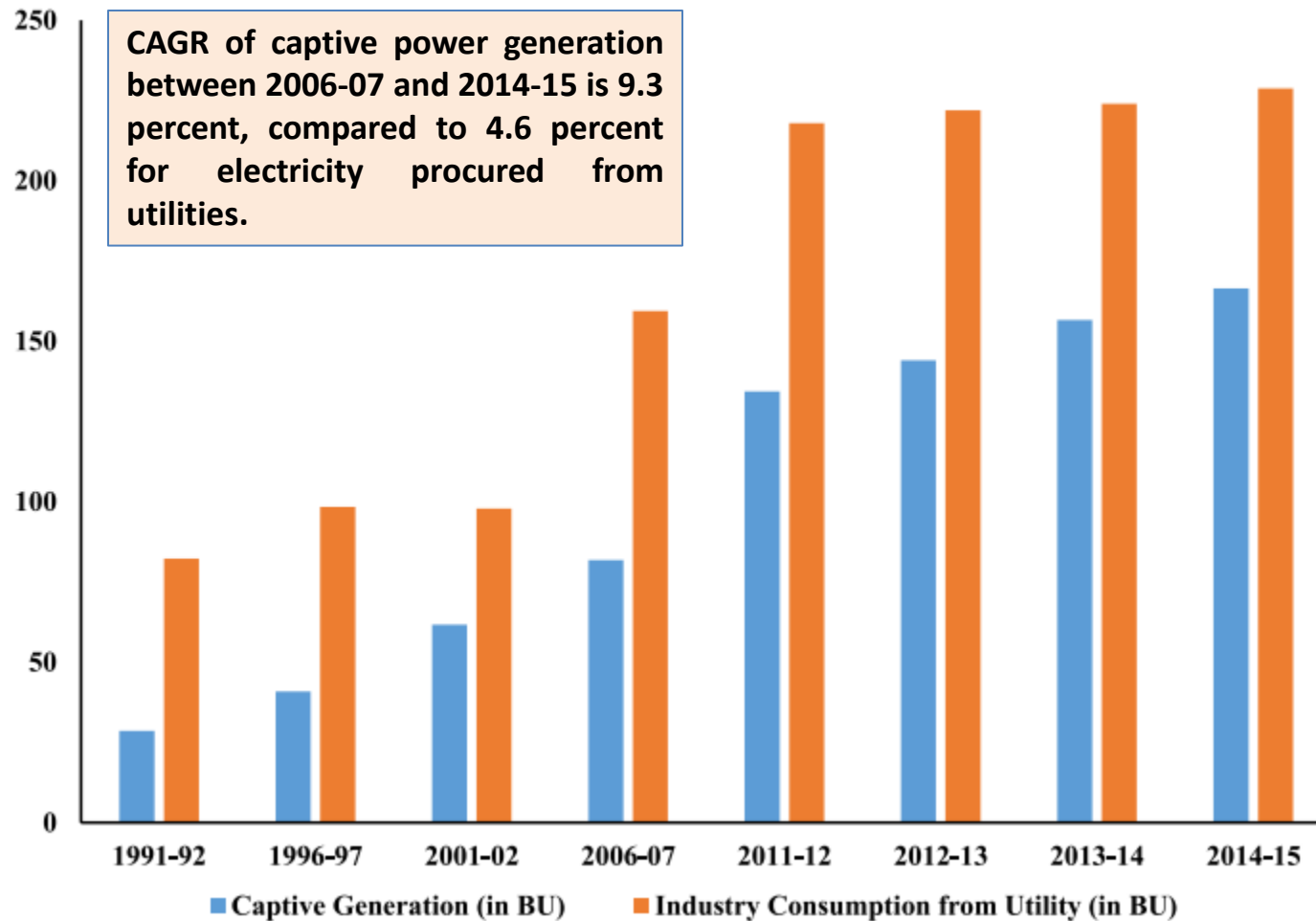


- (response < 10%)
- (10% < response < 20%)
- (response > 20%)

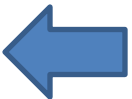
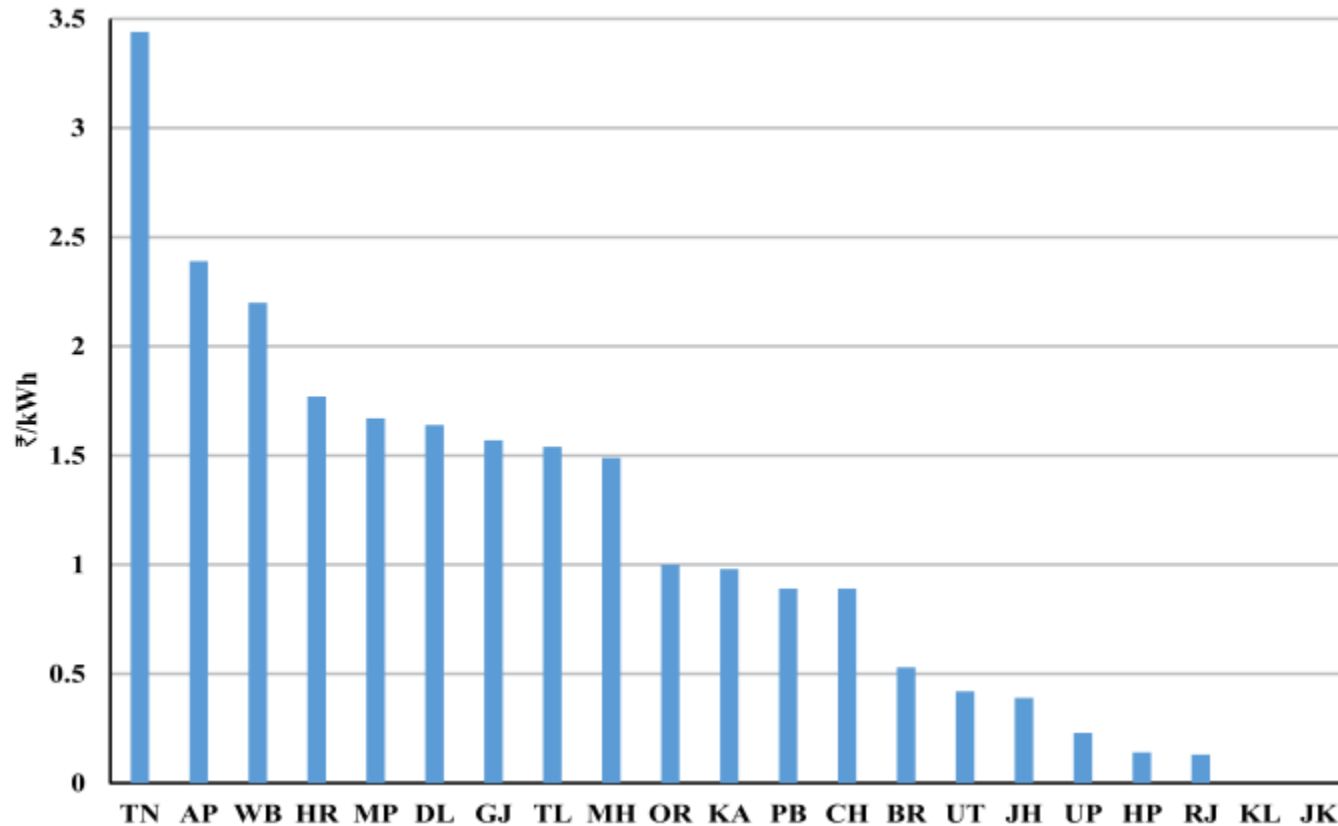
Colours highlight the share of firms (in %) identifying electricity as a major constraint in their state  
 Source: World Bank's Enterprise Survey of Industries (2013-14). Industrial tariffs are from the Planning Commission/Niti Aayog



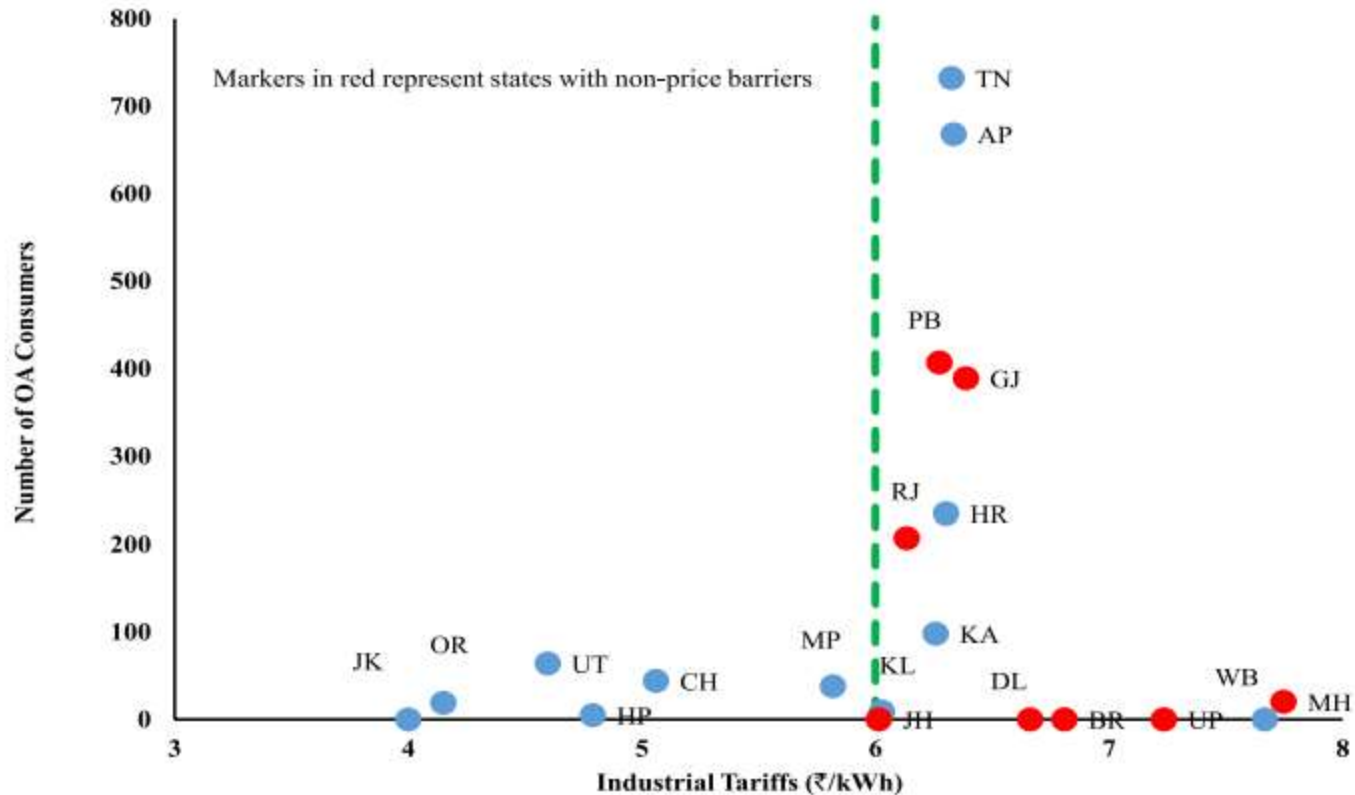
# Generation in CPPs vs. Electricity Procured from Utilities



# Cross Subsidy Surcharge for purchasing power from PX (2015-16)



# No. of OA Consumers and Industrial Tariffs (Rs./kWh)

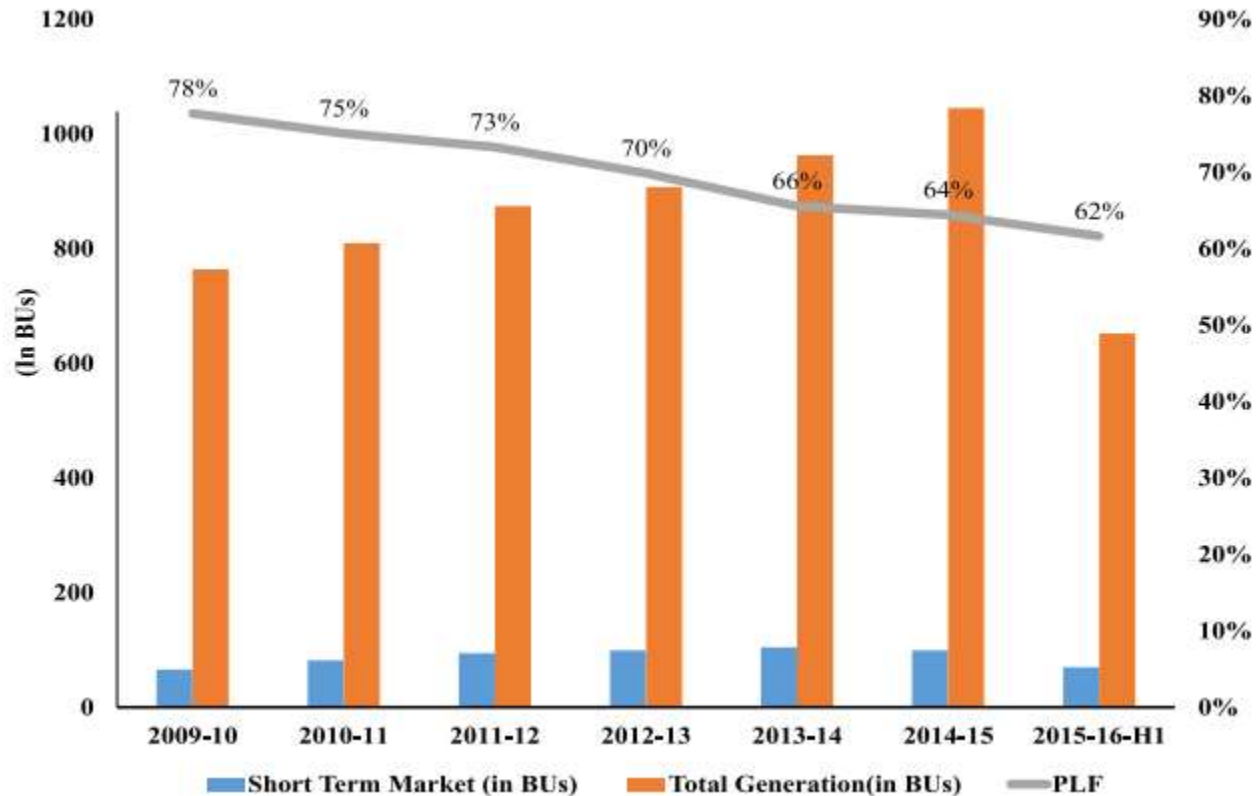


● (non-price barriers)

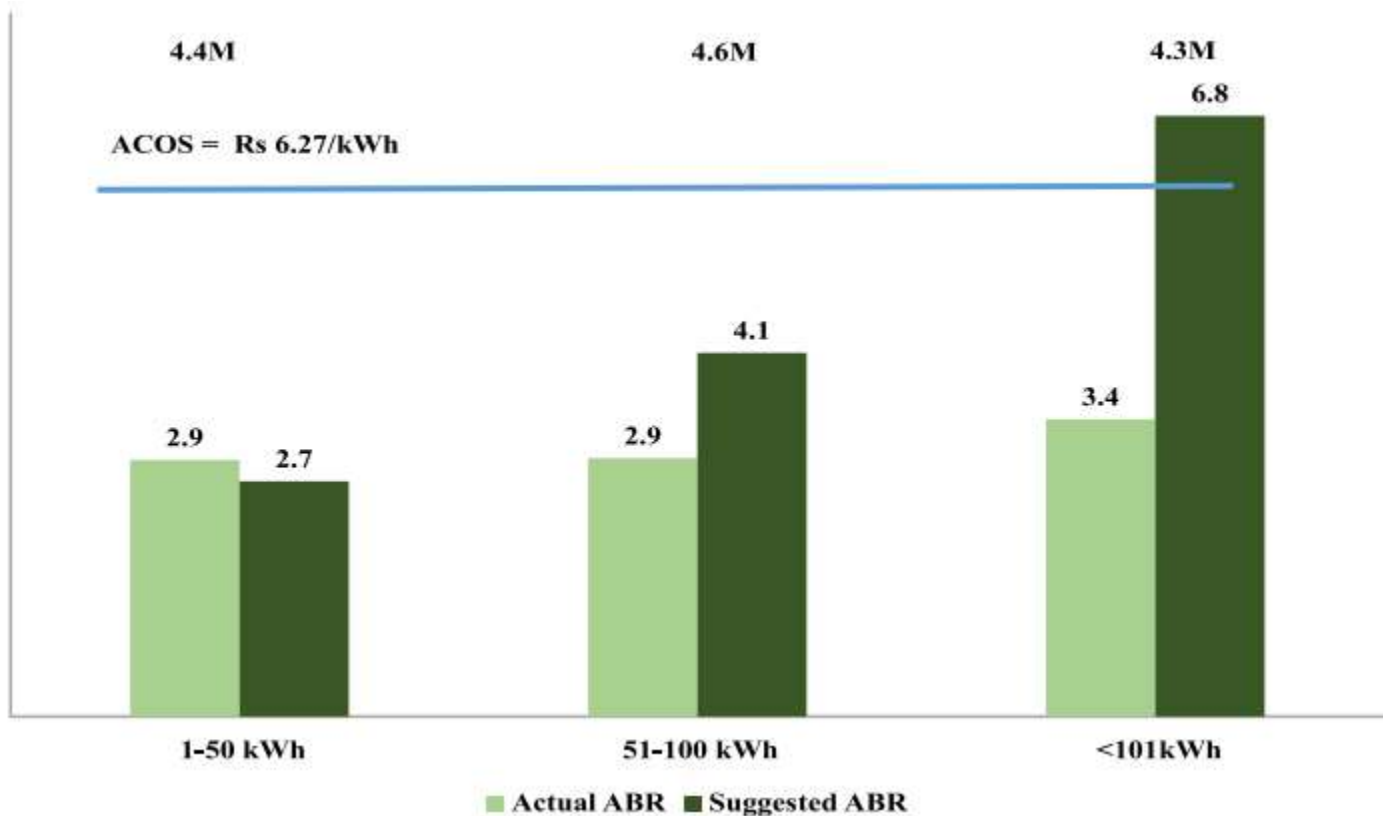




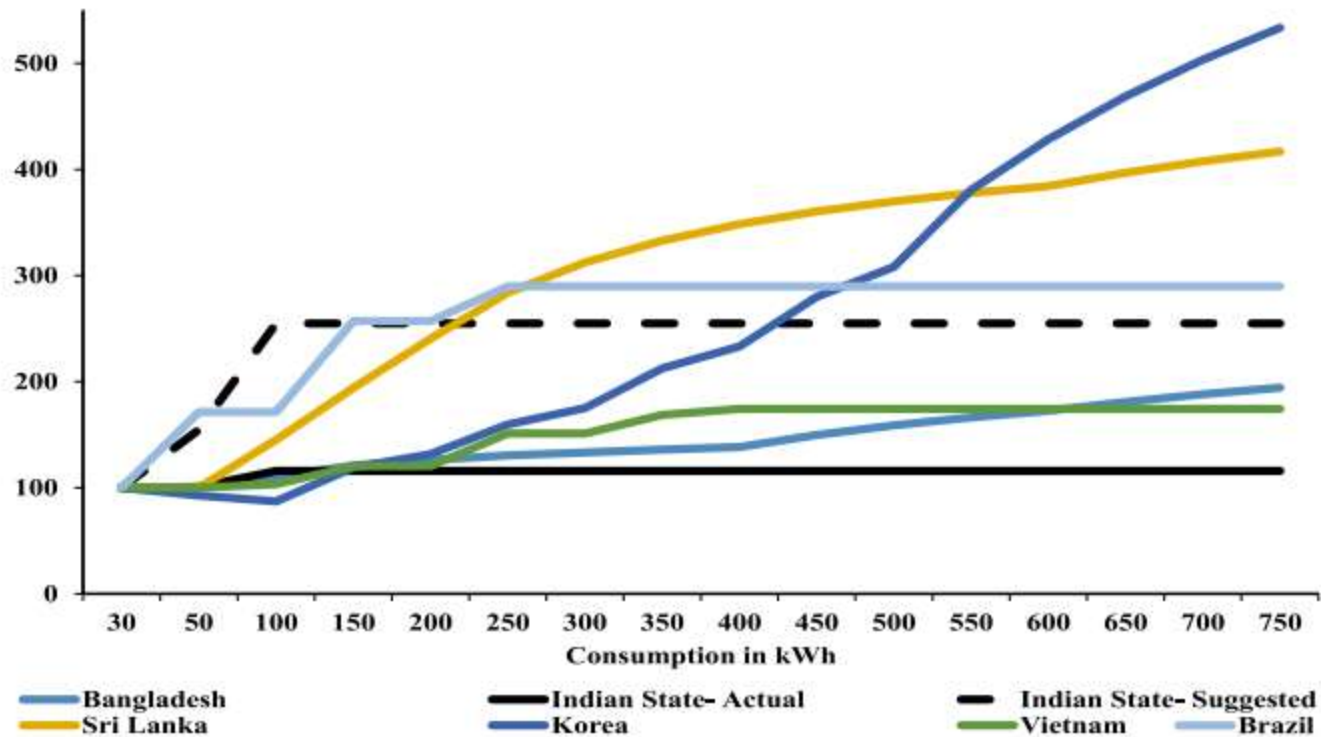
# Total Generation, Short Term Market & PLF



# Actual vs. Suggested ABR (Rs./kWh)



# Progressivity of Domestic Category Tariffs (initial tariff=100)



# Progressivity of Tariffs

- **Regulator, while deciding on the tariff schedules and cross- subsidisation rates**
  - Undertake a broad welfare analysis
  - Rich literature in public finance which tries balancing the same constraints
  - Greater revenue collection versus greater welfare allocations
  - Gruber and Saez (2000), offers a methodology to arrive at an optimal tax and transfer policy based on consumers' behaviour
  - Given the parallels between the two problems, a similar approach can be adopted in electricity tariffs

*“Given the differential response of consumers to prices, and given that governments may wish to provide greater relief to the poorest sections, what should be the best structure of tariffs while also ensuring that power supply costs are recovered?”*

- **Differential responses are reflected in the price elasticity of demand.**
- **Governments' preferences can be captured by social welfare weights for different categories**
- **Covering costs and without unduly burdening richer consumers**



# Report of the FOR Working Group on New FOR Logo

**53<sup>rd</sup> Meeting of the Forum of Regulators  
CERC, New Delhi-110001**

**18.3.2016**

# Introduction

- In the 49<sup>th</sup> FOR Meeting, decision was taken to redesign FOR logo
- FOR Working Group constituted, with
  - Chairperson, CERC as Chairperson of the WG &
  - Chairpersons of RERC / CSERC / TNERC / WBERC / AERC / DERC / JERC (Goa & UTs) as Members
- FOR Working Group met on 31.8.2015 & 11.3.2016
- National Institute of Design, Ahmedabad assisted the WG
- WG deliberated upon various designs

# Mission & Vision of FOR

- **Forum of Regulators (FOR) is responsible for Harmonization, Coordination, Ensuring Uniformity of Approach amongst the ERCs.**
- **FOR is aimed at achieving greater regulatory certainty.**

## Issues considered

- **Bilingual notation**
- **Power Sector as nucleus**
- **Representation of collaborative approach of ERCs**
- **Representation of consensus decisions**
- **India at heart**
- **Values FOR stands for**
- **Clear, Simple yet Striking representation**

# Design One



- Inner Circle represents forum/platform for discussion, knowledge creation/sharing, research, consensus building
- 31 White lines represent the Member ERCs
- Spark at nucleus represents Electricity sector
- Two dynamic converging sparks represent openness / acceptance to new ideas for research study of current topics etc.
- Dynamic arc emerging out and extending beyond circle represent outcome of harmonized decisions, knowledge sharing with external world, dissemination of best practices etc.
- Saffron, White, Green, Dark Blue represent colours of National Flag
- Black represents unambiguous / dispassionate / unbiased decision making.



# Design Two



- Inner Circle represents forum/platform for discussion, knowledge creation/sharing, research, consensus building
- 31 White lines represent the Member ERCs
- Spark at nucleus represents Electricity sector
- Two dynamic converging sparks represent openness / acceptance to new ideas for research study of current topics etc.
- Dynamic arc emerging out and extending beyond circle represent outcome of harmonized decisions, knowledge sharing with external world, dissemination of best practices etc.
- Saffron, White, Green, Dark Blue represent colours of National Flag
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# Design Three



- Inner Circle represents forum/platform for discussion, knowledge creation/sharing, research, consensus building
- 31 White lines represent the Member ERCs
- Spark at nucleus represents Electricity sector
- Two dynamic converging sparks represent openness / acceptance to new ideas for research study of current topics etc.
- Dynamic arc emerging out and extending beyond circle represent outcome of harmonized decisions, knowledge sharing with external world, dissemination of best practices etc.
- Saffron, White, Green, Dark Blue represent colours of National Flag
- Black represents unambiguous / dispassionate / unbiased decision making.



**Thank you**

# CASE FOR A DISCOM UTILITIES FORUM

Presentation by Ajay Shankar, et al

# BACKGROUND

- A lot of generation and transmission capacities has been added over the last decade
- But dropping PLFs indicate that though power is available, it is not being bought
- Demand growth has also slowed down

# BACKGROUND

- Post unbundling, there are about 60 discoms in the country
- Except in Mumbai, Ahmedabad, Surat and Kolkata, most are state owned
- While the private entities are profitable, despite distribution being a regulated business with 15.5 to 16% ROE, state-owned discoms have not fared well at all
- Distribution Franchise models have not succeeded given the paucity of funds for capital expenditure and being allowed to source power from alternate sources

# BACKGROUND

- The cumulative loss among all state-owned discoms is around Rs 3,80,000 cr (as on March 15, 2015) with an aggregate debt of Rs 483,000 cr
- Average loss per annum is Rs 60,000 - 70,0000 cr
- 90% of the losses are in Rajasthan, Uttar Pradesh, Tamil Nadu, Haryana, Madhya Pradesh, Andhra Pradesh and Jharkhand
- Losses in Rajasthan, Uttar Pradesh and Tamil Nadu alone are estimated at around Rs 15- 16,000 cr per state per annum



# BACKGROUND

Some reasons for such dismal performance:

- Over 30% AT&C Losses
- Over 50 % gap in supply cost and revenue realized
- Poor Financial and Operational Management of the Discoms.
- Poor distribution network Infrastructure, Technological backwardness, lack of proper metering
- Poor maintenance leading to breakdowns and poor reliability.

# BACKGROUND

GOI has launched a series of initiatives to re-energize discoms

- **Ujjwal Discom Assurance Yojna (UDAY)** which envisages financial and operational restructuring of the discoms
- **Integrated Power Development Scheme (IPDS)** for Town & Cities
- **Dindayal Upadhyaya Gram Jyoti Yojana (DDUGJY)** for rural areas
- **National Smart Grid Mission (NSGM)** for smart grid pilot projects to modernise distribution infrastructure

# THE PROPOSAL

No structured forum of distribution utilities exists where they can share global and industry-wide best practices, formulate & take up common issues, prepare strategy, organize specialized training for capacity building, etc.

This is an appropriate time to set up such a forum and address the issues in the distribution sector, in tandem with the central & state governments, regulatory authorities and the discoms themselves

**We propose the setting up of a Forum or Association of Discoms (FORD or ADCOM for short) with all the Discoms as members with the above-mentioned objectives**

# THE PROPSAL

The objectives of the proposal are in line with those of the UDAY scheme and will help towards implementation of the same:

- (i) Improving operational efficiencies of Discoms
- (ii) Reduction of cost of power
- (iii) Reduction in interest cost of Discoms
- (iv) Enforcing financial discipline on Discoms

# THE PROPOSAL

## Objectives of the Forum

- A platform to share best practices
- Exchange experiences on technology upgrade processes
- Provide expert solutions for operation, maintenance and R&M issues
- To interact with industry, academia and training and research institutes for technological developments & financial management
- To develop industry standards & benchmarks for discom utilities.

# THE PROPOSAL

## **Forum's activities:**

- Need and Resource Mapping
- Capacity Building workshops
- Knowledge Sharing and Discussion Forums
  - CEO Forum
  - Technical, Regulatory & Consumer Consultation Workshops
- Benchmarking
- Scaling the Technology Curve

# PROPOSERS

- Shri Ajay Shankar – Former Secretary, DIPP & Special Secretary MOP
- Shri Ajay Mathur – DG, TERI & Former DG BEE
- Shri R N Nayak – Former CMD, Powergrid
- Shri Rakesh Nath – Former chairman CEA & Member Aptel
- Smt. Gayatri Ramanathan – Former Consultant, MERC

THANK YOU