Trends and Way Forward in the State Electricity Sectors, 2020

An Experience Sharing Workshop

24th & 25th September, 2020 | Virtual workshop





Table of Contents

- <u>Planning for a smooth transition of the distribution sector</u> <u>Manabika Mandal, Prayas (Energy Group)</u>
- <u>Punjab Power Sector</u> <u>Er.Baldev Singh Sran, Formerly with Punjab State Power Corporation Limited</u>
- <u>AP and Telangana Experience</u> <u>Dr. Thimma Reddy, Peoples Monitoring Group on Electricity Regulation,</u> <u>Hyderabad</u>
- <u>Experiences with APERC and TSERC</u> <u>M Venugopala Rao, Senior Journalist & Convener, Centre for Power Studies,</u> <u>Hyderabad</u>

Planning for a smooth transition of the distribution sector

Trends and Way Forward in the State Electricity Sectors

3rd Experience Sharing Workshop

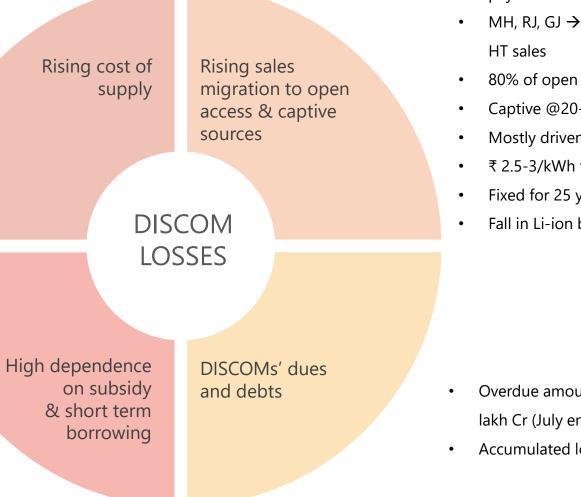
24th September 2020

Manabika Mandal Prayas (Energy Group) <u>www.prayaspune.org/peg</u>



Challenges before the electricity distribution sector

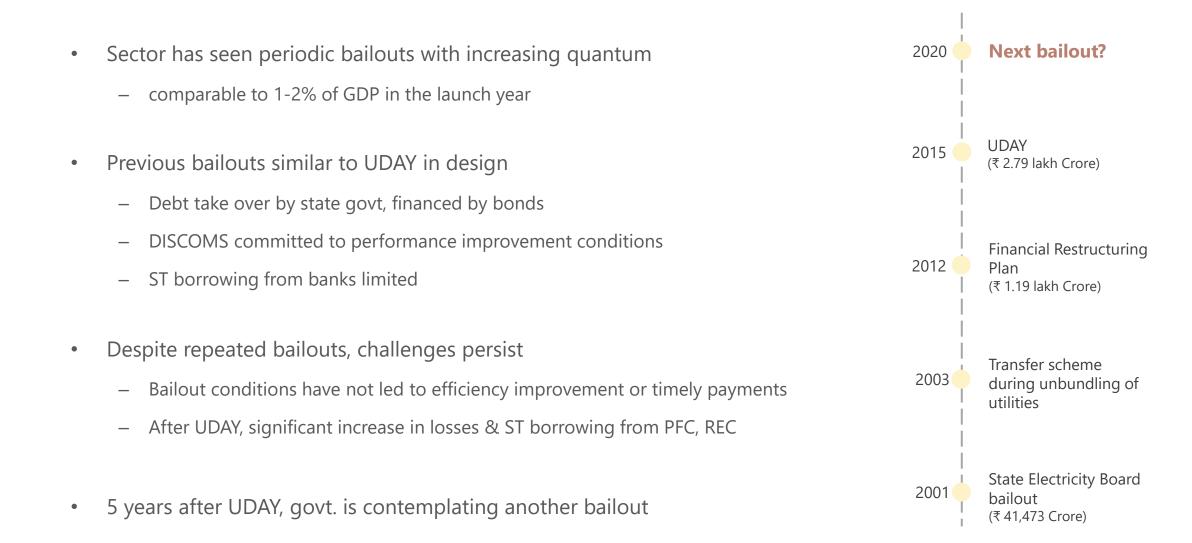
- ACoS > ₹ 7/unit, rising at 6% per annum ٠
- Sustained high power purchase cost
- High cost surplus \rightarrow aggressive capacity addition
- Backing down \rightarrow 15% to 35% of total fixed procurement cost
- CAPEX, no accountability for supply quality
- AT&C loss @ 22%, veracity of estimate?
- ₹ 85,611 Cr- Revenue subsidy received by all DISCOMs in FY18
- Forms 15% of total revenue, often delayed
- Delays cause strain in working capital & ٠ reliance on high interest short term borrowings
- ~80,000 Cr in current borrowings



- Industrial & commercial consumers ٠ pay >130% of ACoS (>₹ 9/unit)
- MH, RJ, GJ \rightarrow open access @ 20% of
- 80% of open access is short term
- Captive @20-30% of total sales
- Mostly driven by fall in RE prices
- ₹ 2.5-3/kWh for wind/solar
- Fixed for 25 years (modular, scalable)
- Fall in Li-ion battery prices

- Overdue amount to GENCOs ₹ 1.17 lakh Cr (July end 2020)
- Accumulated losses @ ₹4.89 lakh Cr

Are bailouts the solution?



Limited scope of current strategies in tackling these challenges

Improving efficiency \rightarrow reduce cost of supply, tariff

Efforts to ↑ efficiency will ↓ rate of growth of cost of supply but not stall it

↑ costs due to need for additional capex, loan repayments and wage increase Increasing fixed charges, for same total tariff

Energy charges may reduce by 10-20% but will remain >₹ 5/unit

High incidence of fixed charges will make shift to solar PV captive more lucrative Reduction in tariff to retain migrating consumers

Tariff rebates provided in many states but with limited success

Could increase subsidy burden/ DISCOM losses (Punjab caps energy charge @ ₹4.99/unit for industries, Haryana & Gujarat provide subsidy to new industries)

RR

DISCOMs' inevitable role in the future

Paradigm shift from the current business model

- Cross subsidy based tariff design unsustainable
- Protect small consumers, market option for paying consumers

Current Scenario	Future Scenario
Wires & Supply	Mainly wires licensee
Universal supply obligation	Provider of last resort
to all consumers	Grid balancing
Dominant grid user	Universal supply obligation
 State demand ~ DISCOM 	only for small consumers
demand	New revenue models
Cross-subsidy based model	

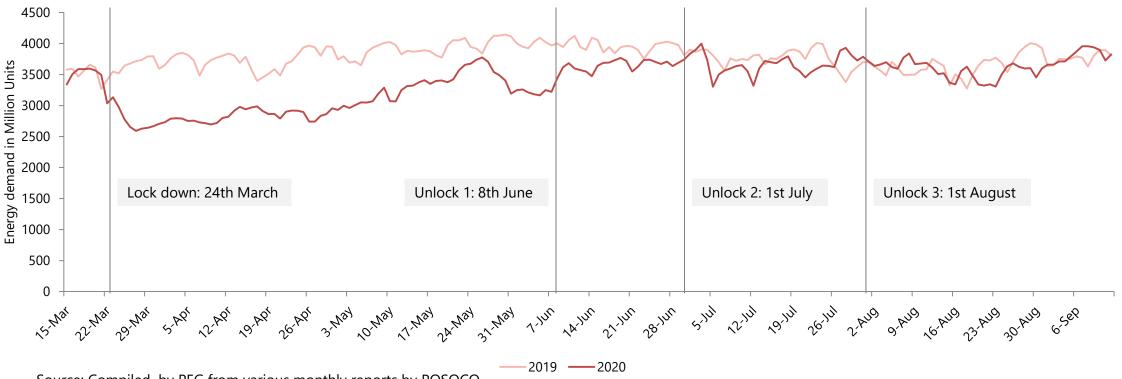
- Crucial policy decisions needed to be taken soon to leverage on opportunities
- Else, changes will unfold chaotically → avoidable costs,
 disproportionate impact on small consumers
 - Stranded assets and resource lock-in
 - Increase in avoidable subsidy burden and bailouts
 - Lack of investment in quality of supply and services for small consumers
 - Delay in necessary investments in grid services
- Significant burden on tax payers, bond rate payers and consumers (esp. small consumers)

5

Power Sector and CoVID-19

Fall in demand by 20% on average due to lock-down

- Fall in C&I demand
- Managing power procurement, contracted capacity a challenge
- Revenue loss for DISCOM, especially cross-subsidy revenue \rightarrow working capital strain
- Meter reading, billing and collection affected especially w.r.t to small consumers



Power Sector and COVID-19...contd.

Central sector initiatives

- Liquidity infusion of ₹ 90,000 Cr via PFC-REC loans to address working capital strain
- Payment moratorium for distribution utilities to central sector utilities and reduction in delayed payment charges
- Rebate and deferred recovery of fixed charges by Central Public Sector Units
 - NTPC: Rebate → ₹ 1,363 crore (~ 25% rebate on fixed charges for period), Deferred fixed charge: ₹ 2,064 Cr
 - Power Grid \rightarrow 25% rebate in charges during period

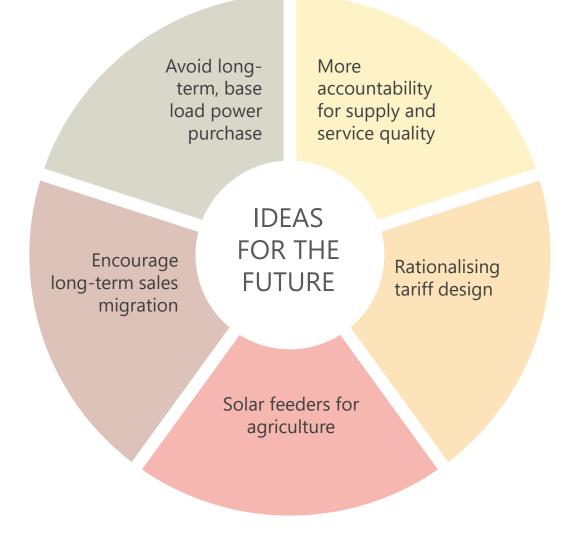
State sector initiatives

- Rebate/ deferred recovery in fixed charges for C&I consumers (Punjab, Gujarat, Maharashtra, Uttar Pradesh)
- Domestic subsidies in Kerala and Madhya Pradesh
- Special dispensation to meet working capital requirement
- Increase in time limits to ensure payments

Effect of COVID on the power sector add to the already significant challenges but is clearly not the driver of the financial crisis which has been caused by deep seated problems with greater and more far reaching impacts

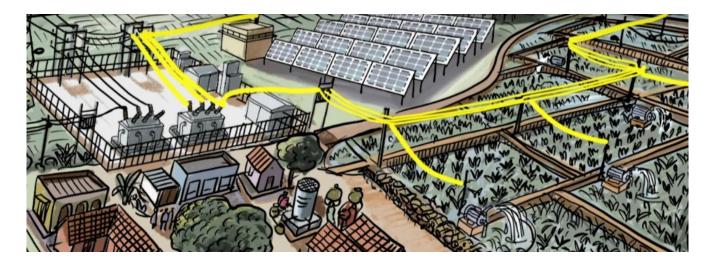


Some ideas for the way forward





Solar Feeder approach to manage agricultural supply



The idea

- 1-10 MW solar plant at 11 kV feeder
- Implemented in areas with dedicated agri. feeders
- Plant built by developers- 25 yr. fixed price contract
- Developers selected via competitive bidding approach

Implementation

- 3000 MW in various stages of procurement in Maharashtra →state government scheme
- Central Government scheme→ KUSUM
 Component A: Implementation in many states Haryana, Chhattisgarh, Madhya
 Pradesh, Rajasthan

Win-win approach

- Day-time reliable power for farmers
- Reduces cost of supplying power: Solar<₹ 3.5/unit, other purchase @ ₹ 5/unit
- Subsidy saving for the state government
- Utilities can meet renewable obligation

Transitions in the electricity sector are going to take place differently, given state-level realities

Thus, in the context of various states, it is crucial that we deliberate the following:

- What models would be best suited for Indian DISCOMs to transition to? What kind of policy measures, financial support and regulatory measures would be needed for this transition?
- What steps can be taken to manage supply to small consumers given the loss of cross subsidy?
- In what ways can time bound financial support be provided? What innovative ideas would make the 5th bailout more effective than its predecessors?



Presentation based on:

Electricity distribution companies in India: preparing for an uncertain future (2018)

https://prayaspune.org/peg/publica tions/item/377-electricitydistribution-companies-in-indiapreparing-for-an-uncertainfuture.html Electricity Distribution Companies in India: Preparing for an Uncertain Future





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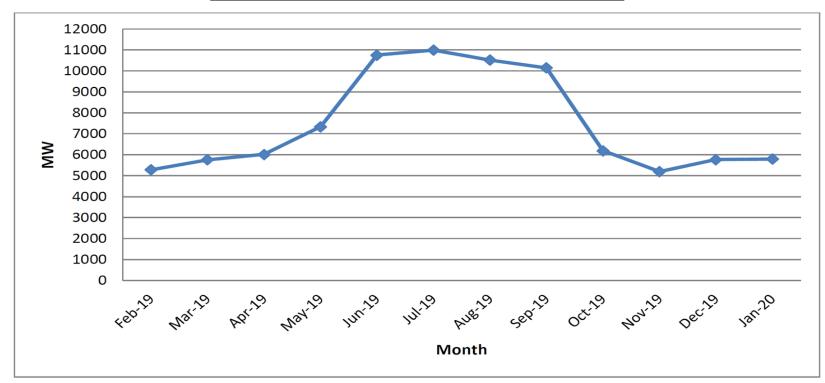


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Punjab Power Sector

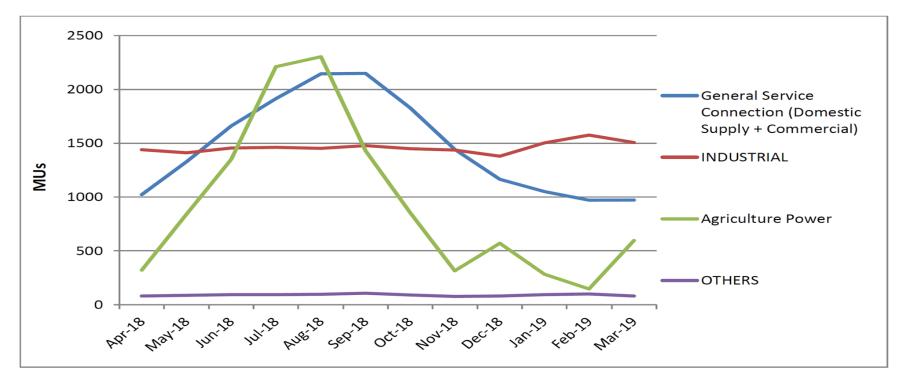
Presentation by Er.Baldev Singh Sran 24th September 2020 CSO Experience Sharing Workshop

Monthly Average Maximum Demand



Maximum demand during 2019-20 : 13606 MW in July 2019 Installed/Contracted Capacity : 13858 MW

Month wise energy consumption of various categories of consumers



Highest Energy during a day : 2999 LUs in July 2019

QUOTED TARIFF VS ACTUAL TARIFF OF IPPS (in Rs./Unit)

	TS Levelised tariff: R	PL s. 2.86 per unit	NI Levelised tariff: R	PL s. 2.89 per unit	GVK MOU route		
Year	Quoted Tariff	Actual Tariff	Quoted Tariff	Actual Tariff	Quoted Tariff	Actual Tariff	
2014-15	2.63	4.44	2.50	4.67			
2015-16	2.66	5.24	2.65	4.43			
2016-17	2.70	5.40	2.78	3.96		5.31	
2017-18	2.75	4.73	2.79	4.19		5.94	
2018-19	2.69	4.99	2.79	4.67		6.63	
2019-20	2.70	6.62	2.74	5.05		9.54	

Comparison of Projected Cost and Actual Cost of M/s. TSPL

Assumed Cost of Coal at the time of Bidding (Year 2008):	Rs. 723/MT
Projected GCV of Coal - 4500Kcal/KG Actual GCV of Coal-	3250 Kcal/Kg (approx)
Assumed Cost of Transportation of Coal at the time of Bidding (Year 2008):	Rs. 1295/MT

Financial Year	Projected Escalated Cost of Coal (Rs./MT)	Actual Cost of Coal (Rs./MT)	Projected Escalated Transportation Cost (Rs./MT)	Actual Cost of Transportation (Rs./MT)	Total Projected Escalated Cost of Coal & Transportation (Rs./MT)	Total Actual Cost of Coal & Transportation (Rs./MT)
2014-15	1090	1477	1339	2690	2429	4167
2015-16	1164	1476	1347	2820	2511	4296
2016-17	1243	1543	1355	2802	2598	4345
2017-18	1327	1780	1361	2790	2688	4570
2018-19	1417	1968	1369	2920	2786	4888
2019-20	1513	2398	1377	2980	2890	5378 ³

Comparison of Projected Cost and Actual Cost of M/s. NPL

Assumed Cost of Coal at the time of Bidding (Year 2009): Rs. 520/MT Assumed Cost of Transportation of Coal at the time of Bidding (Year 2009): Rs. 1204/MT

Financial Year	Projected Escalated Cost of Coal (Rs./MT)	Actual Cost of Coal (Rs./MT)	Projected Escalated Transportation Cost (Rs./MT)		Total Projected Escalated Cost of Coal & Transportation (Rs./MT)	Total Actual Cost of Coal & Transportation (Rs./MT)
2014-15	699	1054	1355	2531	2054	3585
2015-16	742	1191	1387	2553	2129	3744
2016-17	787	1559	1420	2542	2207	4101
2017-18	835	1585	1453	2521	2288	4106
2018-19	886	1784	1488	2664	2374	4448
2019-20	941	1787	1524	2820	2465	4607 ⁶

PLF- Thermal Plants

YEAR		PLF - IPPs	PLF- STAT	E SECTOR	
	TSPL	NPL	GVK	ROPAR	LEHRA
2014-15	34 %	55 %		52 %	56 %
2015-16	42 %	63 %		36 %	39 %
2016-17	51 %	78 %	04 %	25 %	34 %
2017-18	49 %	75 %	32 %	22 %	37 %
2018-19	61 %	75 %	51 %	24 %	31 %
2019-20	51 %	72 %	28 %	14 %	11 %

Distribution Losses

	Category of Feeders Energy in LUs																	
Voltage	-	I d load U ndustria		(1	II Industria	i)		III pendent ction fur		Continu	IV Idepende Jous / es Industry)	sential		V Pattern Rural Are			TOTAL	
	Energy Sent	Energy Billed	% Losses	Energy Sent	Energy Billed	% Losses	Energy Sent	Energy Billed	% Losses	Energy Sent	Energy Billed	% Losses	Energy Sent	Energy Billed	% Losses	Energy Sent	Energy Billed	% Losses
11 KV Feeder	160310	139017	13.28	57083	54609	4.33	12003	11714	2.41	15548	15212	2.16	92574	67656	26.92	338969	289484	14.60
33 KV Feeder	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1050	1034	1.49	0.00	0.00	0.00	1050	1035	1.49
66 KV Feeder	192	193	-0.73	432	412	4.49	16834	16814	0.12	41046	40915	0.32	0.00	0.00	0.00	58504	58336	0.29
132/220 KV Feeder	0.00	0.00	0.00	0.00	0.00	0.00	243	243	-0.06	6933	6627	4.42	0.00	0.00	0.00	7177	6870	4.27
Total	160502	139210	<mark>13.27</mark>	57515	55022	<mark>4.33</mark>	29080	28771	<mark>1.06</mark>	64577	63788	<mark>1.22</mark>	92574	67656	<mark>26.92</mark>	405701	355725	<mark>12.32</mark>

High Distribution Loss Divisions

S. N.	Name of Division	%age Losses	S. N.	Name of Division	%age Losses	S. N.	Name of Division	%age Losses
22	EAST PATIALA	24.71	29	RAIKOT	20.09	36	DIRBA	17.29
23	CITY MOGA	23.91	30	RAYYA	19.49	37	ABOHAR	16.60
24	CITY NAKODAR	23.63	31	JANDIALA GURU	19.39	38	FAZILKA	16.57
25	SUB. FZR	23.50	32	QADIAN	19.03	39	SANGRUR	16.19
26	DHARIWAL	22.68	33	MAHILPUR	18.58	40	SAMANA	15.91
27	GIDDER BAHA	21.51	34	CITY BATALA	17.83	41	MANSA	15.89
28	CITY FZR	20.67	35	BUDHLADA	17.39	42	MUKATSAR	15.70

Government Subsidy

	Actual Subsidy (FY 2018- 19)	Subsidy as per the Tariff Order (FY 2019-20)	Subsidy as per the Tariff Order (FY 2020-21)	
Category	Subsidy	Subsidy	Subsidy	
	(Rs. in Crores)	(Rs. in Crores)	(Rs. in Crores)	
Domestic	1,428	1,623	1513	
Industry - LS	1,141	1,578	1600	
Industry - MS	176	236	166	
Industry - SP	138	177	162	
Agriculture	5,874	6,060	7180	
Total	8,757	9,674	10,621	

Subsidy Paid

YEAR	SUBSIDY ALLOWED FOR THE FY	TOTAL SUBSIDY INCL ARREAR	SUBSIDY RECEIVED /ADJUSTED	BALANCE SUBSIDY
2014-15	5109	4951	4642	309
2015-16	5365	5909	4847	1062
2016-17	6710	7943	5600	2342
2017-18	8633	11542	6578	4965
2018-19	8950	13719	9036	4682
2019-20	9674	14972	9193	5779
2020-21	10621	16400		

Tariff Rise

Financial Year	Rise	Profit/ (Loss) (Rs. in Cr.)	Remark s	Fina Y
2005-06	10.27%	13	-	201
2006-07	0.0%	-1,626	*	201
2007-08	4.90%	-1,390	-	201
2008-09	2.60%	-1,041	**	
2009-10	12.42%	-1,302	-	201
2010-11	7.58%	-1,640		201
2011-12	9.19%	-537	*	201
2012-13	12.08%	261	-	201

Financial Year	Rise	Profit/ (Loss) (Rs. in Cr.)	Remark s
2013-14	9.06%	249	**
2014-15	2.74%	166	-
2015-16	0.00%	-1,695	-
2016-17	-0.65%	-2,836	*
2017-18	9.33%	-907	-
2018-19	2.17%	-38	**
2019-20	1.78%		-

* Assembly ** Parliament

Banking of Power

- Savings by way of lesser cash outflow due to zero power procurement on short term basis during paddy season
- Utilisation of surplus power during off-paddy season

Description	Unit	FY 2015- 16	FY 2016- 17	FY 2017- 18	FY 2018- 19	FY 2019- 20
Banking import during paddy season	MUs	1348	1927	1804	5062	5185
Banking export during Off-paddy season	MUs	1839	1941	3754	5468	3021

Sale of Surplus Power Outside State

FY	Units Sold (MUs)	Amount (Rs. Cr.)	Rate per unit (Rs./unit)	Saving (Rs. Cr.)
2015-16	64	21	3.28	Not calculated
2016-17	361	108	2.98	Not calculated
2017-18	1219	446	3.66	162
2018-19	2268	1183	5.21	453
2019-20	397	187	4.72	64

Savings due to purchase of low cost power

Replacement of high cost power of IPPs/own thermals with low cost power from Exchange

FY	Replacement of high cost power with low cost power purchase (MUs)	Amount (Rs. Cr.)	Av. Purchase Cost (Rs./Unit)	Total Saving (Rs. Cr.)
2018-19	456	142	3.12	26
2019-20	725	240	3.31	38

Issues & Challenges

- Marginalisation of Professionals in the power sector particularly in policy making
- Power sector being misused for vote bank politics
- Political patronage causes high Distribution losses due to theft
- Payment of subsidy and Govt department dues

Prayas Energy Group Third Experience Sharing Workshop (24th September, 2020) Note by Dr. Thimma Reddy AP and Telangana Experience

I

CRISIS

There is no denying the fact that the DISCOMs in AP and Telangana are facing crisis.

A few indicators of this crisis are placed below:

DISCOMs in both the states have to pay dues to power generator. This indicates inability of DISCOMs to pay to the power generators for the power procured from them.

As of July 2020 APDISCOMs,' dues to generators stands at Rs. 4,003 crores. Out of this RE generators have to receive about Rs.2,500 Crore.

TSDISCOMs' dues to generators stands at Rs. 5,029 Crore. Out of this about Rs. 1,200 Crore are to be received by RE generators.

In fact, these are optimistic figures. A few months back dues of DISCOMs of both these states were more than Rs. 10,000 Crore each.

As a part of Atmanirbhar package Rs. 90, 000 Crore relief was sought to be provided to debt ridden DISCOMs. Under Atmanirbhar package AP sought Rs. 6,000 Crore and Telangana Rs. 12,000 Crore.

DISCOMs in both these states are also facing huge accumulated losses. Accumulated losses of APDISCOMs are about Rs. 29,000 Crore by December 2019 and that of TSDISCOMs about Rs. 23,000 Crore.

II

WHY?

How did DISCOMs of AP and Telangana reached such a situation? DISCOMs' dues to generators indicate that they did not have the capacity to pay the generators for the power procured from

them. The DISCOMs did not receive the revenue as allowed under the tariff orders of the respective ERCs. In other words, they are facing arrears from electricity consumers served by them. Significantly huge arrears have to be received from Govt departments in both these states.

In the case of AP according to tariff order of APERC for the FY 2020-21 total arrears from Govt departments are Rs. 8,298.73 Crore.

In the case of Telangana arrears from Govt departments are Rs. 8,426 Crore (Andhra Jyothi, 15-01-2020)

Under UDAY scheme govt departments were supposed to clear all arrears by March 2017.

Delay in subsidy disbursement by the state governments is also one of the reasons for DISCOMs failure to pay generators in time.

In the case of AP according to tariff order of APERC for the FY 2020-21 GoAP is yet to release Rs. 5,759.50 Crore towards for the years 2018-19 and 2019-20. This is about 50% of the subsidy promised by the state government for these two years.

TSDISCOMs are also not receiving subsidy in time.

FSA/True up exercises were not taken up in time leading to accumulated losses.

In AP true up was not taken up during the control period 2015-19. True up for this period was taken up during the next control period. Under the recent true up exercise APDISCOMs claimed Rs. 19,603.95 Crore.

In the case of Telangana partial true up was done for two years and detailed true up was taken up only after the completion of the control period. TSDISCOMs have claimed more than Rs. 10,000 Crore towards true up for this control period.

DISCOMs of both the states have agreed to take up FSA/true up in time as a part of UDAY agreement. But they did not do so.

Ш

No Tariff Hike

Though there was annual tariff exercise in AP there was no tariff hike.

This led to increase of subsidy burden on the state government. Subsidy increased from Rs. 5,144 crores in 2019-20 to Rs. 10,060 crores in 2020-21. More than 80% subsidy went to agriculture consumers.

In Telangana tariff exercise was not taken up for the years 2019-20 and 2020-21. Subsidy during the year 2018-19 was more than Rs. 6,000 crores. During this year the TSERC left about Rs. 1,000 crores uncovered saying that it will be taken up later.

Generally, tariff covered about 80% of CoS.

National tariff policy as well as the proposed amendments to E Act propose reduction or phasing out of cross subsidy. A look at cross subsidy situation in AP is as follows:

According to the tariff order for the year 2020-21 in the case of industrial sector cross subsidy burden is 7% higher than CoS. This comes to about Rs. 800 Crore. This can be gradually reduced to 0 (zero). High government subsidy this year is explained to be a result of lower cross subsidy

In the case of commercial consumers tariff burden is 50% higher than CoS. Most of the commercial services are under LT. Given this fact scope for migration of these services may be low.

IV

Power procurement cost

Power procurement cost accounts for more than 80% of ARR (tariff + subsidy). Higher power purchase cost is because of ill planned and questionable power procurement. It is important to explore avenues to reduce this burden.

In AP there were some exercises in this direction.

GoAP proposed renegotiation RE PPAs. But it has led to huge backlash. Gol expressed its unhappiness about this. Now a few cases related these PPAs are before the Supreme Court and AP High Court. Though AP High Court has given interim order the cases are yet to be disposed off.

GoAP proposed to set up 10,000 MW solar power generation capacity to meet agriculture needs. At present CoS to agriculture is more than Rs. 7 per unit. Solar power costs less than Rs. 3 per unit. Most of this capacity is proposed to be set up on utility scale/mega solar plants/solar parks. Solar power suitable for decentralised, distributed generation and also leads to lower or absence of T&D costs. If utility scale plants are adopted the savings from solar power may be negligible and in the presence of surplus power savings may not be there.

GoAP proposed handing over Rayalaseema Thermal Power Plant (RTPP) (1650 MW) to NTPC. In the face of opposition from utility employees the state government appointed an Expert Committee to look in to the issues. The Expert Committee proposed to alternative solution – one is to take up efficiency measures internally and another is to transfer the plan to NTPC.

Even before the issue of RTPP is solved the GoAP also proposed to handover Sri Damodaram Sanjivayya Thermal Power Station (1600 MW) to Sembicorp, a private power generation company which has a power plant in the geographical area as that of SDSTPS.

Then APGENCO will be left with VTPS only. These units are also facing similar problems – high fixed and variable costs. Solutions do not lay in handing over the plants to other entities. Internal savings, efficiency options need to be explored.

In the case of Telangana in the absence of annual tariff exercise for the last two years no clear picture is available. Also, there is no long-term load forecast.

Even in the presence of surplus power situation new power plants with aggregate capacity of 8,280 MW are in the process of being set up. These include Bhadradri (1,080 MW), Yadadri (4,000 MW), NTPC (1,600 MW), KTPS (800 MW) and Singareni (800 MW). There are no PPAs with respect to these plants.

V

Bail out

Bail out is not the way out. The country has seen four bailouts without any significant improvement in the financial health of DISCOMs. On the same way fifth bail out may not be of much use.

In a way the present situation is a creation of state governments. Let them handle it.

Under bailout interventions central govt did not take up any financial burden. It only helped in swapping of loans. The financial burden was borne by the state governments.

Under UDAY also financial burden was borne by the state govts through taking over debt of the DISCOMs. At the same time neither the state governments nor DISCOMs care to implement steps agreed under UDAY like time bound FSA and true up exercises.

Under bailouts every one (except state govts) gets away, including those with the capacity to pay.

Along with annual tariff exercise FSA/True up shall be taken up in time bound manner. At the same time efforts must be made to bring down power procurement costs and T&D costs.

Consultative process involving centre and states shall be initiated. As conditions differ from state to state, state specific plans need to be formulated. A single model will not be suitable to all the states.

At the same time the central government can take up one initiative. Higher railway freight tariff is one of the reasons for higher variable cost. In the case of some power plants away from coal mines railway freight tariff is higher than coal price. This railway freight tariff includes cross subsidy. As Gol is advocating reducing/phasing out cross subsidy it shall set an example by fixing railway freight tariff according to CoS and without cross subsidy. This will help to bring down power generation cost.

Experiences with APERC and TSERC

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(Submitted for the workshop on Trends and Way Forward in the State Electricity Sectors organized by Prayas Energy Group on 24-25.9.2020 through virtual meeting)

The very purpose of creation and existence of Electricity Regulatory Commissions is to protect larger interest of consumers of power and ensure orderly development of power sector and competitive tariffs within the limitations of law and discretionary powers of the Commissions. We cannot expect the ERCs to violate law in the name of protecting consumer interest. Seen in this limited perspective, the experience in Andhra Pradesh during the six years preceding the present APERC has been one of regulatory failures of commission and omission in broader terms.

Cost of power purchase constitutes about 80 per cent of the total costs of the Discoms for supplying power to the consumers. Therefore, addition of generation capacity and entering into power purchase agreements by the Discoms should be regulated by the Commission in tune with realistic assessment of demand growth, load forecast, procurement plan, etc. However, the experience in A.P. established conclusively that the Discoms, at the behest or permission of the Government of AP, entered into long-term PPAs to purchase unwarranted power at higher costs, leading to availability of substantial surplus power and disastrous consequences on a long-term basis, with APERC giving its consents to the same without due diligence. It turned out to be a case of being more loyal than the king, i.e., giving consents to whatever the GoAP wanted. An operation cover-up has been enacted to conceal futilely all questionable manipulations to do undue favours to developers of the choice of the then GoAP.

As per information submitted by AP Power Distribution Companies - APSPDCL and APEPDCL - to APERC, generation capacity has been backed down and fixed charges paid therefor as given below:

Year 2015-16	Backed down (MU) 3179 MU	Fixed charges paid Rs.409.40 Crores
2016-17	5748 MU	Rs.561.20 Crores
2017-18 2018-19	6912.34 MU 8301.99 MU	Rs.871.70 Crores R.1072.90 Crores

Despite repeated requests over the years to APERC to direct the Discoms to submit quantum of power being backed down every year and fixed charges paid therefor, APERC had given such a direction in the tariff order for 2019-20 only.

Despite tariff hikes effected, and hefty subsidy being provided by GoAP and liabilities of the Discoms taken over by the Government under UDAY, the Discoms have claimed about Rs.20,000/- crore for the said four years towards true-up. True-up claims for 2019-20 and 2020-21 also will turn out to be hefty. The subsidy being provided by GoAP for the current financial year is more than Rs.10,000 crore. The Discoms were forced not to file their claims for true-up periodically and in time with a view to subserving the political expediency of the then party-in-power, especially in the pre-election period, to hoodwink the people that there were no additional burdens on them in the form of tariff hikes, and the Commission, ignoring its own regulations, accommodated such derelictions. This applies to the situation in Telangana also.

For the year 2020-21, APERC has determined availability of surplus power to the tune of 9,500 MU. Due to drastic decrease in demand for power as a result of severe slump in the economy during the pre- and post-Covid pandemic situation, availability of surplus power may exceed the quantum determined by APERC.

The Discoms have submitted to APERC that they have been incurring a loss of Rs.5000 crore per annum on account of purchasing variable renewable energy, i.e., wind and solar power. In their reply to Prayas, the Discoms have stated that 90-95% of backing down of thermal power was due to purchase of VRE. When the tariffs for wind power were hovering around Rs.3 per unit as discovered through competitive biddings in the country, APERC, suo motu, issued orders fixing generic tariffs for wind power @ Rs.4.84 and Rs.4.86 per unit and contrary to its regulations and without giving reasons in writing for such a deviation failed to factor generation based incentive into those tariffs. The Discoms had written two letters to the Commission requesting it to correct this failure of omission but to no avail. On a petition filed by them, the Commission had given its order restoring factoring of GBI into the generic tariffs for wind power from the date of their filing the petition, not from the date of the GBI coming into force as per its original order. The dev elopers of wind power projects challenged the order of the Commission and got a stay order from the High Court. A Bench of the High Court headed by the then Chief Justice, suo motu, made me a respondent in the case in 2018. The case has not come up for hearing so far, while the stay order is continuing.

No PPA was rejected by APERC on the valid grounds that that power was not required, that the tariffs were not competitive, that the Discoms had already exceeded their obligations to purchase non-conventional energy under Renewable Power Purchase Obligation and that relatively cheaper power was available from other sources, including power exchanges, to meet demand or deficit during peak hours and seasons. The latest RPPO issued by APERC was also a mockery, as the Discoms had already exceeded the targets fixed therein.

While seeking amendments to Regulation No.2 of 2005 relating to terms and conditions of open access in O.P.No.3 of 2020 pending before APERC, both the AP Discoms have submitted that the RPP Obligation for 2020-21 is 15% and that the present renewable energy availability is around 30% of system energy requirement. The Discoms have also mentioned that smooth integration of this much RE (Solar and Wind power) of 8515 MW which is variable in nature, with the Grid having system demand of 9000 to 10000 MW is a difficult task. Further, the

Discoms have stated that in this scenario, presently, promotion of RE power is not envisaged and not warranted.

Refusal of the ERC to see reality and examine and consider relevant information led to regulatory failures of commission and omission.

Despite repeated requests made by us over the years, there has been inordinate delay in submitting proposals for long-term load forecast, power procurement plan, etc., by the Discoms and AP Transco. Furthermore, there has been long delay in completing public hearings and issuing order by APERC on those issues. In the order, dated 15.4.2019, on long-term load forecast, etc., for the 4th control period, APERC approved addition of net base-load capacity of 161 MW only, that, too, in the last year of the 4th control period, i.e., 2023-24. This includes 5% spinning reserve also (page 152). In the alternate scenario, the Commission determined need for addition of 831 MW base-load capacity in 2023-24, with no requirement for addition of OTB capacity (non-conventional energy) at all in the entire 4th control period (page 153). This is self-indictment in the sense that the Commission had approved PPAs for procurement of power which would meet requirement in future years, instead of regulating it to be in tune with gradual increase in demand every year. Disrespecting its own order on long-term load forecast, etc., APERC had given consents to PPAs to purchase 1750 MW of solar power by the Discoms from NTPC and SECI.

Dragging on public hearing on Simhapuri project, which belonged to a sitting MP of the then ruling party, for nearly one year, after two orders of APTEL and the Supreme Courts were submitted by the counsel for Simhapuri, APERC hurried the process of hearing and issuance of order. It refused to give a week's time for me to study the two orders and file further submissions. In its tricky order, APERC avoided its responses to my submissions on failure to fulfill three conditions given in the order of APTEL; it also avoided its decision on giving consent to the PPA to bail out Simhapuri from payment of penalties for its failure to generate and supply power, as the project could not be executed.

The Commission had put in its website about 10 petitions, inviting objections and suggestions from interested public, within a span of three weeks. There was no response to my request to give one month's time to file submissions, as it would not be possible to study, analyse and prepare submissions in a meaningful manner within three weeks. In our subsequent submissions, we made it clear that we would be constrained to come to the inescapable conclusion that APERC has been acting deliberately in that questionable manner with a view to hampering the required work to be done by interested objectors for filing their submissions, thereby forcing them to do the work incompletely or even not to file their submissions in some of the petitions.

On an earlier occasion, too, there was no response whatsoever from the Commission to our similar request in the case of 21 PPAs the Discoms had with wind power generators, as if those issues were of unavoidable urgency, and we were constrained to overstrain ourselves to prepare and file our submissions in a hurry and with analytical and qualitative limitations. Ironically, hearings on those PPAs were getting postponed repeatedly for the reasons best known to the Commission. Public hearings on various issues have been turned into regular hearings, getting

postponed or posted repeatedly for weeks, months and even years, thereby causing avoidable difficulties to objectors for repeatedly appearing before the Commission on the same issue with no certainty about the date of actual hearing. It has been harassment for objectors coming from Andhra Pradesh to Hyderabad and go back with petitions getting posted to future dates. Some of the objectors, disgusted as they were with the kind of harassment and infructuous trips to attend the public hearings, stopped participating in the public hearings of APERC. As one who have been participating in public hearings for more than two decades since inception of APERC in the undivided Andhra Pradesh, I can assert, without any fear of contradiction, that public hearings used to be completed on the scheduled date itself or posted for one more day when it became necessary for want of further information and submissions. Prolonged public hearings were an exception which can literally be counted on finger tips.

The practice of holding public hearings, and other hearings on routine cases invariably listed along with them, only on Saturdays, with very few exceptions, is contrary to the earlier standard practice since the inception of APERC in the undivided Andhra Pradesh and practice of other Electricity Regulatory Commissions, APTEL and various courts of law from the lowest court to the highest Supreme Court in hearing cases on all working days or any working day. In its order dated 30.3.2019 on the load forecast, the resource plan, the investment plans, the State electricity plants etc., for the balance of the 3rd control period and corresponding tentative plan for the 4th control period, the Commission has explained that though they were under its consideration from 6.5.2017, it could not complete public hearings and issue its orders in time in view of such an exercise not being undertaken almost since about two decades and the voluminous and vast material that has to be collected, referred to and analyzed, the exercise could not be completed till now and by today, the 3rd control period is coming to an end. It has concluded that the past has therefore become superfluous and infructuous in so far as the 3rd control period is concerned. When such is the predicament of the Commission in completing hearing and issuing its order in time on an issue which was taken up about twenty months back, one can understand the difficulty for interested public for collecting the voluminous and vast material, studying and analyzing the same and preparing their detailed submissions to be filed before the Commission within the stipulated short period of time in the above-mentioned ten petitions running into more than fifteen hundred pages.

Even after completing public hearings and reserving the issues concerned for orders, the Commission has been found to be constrained to postpone pronouncement of orders on the ground that they were not ready in several cases. When such are the unavoidable constraints the Commission has been facing, notwithstanding all its expertise and availability of assistance of qualified, knowledgeable, experienced and public spirited officers, one can easily understand the kind of constraints for objectors like me working in public interest and without any assistance for collecting relevant information relating to issues/petitions on which the Hon'ble Commission has been calling for objections and suggestions and holding public hearings, studying and analyzing the same and preparing relevant submissions in detail to be filed before the Commission, especially on a number of issues within a short period of about three weeks. No justification can be inferred for the Commission issuing public notices inviting objections and suggestions of interested public on several issues within a short span of time as explained above. Even if petitioners, especially the Discoms, file several petitions at a time or with a gap of a few days, incidentally or deliberately, it is always open to the Commission for phasing them out for public

hearing giving adequate gap of time in its public notices to enable interested public to study them one by one, prepare and file their detailed submissions.

Having allowed public hearings on PPA, capital cost and tariff of the 1040 MW thermal power projects of Hinduja for nearly three years and after reserving the same for orders, APERC permitted the Discoms to withdraw their petition on an application filed by them. On an appeal of Hinduja, APTEL set aside the order of APERC and directed it to consider the petitions on merits. Since an appeal on APTEL's order is pending in the Supreme Court, the present APERC has adjourned the petitions sine die, with permission to the parties to seek its reopening after the SC gives its order. The PPA of Hinduja project was withdrawn by the Discoms with a view to getting consents of the Commission to some other PPAs of private power projects. Consents to several PPAs of private power projects were given by APERC, while petitions pertaining to PPAs of AP Genco and APPDCL of GoAP were getting adjourned repeatedly. If Hinduja gets a favourable order from APTEL and the Supreme Court, then the Discoms can claim that they have no option except taking power from that plant. Since AP Genco and APPDCL are public sector utilities, they can get consents of the Commission to the PPAs the Discoms had with their projects. This was now manipulations had taken place to serve the purpose of doing undue favours to private projects of the choice of the then GoAP, by getting consents of APERC on priority basis to their PPAs, even at the cost of saddling the Discoms and their consumers with unwarranted power, with disastrous consequences.

For very valid reasons, the Discoms had sought and got permission of APERC to withdraw 41 PPAs with wind power projects. After the developers approached the powers-that-be, the Discoms were directed by GoAP to resubmit the PPAs to the Commission and seek its consent to the same. APERC, without questioning the impropriety of seeking consent to the PPAs contrary to the valid reasons given by the Discoms for withdrawing the same earlier, gave its consent to the said PPAs.

Over the years, during the course of public hearings on various issues, we have repeatedly requested the Commission to amend its regulations but to no avail. Before the term of the then Chairman was running out, the Commission issued a public notice, inviting suggestions for amending its amendments and it listed out more than 50 regulations running into hundreds of pages, without itself proposing any amendments and explaining the reasons therefor. The present Commission has kept that proposal aside.

Based on the wind and solar power policies issued by the then GoAP, extending for specific periods a number of concessions, facilities, benefits, etc., to wind, solar and mini-hydel power units, APERC issued its regulations, without specifying who should bear the burden of the same. In all fairness, if the Government extends such concessions, etc., to developers of power units, it should bear the burden thereof. Due to the escapist tendency of GoAP and APERC, the burdens continue to be imposed on the Discoms and their consumers. The present Government has issued its new policies, withdrawing all such concessions, benefits, facilities, etc. extended to wind, solar and mini-hydel projects, following which AP Transco and Discoms have filed various petitions, seeking amendments to the relevant regulations of the Commission in tune with the latest policies of GoAP. While the petitions are pending before the Commission, developers

have got a stay order on the latest policies of the GoAP, and the Commission has adjourned sine die, with a permission to the parties concerned to seek reopening of the petitions after the High Court gives its verdict.

APERC informed that "the Principal Secretary, Energy, Government of Andhra Pradesh is being addressed by the Commission to obtain the considered opinion of the learned Advocate General of Andhra Pradesh to advise on the legal feasibility and possibility of reviewing the Power Purchase Agreements in force and restricting the period of force of such Power Purchase Agreements to five years or any other period in respect of existing or future Agreements. On receipt of such advice, appropriate future course of action can be evolved" (page 139 and para 184 of tariff order for 2019-20). Though the Commission had written a letter dated 27.2.2019 to the Principal Secretary, department of energy, GoAP, to seek and submit the considered legal opinion of the learned Advocate General of Andhra Pradesh, no such opinion seemed to have been received by the Commission so far. Over the years, during public hearings and in our voluminous written submissions filed before the Commission, we have repeatedly made it clear that in view of availability of substantial surplus power determined by the Commission, and the Discoms exceeding their obligations under RPPO, it is imprudent to enter into long-term PPAs, especially with wind and solar power units, to meet temporary shortage for power during some days or seasonally with disastrous consequences and that such shortages during peak hours can be met through purchases from power exchanges or competitive biddings for short-term seasonal requirements. All our rational criticism and constructive suggestions fell on the deaf ears of the authorities concerned and the Commission. It is strange that the Commission sought the considered legal opinion of the learned Advocate General of A.P. on legal feasibility and possibility of reviewing the Power Purchase Agreements in force and restricting the period of force of such Power Purchase Agreements to five years or any other period in respect of existing or future Agreements. This belated realisation on the part of the Hon'ble Commission shows its failures of commission and omission in not considering the same issue before giving its approvals/consents to the PPAs the Discoms had with high-cost and must-run power plants and other private power plants for purchasing unwarranted power on long-term basis. Moreover, irrespective of the considered legal advice of the learned Advocate General of A.P., as a regulatory Commission, with a legal luminary and retired judge of the High Court as its Chairman, the Commission had all the competence to take its view on the issue on which it sought the legal advice of the learned Advocate General and evolve appropriate future course of action. If the Advocate General gives the opinion that the PPAs in force cannot be reviewed and their term cannot be restricted to five years or any other period, the Hon'ble Commission can simply close the file. If the learned Advocate General gives his opinion positively and if the Commission proceeds to evolve appropriate future course of action, the generators who are parties to such PPAs can stall that process by getting stay orders or interim orders from Courts of law and APTEL, as is happening in such other cases. In such an eventuality, too, the Commission has to stop its regulatory process. Having caused irreparable damage to larger consumer interest on a long-term basis by giving inappropriate consents/approvals to the longterm PPAs the Discoms had with public sector units and private developers, especially of wind and solar power plants, to purchase unwarranted, high-cost and must-run-basis power, with all the disastrous consequences, the initiative of the Commission at the eleventh hour for seeking

legal advice of the learned Advocate General of A.P. on the said issue to evolve appropriate future course of action, apparently in consumer interest, lacked sincerity of purpose.

There has been clamour in certain quarters for appointment of retired judges to ERCs. Such appointments are not a virtue by themselves. Generally, the attitude of the judges is that what they interpret is law. On various occasions, especially during the recent period, there has been intolerance from the Bench of various courts to anybody questioning the impropriety of their orders. Apart from academic qualifications and experience, professional integrity, intellectual honesty and moral courage to tell the truth and what is right are imperative necessity for consideration in making appointments to adjudicating bodies. If Mr Justice acts like Mr Injustice, justice cannot be rendered. It is the generally held opinion that the judgements of even the Supreme Court are final, because it is the highest court of the country, not because they are perfect. Judgements given by lower courts are being set aside by the higher courts and of one bench by another higher bench. Let us not make a fetish of appointment of Director(Law) in the Regulatory Commissions and Member (Legal) in APTEL. The present Chairman of APERC and his immediate predecessor are retired judges of the High Court of A.P.

I have written the following letter to APERC on September 2, 2020:

"In my submissions dated 29.6.2020 in OP 52 of 2019 relating to Sri Damodaram Sanjeevaiah Thermal Power Station of APPDCL, I submitted, inter alia : "If the generator is not responsible for conditions of force majeure coming into play at any point of time after declaration of COD, the Discoms and their consumers, too, are not responsible for the same." (Point 3°)

In its order dated 13.8.2020 in OP 52 of 2019, the Commission had incorporated my view as : "(iii) the responsibility for conditions of force majeure coming into play at any point of time after declaration of COD does not lie only with the DISCOMs and their consumers but equally lies with the generator as well,"(page 27 of the order). It is a distortion of my view. Nowhere in the order, the Commission could explain as to how the Discoms and their consumers are responsible for conditions of force measure coming into force hindering generation of power. My said view "quoted" in such a distorted form in the order imputes to me a view which is diametrically opposite to my view submitted in writing.

The implication in seeking payment of fixed charges for not generating and supplying power by the generator under conditions of force measure is that the generator is not responsible for such conditions coming into play. Our contention is that for conditions of force measure coming into force, hindering generation by the plant, the Discoms and consumers are not at all responsible. That is the reason why we have been persistently opposing provisions for payment of fixed charges under deemed generation.

Needless to say, the view that the Discoms and their consumers are responsible for conditions of force majeure coming into play after declaration of COD, hindering generation of power by the plant concerned, is baseless, unrealistic and irrational. Attributing such a view to me, even if unintentionally, would cause a lot of embarrassment and evoke negative comments. I strongly

feel that the distortion needs to be corrected in the order in line with my submission, to set the record straight and avoid misunderstanding.

I request the Hon'ble Commission to do the needful to correct the distortion."

In its reply dated 11.9.2020, from the Secretary of APERC, the following observations are made:

"With reference to your letter cited above, I am directed to inform you that the Commission exercises its quasi judicial jurisdiction while adjudicating issues raised before it by parties. In that process it takes decisions which sometimes may not be to the liking of any of the parties or stakeholders. If any one feels aggrieved by such decisions, he can avail further legal remedies under the Electricity Act, 2003. As for this Commission, once it passes an order, it is final subject however to a review before it or further remedies such as appeal to the appellate forum or judicial review under Art. 226 of the Constitution of India before a High Court. It is strange that without availing any such remedies, you have chosen to address a letter to the Secretary of this Commission, pointing out certain 'distortions' in the order dt:13.08.2020 in OP No. 52 of 2019. The Commission finds this method as wholly impermissible and undesirable. Moreover, in your letter you have deployed the word 'distortion' repeatedly which implies attribution of malice and biased mind to this Commission. By using such a disparaging phrase liberally, you have shown scant respect for and insinuated the Commission which was not expected of a person with a long career behind him as a journalist. I am therefore directed to inform you that hereafter you may refrain from addressing any letters on the orders passed by this Commission, much less using derogatory words howsoever aggrieved you may be, by the orders passed by the Commission, instead of availing appropriate legal remedies as indicated above. If in spite of this communication, you address letters in future, they will be completely ignored."

During the last more than two decades, it is for the first time that I have come across this kind of distortion of my submission in the order of the Commission. There are occasions when even the highest court of the country has taken up suo motu, based on a letter received by it, or on the basis of a report appeared in the media, for hearing the issue mentioned therein. Here, in my case, I have simply pointed out a fact explaining how my view submitted in writing is distorted. There is no scope, much less any intention, to impute motives or malice to the Commission, for, I have not questioned the order given by the Commission. As far as professional career is concerned, the person who redrafted my view in such a way also has his professional career. The Commission's comment on my professional career applies more aptly to the officer who redrafted my view in that manner.

Filing a review petition or going in for an appeal in APTEL or a High Court, seeking correction of my said view in the order of the Commission is too technical an issue. Should we consider such an option as a reward or as an avoidable litigation or forced harassment for all the work I have been doing, spending my time, energy and money, for participating in the regulatory process of the Commission all in larger public interest? There is no bar, even going by the regulations of the conduct of business of APERC, from writing a letter to it by anybody. The Commission has all the powers to adopt any procedure as it deems fit for taking up issues for its consideration. There are occasions when the Commission, suo motu, has corrected some of the mistakes crept into its orders. If I file a review petition before the Commission, seeking correction of the said distortion, what would be its response? In our submissions in various petitions, we have been questioning the observations made by the Commission in its orders whenever the context demanded it.

It may not be possible for the Commission to cross check the veracity of submissions redrafted by its officers for incorporating in its orders. In good faith, it can take them for granted. The reality being what it is, the question of attributing "malice and biased mind" to the Commission does not arise. It is strange that the Commission is seeing pointing out a fact as attributing "malice and biased mind" to the Commission. The reality is the other way round. I hope that this instance will remain as one of exceptional inadvertence.

TSERC, in its initial period, exhibited the tendency of being more loyal than the king in its approach and orders. I wrote a letter questioning one of its order to which TSERC did not take any objection but took it in the right spirit. On the other hand, I had the opportunity to interact with them and explain my point of view on how the approach of the Commission should be to which they were receptive. Later, the Commission had given several orders which are in the nature of protecting larger consumer interest. The Commission had taken our submissions into consideration in the right spirit while issuing its orders.

There has been anarchy from the side of the TRS Government in Telangana. It violated the law by not initiating the process in due course for appointment of members and Chairman of the Commission in time, following their retirement, and the Commission remained defunct for almost one year, without Chairman and members. When the Commission acted as a one-man Commission, several aberrations took place in its orders, affecting consumer interest on a longterm basis. Due to the intransigence of the Government of Telangana, the Discoms could not file their ARR proposals for the last and current financial years. The Discoms were forced to violate law by collecting old tariffs for the year 2019-20 as per earlier tariff order, without any order of the Commission. The present Commission permitted them to collect tariffs for the year 2019-20 and 2020-21 as per the order for 2018-19 with retrospective effect. It is learnt that the Commission, having given extension of time for filing ARR proposals for the last two years and 2020-21, has refused to give further extension. It is to be seen what the Discoms and the Commission would do. The situation in power sector in Telangana is also akin to that of AP, of course, with a difference in degree. Facts will come out once the Discoms submit their ARR proposals and true-up claims for their retail supply business.
