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Bangalore Political Action Committee

Submission to

Mr. MK Shankaralinge Gowda
Chairman,
Karnataka Electricity Regulatory Commission

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Power Situation in Karnataka

Energy misuse leading to power cuts

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Energy sale category in comparison with other states

State	Domestic	Commercial	Industrial	Agriculture	Others
Karnataka	19%	13%	22%	39%	7%
Andhra Pradesh	20%	7%	40%	26%	7%
Tamil Nadu	24%	9%	43%	18%	6%
Gujarat	13%	6%	59%	19%	3%
Maharashtra	21%	13%	43%	18%	6%

Projected supply-demand gap

Year	Estimated supply from current PPAs	Unrestricted demand	Residual unrestricted demand	% Gap
FY-14	51,635	66,835	15,200	23%
FY-15	55,043	70,778	15,735	22%
FY-16	58,920	75,020	16,100	21%
FY-17	63,358	79,587	16,228	20%

- Consumption of unmetered IP sets is growing @ 22% (YoY)
- The anomalous figure is an indication of misuse/theft
- Addhar linked cash subsidy and 100% metering could resolve the problem

Projected peak supply-demand gap

	FY-14	FY-15	FY-16	FY-17	FY-18
Projected Peak (MW)	10,899	11,542	12,234	12,979	13,781
Estimated Peak Supply (MW)	9355	10203	10936	12459	13032
Residual Peak (%)	14%	12%	11%	4%	5%

Source: KERC

Unprofessional approach leading to higher costs

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Power Purchase Agreements

Year	Total Power Purchase (MU)	Quantum of long-term PP (MU)	Quantum of short/med term PP (MU)	Cost of long-term PP (Crores)	Cost of short-term PP (Crores)	Per unit cost of long-term PP	Average rate of short-term (Rs/Kwh)
FY-08	40444	40404	41	8996	28	2.23	7.0
FY-09	41961	39998	1964	9898	1327	2.47	6.8
FY-10	43155	41356	1799	9938	1154	2.40	6.4
FY-11	47119	39304	7815	10647	3907	2.71	5.0
FY-12	52620	46300	6320	13149	3033	2.84	4.8
FY13	57229	46182	11047	12949	4838	2.80	4.4

Plant Load Factor (PLF) of state owned thermal plants

Year	Raichur	Bellary
2007-08	89.2%	-
2008-09	84.5%	-
2009-10	67.9%	61.7%
2010-11	78.6%	57%
2011-12	63 %	66%

PLF of more than 25 year old NTPC Plants

Singrauli NTPC	97%
Rihand NTPC	93%
Unchahar NTPC	93%

ATC Losses: Comparison

Karnataka	BESCOM	AEC & SEC	NDMC	TATA Power
19.5%	18%	6.25%	11.94%	10.5%

Performance of BESCOM divisions

ATC losses	5% or less	6-10%	11-25%	26-45%
No of Divisions	6	22	56	21

Source: KERC

B.PAC's major objections to last tariff hike

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- BESCOM purchase only 24564.62 MU of power through long time PPA against approved 27364.35 MU
- Whereas purchased 3893.37 MU through short time PP against the approved 2801.05 MU
- The rate paid for the purchases are much higher than approved rates
- The average energy cost/unit of all purchases works out to INR 3.50 compared to the average cost of INR 3.27 for the approved PP
- Though the energy purchased by BESCOM during FY 2014-15 was 2237.2 MU less than approved figures, the increased quantum of short-term purchase and higher rates paid made the per unity energy too costly.
- BESCOM needs to workout realistic demands and accordingly enter in to more long term PPAs, even with private players.

Open Access PP Agreements

- B.PAC heartily welcome the recent initiative by KERC in appointing a nodal agency and insisting for time bound clearances.
- We also urge KERC to please look in to the drastic increase in Cross Subsidy Surcharges (CSS) for direct access power purchases imposed in last tariff revision. Industrial consumers at 11/33 KV and at 66Kv and above, paying CSS of seven paisa and 42 paisa per unit, now have to pay 63 paisa and 98 paisa per unit. As against this, their commercial counterparts who were paying CSS of 138 and 173 paisa per unit last year, now end up paying 160 and 195 paisa per unit respectively. This makes it a financial unviable option.

Present Power Crisis

Sine it is evident that the power generation by the state owned power generation companies are insufficient to cater to the actual demand, BESCOM should have entered in to long term PPAs with the private players through competitive bidding, instead of continuing with short/medium term PP. This would have avoided the current power crisis as well as reduced the per unit energy charges.

(As stipulated in para 5.1 of National Tariff Plan, power procurement for future requirements should be through a transparent competitive bidding mechanism using the guidelines issued by the Central Government vide gazette notification dated 19th January, 2005. These guidelines provide for procurement of electricity separately for base load requirements and for peak load requirements.)

Cross Subsidy Charges

(While Electricity Act 2013 recommends that cross subsidies shall be progressively reduced and eliminated in the manner as may be specified by the State Commission, National Tariff Policy recommends the following:

- The State Governments can give subsidy to the extent they consider appropriate as per the provisions of section 65 of the Act.
- However the tariff should be minimum 50% of the cost of electricity.
- The cross subsidy variation should be brought down gradually and to the extent of not more than (+/-) 20% of the cost by FY2011.)

The cross subsidy variations of BESCOM are not within the above prescribed limits. Commission need to ensure that BESCOM brings down the cost of power, through competitive bidding for PP and shedding its inefficiencies in the distribution system, thereby making the cost affordable to different sections of the society and bringing down the cross subsidy within the prescribed limits.

Standard of Performance

- BESCOM may be insisted for establishing hotline call centers in all divisions, monitored through a centralized control center.
- BESCOM may be asked to set up multiple mobile service units (zone wise) for attending faults and emergencies (AEC of Ahmedabad could be a right model).
- BESCOM may be asked to declare their performance standards and KPIs in agreement with the commission. The compliance report to be submitted to KERC quarterly.

(As per the National Tariff Policy, the State Commission should determine and notify the standards of performance of licensees with respect to quality, continuity and reliability of service for all consumers. A suitable transition framework could be provided for the licensees to reach the desired levels of service as quickly as possible. Penalties may be imposed on licensees in accordance with section 57 of the Act for failure to meet the standards.)

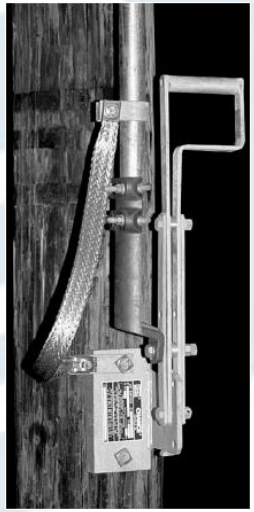
Power Quality & Energy Audits

In view of the large variations in distribution losses among divisions (ATC losses varying from 4% to 42.5%), annual energy auditing to be made mandatory in all divisions by independent energy auditors (division vise) to understand the sources of losses and to identify the possibilities for improvement in performance. Many other commissions have made such periodical audits mandatory and the performance of the distribution companies have increased as a result.

(As per para 5.4.6 of National Electricity Policy, a time-bound program should be drawn up by the State Electricity Regulatory Commissions (SERC) for segregation of technical and commercial losses through energy audits. Energy accounting and declaration of its results in each defined unit, as determined by SERCs, should be mandatory not later than March 2007. An action plan for reduction of the losses with adequate investments and suitable improvements in governance should be drawn up. Standards for reliability and quality of supply as well as for loss levels shall also be specified, from time to time, so as to bring these in line with international practices by year 2012.)

Unsafe high tension structures on busy streets

- All HT overhead structures to be made safe, conforming to IE rules and standards.
- The handle of GODS either to be got rid of or to be positioned on the rear side of the structure.
- Modern GODS provides both pump handle and swing handle mechanism (along with the operating rod) to be installed on the pole itself, without any protrusion. Please see the pictures below.



Pole mounted transformers and bare conductors in public areas

All transformers on public places to be installed above 8 feet height, preferably plinth mounted as done in modern cities, without any exposed live parts, with proper chain linked fencing all around.

In residential areas, particularly for the power supply to apartments, the existing overhead structures and transformers to be replaced with cubicle type Compact Substations or RMU cum Transformer Units which enable “loop in – loop out” cabling, without any exposed live parts.

Mandatory energy rating for new commercial buildings in the city

Compliance to energy rating system to be made mandatory for all new commercial buildings coming up in the city with immediate effect. No building plans to be approved unless the building design satisfies the desired energy rating system.

Our recommendations:

- All future commercial buildings to be designed to fulfil the GRIHA or LEED energy rating system as follows:
- Maximum demand (MD) 100 KW-500 KW – Silver rating
- MD exceeding 500 KW but not exceeding 1000 KW – Gold rating
- MD exceeding 1 MW – Platinum rating

All apartments and housing colonies having more than 25 residential units, the usage of solar power for common area lightings (street lighting, garden lighting, corridor lighting, pool area lighting etc.) to be made mandatory. Those societies who fail to do so, to be either penalized or to be charged with commercial tariff instead of residential tariff for common area meters.

Green power capacity addition and its better usage

State's RE policy need a review, to make it more tempting for the private investors and corporate sector, ensuring hassle free capacity addition, with simplified norms for wheeling and distribution within the state and between states.

- Wastelands for RE investments to be identified, notified and proposals to be called for setting up plants under PPP projects
- RE open sale policy with probable better incentives for byers
- Long time incentives for bulk consumers for investing and setting up own RE plants
- Long term incentive for roof top PV generation (for commercial and domestic consumers)
- Common grid access to all RE investors with liberal wheeling norms
- Wheeling of RE from other states to be made possible through bilateral agreements

Other B.PAC Recommendations

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- All ESCOMs in the state to be reformed under PPP mode, as has been done in other metros like Delhi.
- More private players to be roped in to set up more generating plants to match the projected power demand.
- Divestment of KPCL to be initiated, listing the entity in stock exchange to generate required capital for its expansion.
- KPTCL to be made more efficient by entering into strategic partnerships with NTPC or PGCIL or other proficient and resourceful entities in the field.

Thank You

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