

No.Y/02/9

**BEFORE THE KARNATAKA ELECTRICITY REGULATORY COMMISSION
BANGALORE**

Dated this 7th day of September 2009

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|----------------------------|----------|
| 1. Sri K.P. Pandey | Chairman |
| 2. Sri Vishvanath Hiremath | Member |
| 3. Sri K. Srinivasa Rao | Member |

**IN THE MATTER OF FIXING A PRICE CAP FOR SHORT-TERM POWER
PROCUREMENT BY THE DISTRIBUTION LICENSEES'**

1. KERC (Conditions of Licence for ESCOMs) Regulations, 2004 have been issued with effect from 10.6.2004. These conditions form part of the license conditions of ESCOMs who are considered to be the deemed licensees under the provisions of Electricity Act, 2003. Condition No.21 of the licensing conditions provides for power procurement procedure. The said condition reads as under :

"21. Power Procurement Procedures

21.1 *The Licensee shall in all circumstances purchase electrical capacity and/or energy in an efficient and economical manner under a transparent procurement process as approved by the Commission and following the guidelines issued by the Commission from time to time relating to preparation of load forecasts, power procurement plan and power procurement procedure.*

21.2 *The Licensee shall not purchase electrical capacity and/or energy without an authorization granted by the Commission under the*

terms of condition 21.1 except in the case of short duration purchases for less than 6 months.

21.3 *An authorization required under condition 21.2 shall be granted when the Licensee has demonstrated to the Commission's satisfaction that;*

(a) electrical capacity and/or energy is necessary to meet the Licensee's service obligation in accordance with condition 2.1(a); and is consistent with the approved load forecast and power purchase plan

(b) the licensee has examined the economic, technical, system and environmental aspects of commercially viable alternatives to the proposals for purchasing electrical capacity and/or energy (including arrangements for reducing the level of demand) and such examination has been carried out in a manner approved by the Commission.

The Commission shall dispose of the application within 120 days from the date of receipt of such application.

21.4 *In all circumstances the Licensee shall purchase electrical capacity and/or energy in a manner*

(a) which is in compliance with the State Grid Code

(b) the details of contracts entered into for capacity/energy purchases are furnished to the Commission within one month from the conclusion of such contract's".

2. In accordance with Clause 21.2 of the licensing conditions extracted above, the licensee is empowered to make short-term purchases for less than six months without obtaining the express authorization of the Commission.

3. Due to acute shortage of power during FY-09, all the licensees of the State have gone in for short-term purchases exercising their right under condition No. 21.2 of the licensing conditions. In the ERCs filed during June 2009, it is stated by the licensees that they have made short-term purchases to an extent of Rs.949.85 crores to meet the power requirement of the consumers of the State. From the details of the short-term purchases furnished, it is noticed that power has been purchased at various rates ranging from Rs. 5.48 to Rs. 8.18 per unit. The Commission observes that these high rates of power may be mainly on account of unplanned purchases resorted to at a short notice which in other words was like a distress purchase and also because of general power shortage prevailing across the country and power availability is not adequate.

4. It may be said that the power shortage is going to be a regular phenomenon at least for another five years as admittedly there is a regular gap between generation and the demand and measures that have been taken by the State for augmenting the generation and procurement of power may require a minimum of five years to fructify.

5. The Commission though cannot be against the concept of short-term power purchases, as and when it becomes a necessity, but shall have to be resorted to not as a routine practice, but only exceptionally. In order to see that even short-term power is purchased at reasonable cost, it is necessary for the licensees to plan even short-term purchases well in advance in the beginning of each year and shall take timely measures to procure power through transparent bidding process. However, contracting power purchases for a longer period say for 3–5 years is always preferable to short term purchase as this will keep the prices at a much lower level than one under short-term power purchase.

It is always observed that the longer the period lesser will be the rate. Therefore short-term purchase shall be for a minimal quantity and period and shall be opted only for balancing the supply and demand under extra-ordinary circumstances.

6. CERC in its Order dated 17th December 2008 on the staff paper titled 'Measures for restricting the prices of electricity in short-term sale/trading', has suggested that SERCs may impose limit on the price at which their utilities may procure short-term power taking into account the relevant factors & implications.

7. Keeping the above at the backdrop, the Commission on 28.4.2009, issued a discussion paper titled "Price cap by KERC for Short-term Power Procurement by the Distribution Licensees" and had invited comments from various stakeholders including distribution licensees. Six stakeholders including GoK & Distribution Licensees have made their written submissions. The list of Stakeholders who submitted the written submissions is placed at **Annexe-1**.

8. To elicit further views/suggestions, if any, the Commission also held a public hearing on 29th July 2009. Four persons made their oral submissions in the hearing. The list of persons who made oral submissions in the hearing is placed at **Annexe-2**.

9. All the stakeholders, except for Consumer Care Society (CCS), have submitted that a Price cap for short-term power purchase is necessary so that the power is purchased at a reasonable cost. CCS has opined that, when the short-term purchase is done through a transparent process of bidding, there is really no need to fix a price cap.

10. GoK in its written submission has stated that in addition to price cap, a cap on the quantum of short-term purchase should also be fixed and has suggested that the tariff shock on account of such purchase should not be more than 5%.

11. Fixing of a 'price cap' valid for all the time to come is considered to be a very difficult exercise. However, at the same time one cannot leave the field totally open without imposing checks and balances to ensure that licensees buy power even for short-term at a reasonable cost and in a transparent way. Therefore, the Commission has decided to introduce a price cap for short-term power purchase for the licensees up to which they need not seek prior approval of the Commission. This will give them a free hand for adjusting their power purchases in case of necessity. However, for any power to be purchased at a cost more than the price cap imposed by the Commission, the licensees still can do so with the prior approval of the Commission, by providing justifiable reasons for exceeding the price cap fixed by the Commission.

12. While fixing the 'price cap', the Commission has considered the following aspects :

i. Power purchase rates for long-term contracts in other states:

Based on the power purchase cost details of Andhra Pradesh, Kerala, Maharashtra, Gujarat, Chatisgarh and Tamil Nadu, the Commission notes that the maximum cost of Coal based Thermal Generation is Rs.3.10 per unit and for Gas based generation it is Rs.3.50 per unit. The above rates are based on long-term contracts. Therefore, the Commission is of the view that the Short-term rate should naturally be

higher than long-term PPA rates because of the inherent uncertainty in returns in the short-term.

ii. **Short-term rates in the Indian Market:**

The Commission notes that, based on CERC monthly reports on short-term transactions of electricity, the weighted average cost of bilateral transactions through traders is in the range of Rs.6.58 per unit to Rs. 7.98 per unit during the period August 08 to April 09. During the same period the weighted average cost in IEX was in the range of Rs.6.16 per unit to Rs. 10.10 per unit and in PXIL it was in the range of Rs.6.58 per unit to Rs. 10.18 per unit.

The Commission notes from the CERC Order dated 17th December 2008 that the sale price of 66% of the volume of electricity traded by trading licensees was less than Rs.6.00 per unit.

The Commission is of the view that the prices in the day ahead, week ahead and month ahead markets will be definitely higher owing to demand and higher risk perceptions of the generators and therefore, cannot form a basis for price cap.

iii) **Stakeholders' proposals:**

GOK has proposed a cap at the Maximum UI rate for Liquid fuel based generation & 75% of Maximum UI rate for Hydro & Thermal based energy.

BESCOM/Hukkeri Co-Operative society: 4 paise/unit over the tariff fixed by the Commission for particular source of energy.

HESCOM & GESCOM: 4% over the tariff fixed by the Commission for particular source of energy.

iv) **Average realization rate at current rates of tariff:**

The average realization rate for FY09 at current rates is Rs. 3.38 per unit. In respect of LT Commercial category the same is Rs.6.72/ unit and for HT commercial category it is Rs. 6.18 per unit.

v) **Short-term power purchase rates of ESCOMs during FY09:**

The average rate of short-term purchase by ESCOMs as per ERCs filed in June 2009, for FY09 is as follows:

Rate Rs. per unit

BESCOM	7.06
MESCOM	6.53
CESC	6.67
HESCOM	6.55
GESCOM	6.36
State average	6.81

vi) **Sensitivity Analysis:**

A sensitivity analysis with respect to the impact of short-term purchase on the overall power purchase cost for BESCOM based on approved cost for FY10 (MYT Order dated 11.01.2008) is indicated below:

Sensitivity Analysis on Power Purchase Cost

Short-Term Rate-Rs/unit	Reduction in Hydro				
	5%	10%	15%	20%	25%
4	1.20	2.40	3.59	4.79	5.99
5	1.54	3.09	4.63	6.18	7.72
6	1.89	3.78	5.67	7.57	9.46
7	2.24	4.48	6.71	8.95	11.19

It is seen from the above that up to 10% of the shortfall in Hydro Generation, if made good by short-term purchase, the cost of power purchase thereon would not increase beyond 4.48%.

Further, during FY09, the quantum of short-term purchase made by ESCOMs (1386 MU) was less than 5% of the total requirement. It is also observed that in April 09, 3.54% of total electricity generated at the national level was transacted through bilateral trading & 0.65% was transacted through power exchange. Thus the Commission is of the view that at present, the availability of Short-term power may not exceed 5% of the total quantum of power purchase.

ORDER

14. In exercise of the powers conferred under Section 62(1)(a) of Electricity Act, 2003 read with KERC (Conditions of Licence for ESCOMs) Regulations, 2004 as amended from time to time and all other relevant regulations, Commission passes the following Order.

15. The licensee may purchase the electricity at a maximum ceiling price of Rs.6/- per unit up to a period of six months as stated in the licensing conditions subject to complying with the following conditions :

- a) As the Commission is approving the required power purchase quantum & Costs while approving the ARR, the need for short-term purchase would arise only when there is an adverse monsoon affecting the hydro-generation or major break down of thermal generating units or unprecedented coal shortage. Hence, the distribution licensee shall resort to purchase under short-term, only when there is a shortfall in the availability vis-à-vis the availability approved by the Commission and only to the extent of shortage in quantum of power.
- b) In case purchase of power has to be made beyond the above ceiling price or quantum, the licensees shall obtain prior approval of the Commission by filing suitable application.
- c) The short-term purchase shall be made only by following a transparent process of bidding initiated well in advance.
- d) The licensees shall source the short-term power only from firm sources and the generating plants which are already producing electricity at the time of calling for bids.
- e) The short-term power purchases shall not be resorted to from a generating station/ trader with whom ESCOMs have a PPA, unless the power to be supplied is beyond the contracted quantum.

- f) The quantum of short-term power purchase shall be arrived at by ESCOMs by considering the availability from thermal generating units and water inflows in the hydro dams up to end of September of each year as per the information obtained from KPCL.
- g) The priority for choosing the successful bidder shall be in the ascending order of the rates quoted by the bidders.
- h) ESCOMs shall enter into contracts with the generators for up to six months at one stretch.
- i) The above maximum ceiling rate is not applicable to day ahead purchases made by the Licensees through power exchanges.

16. This Order is signed and issued on this 7th day of September 2009 and shall be in operation for a period of one year from the date of issue of this order or till this is modified, whichever is earlier.

Sd/-
(K.P. PANDEY)
CHAIRMAN

Sd/-
(VISHVANATH HIREMATH)
MEMBER

Sd/-
(K.SRINIVASA RAO)
MEMBER

Annexe-1.**LIST OF STAKEHOLDERS WHO SUBMITTED WRITTEN SUBMISSION**

1. **Energy Department
Government of Karnataka**
2. **BESCOM, Bangalore**
3. **CESC, Mysore**
4. **HESCOM, Hubli**
5. **GESCOM, Gulbarga**
6. **Consumer Care Society, Bangalore**

Annexe-2.**LIST OF STAKEHOLDERS WHO MADE ORAL SUBMISSIONS IN THE HEARING**

1	Sri Shridhar Prabhu Hukkeri Rural Electric Co-op.Society Ltd., Hukkeri
2	Sri V.Govinda Reddy Secretary The South Indian Sugar Mills Association Karnataka
3	Sri A.Raja Rao Consumer Care Society BSK II Stage, Bangalore – 560 070
4	Y.G. Muralidharan Consumer Advocate, KERC