

KERALA STATE ELECTRICITY REGULATORY COMMISSION

THIRUVANANTHAPURAM

PRESENT: Sri. K.J.Mathew, Chairman
Sri.C.Abdulla, Member
Sri.M.P.Aiyappan, Member

April 5, 2010

Petition No. OP17/2010

In the matter of

Introduction of power restriction to all HT&EHT consumers including Bulk Supply to other Licensees and LT consumers of the State

Kerala State Electricity Board

- Petitioner

ORDER

Background

1. Kerala State Electricity Board (*hereinafter referred to as KSEB or Board*) filed a petition for introducing restrictions on use of electricity for all consumers including that of other licensees except LT agriculture, street lighting and LTVI(D). The Board has attributed the following reasons for introducing restrictions.
 - a. Unanticipated increase in power consumption
 - b. High cost of power purchase not matched by tariff
 - c. Below normal availability from CGS
 - d. Non availability of power in the short-term market
 - e. Highly volatile power market
 - f. Rise in energy demand in the neighboring states
 - g. Board's critical financial position

2. In the petition, KSEB has stated that it is difficult to meet the increase in demand for power in the State and hence the option is to reduce the energy demand by introducing power cut, load shedding, power restrictions etc in the coming months of April and May-2010 are proposed. Before proposing the restrictions, KSEB had discussion with the representatives of different consumer organizations/representatives on 20th March, 2010. Most of them in principle agreed for power restrictions and paying marginal cost for excess power rather than introducing power cut. Concerned with the power situation clubbed with the

difficult financial position, the Board decided to approach the Commission for imposing power restrictions with effect from 1st April-2010.

3. In the petition, KSEB stated that demand for power for 2009-10 has increased by about 15% compared to the previous year and as against the normal increase of about 7%. The peak demand increased by about 10 to 24%, which will continue in April and May 2010. KSEB projected the demand for energy at 54.06MU in April and 53.76MU in May. It is stated in the petition that considering the present availability of energy and its cost from the available sources including hydro, CGS, liquid fuel stations, power traders and energy exchange, it would be difficult to meet the emerging power demand without incurring huge additional financial liability. KSEB estimated that possible hydel generation would be 21MU and energy from CGS about 19.5MU. Thus the balance 13.5MU is to be met from the liquid fuel stations, traders and power exchange. Of this 13.5MU from liquid fuel stations, about 10.42MU will be available from internal sources. The total cost of procurement from CGS (Rs.4.21 crore) and liquid fuel stations (Rs.7.73 Crore) would be about Rs.11.94 crore. Hence KSEB wants to limit consumption to about 6.5MU to 7MU per day so that the high cost power be limited to about 7MU per day. For that, power restrictions of 25% is proposed as has been done in 2008-09. By imposing 25% restrictions on HT-EHT class, about 3.04MU could be reduced. Similarly from LT IV,LTVI (except LTVID), LTVII, the saving would be about 2.56MU. If restriction is imposed for domestic consumer category above 200 units it would result in saving of 1.27MU, totaling about 6.7MU. By reducing the consumption, additional power purchase cost saved would be Rs.5.15 Crore/day and revenue loss due to reduction in sales would be Rs.2.37crore/day and net savings would be Rs.2.78 Crore per day. Further, energy consumption over and above the restricted level is proposed to be charged at the cost of additional purchase. KSEB also requested that restrictions are to be imposed on consumers of all licensees in the similar manner.
4. After receiving the petition on 24-3-2010, the Commission forwarded the petition to the Government for comments. The Commission also directed the licensee to inform their consumers about KSEB proposal and directed KSEB to forward copy of the petition to the licensees. A public hearing was scheduled on 31-3-2010 at the Commission's Office. The Commission also issued press releases in this regard.

Public Hearing on the petition

5. For the public hearing, representatives of different consumer categories were present. Sri. Dijo Kappen, Centre for Consumer Education, strongly opposed

the restrictions. According to him the financial crises if any of the Board is due to lack of planning in the use of hydel resources and the non-collection of substantial arrears from the consumers. Most of the arrears are from high paying non-domestic consumers. The Board, has never shown any alacrity in disconnecting the defaulting high paying class, where as domestic consumers are penalised heavily. Considering the consumption of domestic category of about 6000MU, the generation from hydel sources is sufficient for which cost is much less. He also stated that restriction could have been made earlier in the year when the marginal cost was much less. The present average tariff from the domestic category is much higher compared to this. He said there is no rationale for imposing restrictions over 200 units. According to him since no directions of the Commission have been implemented by the Board no relief should be given. Representatives of HT-EHT Association challenged the arguments of the Board by showing that restrictions are not necessary. They pointed out that the rationale for introducing power restrictions in 2008-09 was much different and genuine, and such similar exigencies are not prevailing now. They tried to establish that in the name of restrictions, Board is trying to reap quick money from the consumers, which should not be allowed. In fact energy is available to meet the demand to the tune of 56.83MU considering the resources available with the Board. They pointed out that energy from hydel sources will be about 23MU. They also objected to the argument of the KSEB that there is substantial increase in demand over the previous year. According to them such comparison with 2008-09 is not correct since the figures were taken after power restrictions were imposed in 2008-09. In fact the increase in consumption will be about 2%, which is be manageable by KSEB. Further he mentioned that even as per the estimates of KSEB, shortage is 2.885MU per day, but the restrictions proposed are to the tune of 6.87MU per day. They requested that even if restrictions are imposed it should be imposed on the class which created additional demand, which is the domestic category. The concerns of high cost of procurement can be addressed with the introduction of fuel surcharge formula. The arguments of M/s TCC limited, M/s Binani Zinc Limited, M/s HNL limited, M/s TTP limited, MRF limited, M/s Apolo tyres and M/s Carborandum Limited were also largely in support of the arguments of the Association to reject the petition.

6. Representing domestic consumers, Adv. Punchakari Raveendran, Secretary, Federation of Residents' Associations strongly objected to the proposal of KSEB. According to him, there is no need for introduction of restrictions and no restrictions shall be imposed on domestic consumers, since all the burden always falls on the domestic category. The representative of the Small Scale industries also objected to power restrictions. They mentioned that if at all restrictions are

imposed, it should be based on total consumption of energy rather than introducing quota as has been done in 2008-09, which resulted in substantial problems in the field during implementation. Southern Railway represented that restrictions shall not be imposed on traction services. M/s KDHPCL, a licensee, stated that restrictions shall not be imposed on the licensees but on the consumers of the licensees. Shri. Abdul Khader, Consumer Bureau of India suggested reducing consumption to avoid restrictions. Representatives of Ice Manufacturers Association stated that while fixing quota, earlier order of KSEB ie., 450units/kW shall be allowed. Representatives of some trade unions also objected to the proposal of KSEB. M/s Cochin Port Trust filed written submission not to impose restrictions as suggested by the Board.

Analysis and decision of the Commission

7. The Commission has considered the petition of the Board and the arguments of the objectors. KSEB's case is that due to increase in demand and lack of availability, power restrictions are required. However, the objectors with supporting data have pointed out that there is no shortage of power. According to them, with the present proposal, Board is trying to collect easy money from the consumers. According to the objectors, there is no pressing demand for introduction of restriction as has been the experience in 2008-09, when two hydel stations were under forced outage, together with failure of monsoon and sky rocketing fuel prices. It is pertinent to note that in the petition also Board has not specifically pointed to any lack of availability, but focused on the additional financial liability due to purchase of power. In the petition, KSEB pointed out that to meet the demand, about 13 to 14 MU needs to be procured from Liquid fuel sources and traders/exchange. Considering the present financial position procurement of about 6 to 7 MU from liquid fuel stations, traders and exchange is possible but recommended to impose restrictions to save about 6 to 7 MU. Hence, it is clear that the intention of the Board was to limit the power purchase to affordable levels than due to genuine shortages. In any case power is proposed to be supplied if the higher amount is paid.
8. The Commission has also observed this aspect. Because of the increase in the cost of fuel, cost of power from liquid fuel stations and from traders/energy exchange has reached a level of more than Rs.7/kWh, compared to Rs.4 to Rs.5/kWh proposed by KSEB in the ARR for 2009-10. On the other hand, the average realization is below Rs.4/kWh. Hence any effort to save energy would substantially add to reduction in the overall cost of energy. The Commission notes that between 2005-06 to 2007-08, the Board could export energy to earn substantial revenue. Further even in 2008-09, where substantial reduction in

availability occurred, export of power was possible due to the inherent load pattern of consumers and rigidity in production from base load stations. Such comforts have now disappeared and the demand has been increasing even during off-peak. KSEB attributed rationalization of ToD tariff as one of the reasons for increase in demand, without substantiating the arguments. If such is the case, KSEB should have approached the Commission for a review as has been specifically directed in the said Order.

9. The Commission also notes with concern that the situation is also due to lack of short term/medium term planning by KSEB. One of the reasons for the shortage of low cost power is delay in the commissioning of projects both at state and central level. KSEB did not make any serious effort to foresee such delays and propose any contingency plan as being undertaken by the utilities in other States on war footing. KSEB has always resorted to firefighting measures in the event of contingency.
10. As per the estimates available with the Commission, based on KSEB's statistics the power position as on 31-3-2010 is given below:

Power position as on 31-3-2010 (In Million units)	
Hydro storage as on 31-3-2010	1688
Average inflow expected in April, 2010	108
Average inflow expected in May, 2010	187
Available hydro generation upto June, 2010	1983
Less contingency reserve for June	550
Balance hydro available upto 31-5-2010	1433
Hydro generation possible per day	23.11
Average daily availability from CGS (net of losses)	20.00
Total Energy available (hydro+CGS)	43.11
Average Daily Demand Expected (April - May)	54.00
Balance Energy required per day from liquid fuel/purchase	10.89

11. As per the estimates of KSEB, about 10.42MU per day is available from internal liquid fuel stations. Hence, the Commission is of the view that virtually there is no shortage as has been argued by KSEB, which warrants severe power restrictions. Hence, the objections of the consumers that the present proposal of KSEB on power restrictions aims at harnessing quick money through short cut methods, cannot be entirely rejected as baseless.
12. Though this being the case, it is a fact that energy price has been increasing in the short term. As per the ARR&ERC filing for 2010-11, 38% of the energy is

from hydel sources, the variable cost of which is almost zero. About 45% of energy would be from Central Generating Stations. The balance is from liquid fuel stations and other sources. The average cost of power for sources other than liquid fuel stations is about Rs.2.94/kWh. However, the cost of power from liquid fuel stations comprising only 15% of the total energy is about Rs.8/kWh, which constitutes about 51% of the total cost of power. Hence major share of power purchase and generation cost is diverted to procure less than 1/5th of total requirement of power. The Commission is of the view that there should be adequate awareness among all on this issue and proper price signals needs to be communicated to all the consumers for optimum use of energy and to reduce wasteful consumption to inculcate the habit of energy conservation.

13. Further, the consumption pattern in the State is rapidly changing, possibly owing due to the addition of various modern gadgets. The ratio of peak demand to off-peak demand is falling considerably. The Commission is also open to the fact that energy demand in neighbouring states and in Northern States has been increasing due to on coming summer season. Energy prices are expected to increase further due to increase in demand. There could also be possibility of forced shutdown/breakdown of stations due to severe production conditions during summer. It is also pertinent to note that if unabated purchase of high cost energy @Rs.7 or Rs.8/kWh is resorted, the resultant cost in any case will have to be borne by all the consumers as part of ARR&ERC or Truing up initiated by the Commission in subsequent periods. Considering all these factors in mind, the Commission is inclined to accept the proposal of power restrictions by imposing a minimal restriction of 10% in the months of April and May. Hence, the consumption over the quota of 90% would be charged at marginal costs. As requested by KSEB, the restrictions shall be applicable to the consumers of all licensees except Agriculture, domestic consumer having consumption less than 300 units per month, street lighting, & Orphanages (LTVID). Because of restrictions, it is expected that KSEB would save about 3MU per day and reduce the financial impact by Rs1.06 crore per day.

14. The Commission is also of the view that the restrictions would not seriously affect the consumers. Consumption can be reduced by about 10% easily through energy efficiency measures and reducing wasteful/luxury consumption. Most of the industrial consumers mentioned that during the month of April and May consumption would be lower due to annual maintenance of plants. Other class of consumers can limit the consumption by 10% so that the objective is achieved. The Commission expects that such a measure will give proper signals for the consumers to reduce consumption. In this context, it is to be mentioned that, the

Commission gave serious thought to the views expressed by Southern Railway on excluding traction load from restrictions. The Commission is of the view that since restrictions are only at the minimum level, there may not be substantial impact due to restrictions on railways, since no forced shedding is resorted to.

15. Some consumers, especially representative of Small Scale industrial Association proposed to charge a high rate for a fixed percentage of the total consumption irrespective of quota to avoid the problems relating to fixation of quota. The Commission is of the view that since the reason for introducing restriction is to limit the consumption voluntarily, those who genuinely reduce consumption should get the benefit. Further such method of billing may not be acceptable to all consumer categories. The Commission is also of the view that there shall be a uniform procedure for billing. Hence the suggestion of the Association is not accepted.
16. The Commission, in 2008-09, while imposing the restrictions, had determined the marginal cost of power on a monthly basis after the close of each month, mainly considering the fact that energy cost had been fluctuating largely due to volatile international crude oil prices. Fixation of rates on a monthly basis was difficult not only for the licensees, but also for the consumers and the Commission at a short notice. There were a number of complaints on rate the charged by the licensee over different months since reduction in monthly rates was not properly transferred to the consumers. Further, the consumers especially the industrial class could not plan due to uncertainty on the cost of power. The cost of power from liquid fuel stations are reasonably steady at a rate of Rs.7 to Rs.7.5/kWh over the last few months. KSEB also reported that the cost of top 7MU from liquid fuel stations and power exchange/trader is Rs.7.50/kWh Considering this, and to limit the complaints, the Commission is of the view that for April and May 2010 for which the restrictions are effective, rate for additional power shall be fixed in advance, which will provide a clear signal to the consumers for their energy use. Hence keeping in view of the provisions of the Act and Tariff policy, the Commission decides to fix Rs.7.25/kWh for the excess consumption of energy over the quota and for the domestic consumers having consumption over 300kWh per month. Fuel Surcharge shall not be made applicable for excess consumption at the marginal cost.
17. The Commission has received number of complaints especially from LT consumers on fixation of quota. The power restrictions imposed in the year 2008-09 was continued till April, 2009. Further consumption for March 2010 may not be available by now. Hence, the Commission is of the view that average consumption from May 2009 to February 2010 may be taken for fixing base

average consumption. In order to avoid such confusion, the following guidelines can be followed.

- a) The quota shall be 90% of base average consumption for categories such as HT-EHT, LT IV, LTVI (except LTVID), LTVII. For domestic category 300kWh per month shall be the quota. For estimating the base average consumption, consumption for the months of May 2009 to February 2010 shall be used.
- b) Base average consumption for HT/EHT consumers shall be arrived at by excluding 'nil' consumption as well as abnormal consumption having 30% variation on the monthly average consumption.
- c) New consumers who started operation from March 2010, the base average consumption shall be fixed as 250kWh/kVA of Maximum Demand for HT consumers, 400kWh/kVA of Maximum Demand for EHT consumers and 105kWh/kW of connected load for LT consumers.
- d) Existing LT consumers (prior to 1-3-2010) who did not have adequate consumption or nil consumption in any period between May 2009 to February 2010, the base average shall be worked out similar to the method followed for HT-EHT consumers. However, if such average is below 105 units/kW, the norm of 105 units/kW of connected load shall be applied and quota shall be fixed accordingly.
- e) Fuel Surcharge is not applicable to excess consumption at marginal rates.
- f) The Consumption over the quota (excess consumption) shall be billed at Rs.7.25/kWh or the applicable tariff, which ever is high. If any portion of excess consumption is billed at normal rates (for eg: LTVII(B) more than 500 units), fuel surcharge shall be applicable to such consumption.
- g) There shall be no restriction on maximum demand
- h) The Licensees other than KSEB shall follow the same principle as above in fixing quota and for power restrictions. Additional income from consumers at marginal rates shall be transferred to KSEB promptly on a monthly basis.

Orders of the Commission

18. Considering the submissions and arguments made by the parties, the situation of high cost of power, and the need to promote the conservation of power, the Commission decides to accept the proposal of KSEB with modifications. Accordingly restrictions on the use of power to the tune of 10% shall be imposed

on consumers of all licensees except domestic, street lighting, agriculture and LTVI(D). Accordingly, 90% of the base average consumption as per para 17 above, shall be fixed as quota. The consumption over quota shall be charged at the rate of Rs.7.25/kWh. Restrictions shall also be applicable to domestic consumers having consumption over 300 units per month, which shall also be charged at Rs.7.25/kWh. The other licensees shall promptly remit the revenue from excess consumption to KSEB on a monthly basis. All licensees including KSEB shall indicate the quota, excess consumption and rate charged for excess consumption separately in the bills issued to the consumers. Licensees shall take steps to resolve the disputes or doubts of the consumers on this issue in a time bound manner, without causing hardship to the consumers. The Commission will review the power position and rate for additional consumption on 5-5-2010 and take suitable decision on the restrictions. KSEB shall submit all supporting data for the review by 3-5-2010. This order is effective for consumption from 1-4-2010.

19. The petition is disposed of accordingly.

Sd/-
M.P.Aiyappan
Member

Sd/-
C. Abdulla
Member

Sd/-
K.J. Mathew
Chairman

Approved for Issue

Sd/-

Secretary