



Chhattisgarh State Electricity Regulatory Commission

Civil Lines, G.E. Road, Raipur - 492 001 (C.G.)

Ph.0771-4073555, Fax: 4073553

Petition No. 17 of 2006(M)

In the matter of issue of direction to the distribution licensee under Sec. 23 of the Electricity Act for maintaining efficient power supply

Chhattisgarh Mini Steel Plant Association Petitioner
Raipur.

V/s

Chhattisgarh State Electricity Board Respondent
Raipur

Present : Shri S.K.Misra, Chairman
Shri Sarat Chandra, Member

ORDER

(Passed on 18/07/2006)

The Chhattisgarh Mini Steel Plant Association, a registered association of mini steel plants in the State, with its registered office in Choubey Colony, Raipur, has submitted this petition which prays for the Commission's directions to the Chhattisgarh State Electricity Board (CSEB or the Board, for short) under the provisions of Sec. 23 of the Electricity Act, 2003 (the Act, for short) to maintain efficient distribution of electricity and to regulate the distribution in such a way that continuous process industries like mini steel plant do not suffer due to power shutdown. The petitioner has specially sought relief from the frequent unscheduled power cuts allegedly resorted to by the CSEB. In the above context, the petitioner also seeks refund of demand charges to the affected consumers and reduction in such charges in proportion to the power made available to them by the CSEB.

2. The petitioner association claims to represent 100 mini steel plants in the State, which together have a demand of 300MW of power which is supplied by the CSEB. Thus they constitute an important consumer group of the Board. Mini steel plant is a continuous process industry and any disruption in supply of power causes heavy losses to the industry apart from damaging expensive equipment and furnace lining. It has been pleaded that once a partially molten material gets solidified, it requires electricity to melt it again. This repetition of the process entails double consumption of electricity for the same operation. In recent months, particularly since March 2006, the Board has been resorting to both scheduled and unscheduled power cuts which have resulted in production loss to the extent of 40%. In support of this contention, the petitioner has submitted the load interruption details of one mini steel plant, i.e. M/s Kontinental Steel Corporation, Kumhari, Distt. Durg. According to these details in the month of March '06, power was not available to the industry for 270 hours (36.4% of total time) and in April '06 for as much as 401.50 hours (55.9%

of total time). During hearing of this petition it was repeatedly stressed by the petitioner that while they appreciated that there was power shortage in the State and hence the inability of the CSEB to provide uninterrupted power supply, unscheduled power cuts, which have been quite frequent, could spell the ruin of this industry for reasons given above. Secondly, the payment of fixed charges irrespective of supply of electricity by the Board, cast a heavy financial burden on them and has the effect of increasing the cost of power supplied and consumed very substantially. Power being a raw material for furnace industries the losses have multiplied. The petitioner has cited the example of neighbouring State of Madhya Pradesh in which under similar circumstances, the MPERC issued orders (vide order dated 21.03.2005 in suo motu petition No.21/2005) for non-recovery of fixed charges by distribution licensee from those consumers who were affected by load-shedding. The petitioner has also cited a judgement of the Hon'ble Supreme Court (AIR 1976 SC 1100) in which a proportionate reduction of demand charge has been ordered if the consumer is prevented in consuming electricity as per the contract to the extent it wanted to consume because of the inability of the Board to supply electricity.

3. The respondent CSEB has not denied the unsatisfactory power situation in the State, the fact that power shortage exists and resultant power cuts. Their submission is that during the summer months the overall power deficit in the State was around 500MW during peak hours and about 250MW otherwise. Such a large deficit could not be bridged by the CSEB with the present resources, both in terms of financial ability and availability of electricity. It has also been pointed out that variation of system demand in the State is very wide over a year, between 2250 to 1400 MW, mainly due to wide variation in seasonal demands, industry demands and time of day demands. It has been claimed that even then the annual availability of power in the State is 95% over a full year, which is better than the position prevailing in most other States in the country. It is only in the months of March, April and May, and sometimes June, that there is considerable shortage for reasons which are beyond the control of the Board. It has been further submitted that the Board had proposed a load management plan for the summer months upto end June '06 which was approved by the Commission. However, due to inconsistency of supply and unforeseen failures and lack of availability of sufficient energy, particularly in peak periods, unscheduled load shedding had become inevitable. Since the marginal cost of additional energy required to be purchased from the free market is generally substantially higher than the average purchase cost, the Board had to restrict supply of power to subsidized consumers, including mini steel plants. The Board has also produced voluminous data to show that efforts have been made to inform the consumers about an impending unscheduled power cut.

4. As regards the issue of reduction in fixed cost in proportion to energy supplied, it has been pleaded by the CSEB that the MPERC's orders are not reasonable and that in any case should not be taken as a precedent for this Commission. It has also been stated that the ruling of the Hon'ble Supreme Court (AIR 1976 SC1100) cited by the petitioner is not applicable as the Hon'ble Court has decided the matter on the basis of the provision in the relevant law and on the facts and circumstances of the case, and no principle of law was decided. It has also been pointed out that the structure of tariff in Chhattisgarh is such that only 20% of the fixed cost is recovered through demand/ fixed charges while the fixed cost is as much as 53% of the total cost. Thus as much as 33% of fixed cost is presently

recovered through unit energy charge. When no energy is supplied the fixed cost component of the energy is not recovered. The Board has argued that there is no merit in the demand for reduction in demand charge because of load-shedding and inadequate supply of energy to the petitioner industries.

5. In course of the hearing of this case, the Commission, being aware of the shortage situation in the State, but having regard to the concern of the petitioner consumers, had directed the CSEB to urgently discuss the matter with the petitioner association and such other group of consumers who have substantial load and come to an understanding about management of load with their cooperation. The Commission thus wanted a solution to be found to the acute shortage situation in the summer months, with the co-operation of the big consumers. From the reply submitted by the respondent it would appear that a meeting was held, but it was conducted rather perfunctorily and no satisfactory solution could be emerge; nor, it would appear, was any attempt made to find a solution.

6. The CSEB continues to be the monopoly supplier of power in this State and it also continues to be an unbundled power utility. It is expected from the Board that it shall maintain efficient supply and ensure that supply is equitable in a manner as not to cast a heavier burden of load-shedding on any consumer group. Admittedly the mini steel plant is a continuous process industry and this industry constitutes an important segment of consumers of the Board. Although they are provided electricity as per the prevailing tariff, at a rate slightly less than the average cost of supply, looking to their importance in the industrial profile of the State, it is reasonable expectation that supply of energy to this industry would be equitable. Secondly, all over the country load-shedding is applied last to continuous process industries and mini steel plant is not only such an industry but its nature is such that power is its raw material. Therefore, we are of the view that due consideration should be shown to this industry in scheduling power cuts. As far as possible unscheduled power cuts should be avoided in their case.

7. The issue of refund of reduction in fixed charge in proportion to supply of energy, is on a different footing and has wider implications. The fixed cost comprises the cost of infrastructure for generation, transmission and infrastructure created in order to supply of power to the extent of contracted quantity to individual consumers. So far as its regular consumers are concerned, these costs are in the nature of costs which are incurred irrespective of whether power is supplied in full or not, although this does not take away from the responsibility of the Board to supply adequate and quality power to all consumers. Secondly, as has been pointed out by the CSEB, the fixed cost component of tariff presently is not fully reflected in the demand charge. As much as 33% of the fixed charge is in the form of energy charge and when energy is not supplied this charge is not paid. Thirdly, the effect of load-shedding has not been uniform on all mini steel plants while some plant (as per e.g. Kontinental Steel Corporation) might have been very badly hit, this has not been the uniform pattern. We do not know the circumstances under which MPERC gave relief by way of reduction in demand charge to industries subjected to load-shedding. We understand this was not implemented and is presently inoperational. We would not, however, like to take it as an example for grant of similar dispensation in this State. The judgement of the Hon'ble Supreme Court is on the basis of the provisions of law is clearly distinguishable. Not being a ruling, it may not be invoked in this case.

8. The main plea of the petitioner is that the Commission should direct the CSEB to maintain efficient supply and ensure equitable distribution of electricity under Sec. 23 of the Act and we consider that there is considerable force in this plea. There is no denying the fact that there was acute shortage of power in the summer months. There is also no denying the fact that load-shedding had to be resorted to in such situations. It is also to be recognized that these situations are many times beyond the control of the Board, under which unscheduled power cut becomes inevitable. But the manner in which the Board had gone about managing the load left much to be desired and was not in the best interest either of the Board or of the consumers as the following discussion would be relevant:

- (i) There was no accurate assessment of demand or availability. It is recognised that forecasts of demand can not be made very accurately. However, there should be a sincere effort at making it as accurate as practicable. The trend of rise in demand during the summer months was clearly visible. The Board submitted the load management plans to the Commission after some plodding. There was no proper assessment of availability of power. In fact, the Commission had to intervene for ensuring supply of power by some CPPs in the State.
- (ii) Although the Commission had approved the load management plan for the months of April, May and June '06, the implementation was not undertaken in a transparent manner taking the consumers into confidence as is expected of the Board. In fact, in spite of the Commission's direction, adequate publicity to the load-shedding measures and the need for such load shedding was not given. As observed in our interim order of 4.5.2006 in this case, even the Board's letter dated 1.4.2006 addressed to the petitioner association, it has only been informed about the acute shortage of electricity in peak load and the expectation of the Board from HT industries to give load relief in peak hours. It does not mention the specific period of the day during which load-shedding was planned. There appears to be some reluctance on the part of the Board to give out this important information to the consumers to whom it is due.
- (iii) Unscheduled load-shedding was almost a daily occurrence in the months of March, April and May '06. It would appear that some attempt was made by the Board to inform the major HT consumers. We have already discussed the consequence of unscheduled power cut on continuous process industries like mini steel plants.

9. The Board's plea is that 'inconsistence of supply resources, unforeseen constraints and/or unforeseen failure of availability of sufficient energy and/or peak demand assistance' resulted in critical conditions necessitating unscheduled load-shedding. This plea hides lack of planning and mismanagement and is not acceptable. Power shortage is not typical to this State; many States in the western region (such as Maharashtra, Madhya Pradesh and Gujrat) also face shortage of power; in some cases more acutely as in Maharashtra. But in those States the utilities have streamlined management of load and do not face a situation which prevailed in summer months in Chhattisgarh. The Commission is, therefore constrained to

observe that the Board should do better load management taking, as far as practicable, consumers into confidence. It has been our experience that the load management plan was never put up to the Commission in good time so as to enable the Commission detailed discussion or hearing.

10. In view of the above, while we are not in a position to grant any relief to the petitioner, we would direct the Board under Sec. 23 of the Act to take following steps for proper load management:-

- (i) The periods of maximum demand during a year are now well known. The months of March to May are characterized by the maximum demand during which demand has gone up to a peak of 2200 MW this year. With around 15% annual growth rate in load, the peak load is expected to be much higher next year. The Board should forecast load demands in the next summer months and prepare plans for meeting the same in a more efficient and transparent manner.
- (ii) Apart from summer months, there is power deficit in the State almost throughout the year except for the rainy season. Looking to the availability of power and the overall availability in the grid, load-shedding has become necessary till additional power becomes available in the State, expectedly after April 2007. That being the case, the Board should notify clearly the load-shedding pattern every quarter to the consumers and major associations of industries/other consumers through the newspapers. The reason for load-shedding should also be explained.
- (iii) Unscheduled load-shedding should be kept to the minimum. If such load-shedding is inevitable, because of reasons beyond the control of the Board, HT consumers and continuous process industries in particular must be notified about such load-shedding as early as possible preferably two hours in advance of its implementation. While it may not be possible to notify load-shedding seven days in advance, as demanded by the petitioner, it is practicable to inform HT industries and continuous process industries a day before or at least a few hours before this is resorted to. Though there may be operational difficulty in intimating each and every HT consumer separately, Board may consider to introduce latest technology of giving SMS on mobile phones. Many mobile phone companies and Banks have been successfully implementing such communication. The Board shall submit complete account of unscheduled load-shedding every month by 7th of next month to the Commission along with reasons of such load-shedding.
- (iv) The load-shedding plan should be submitted every quarter to the Commission at least a month before the beginning of the quarter so that there is sufficient time for consideration of the proposal and if necessary consultation with the affected consumers.
- (v) HT industries in Raipur and Durg constitute the single largest block of HT industrial consumers of the Board. It would help if the load-shedding plan is prepared in consultation with the association of industries in these two places. They have repeatedly stressed before us that while there was no denying the

need for load-shedding, their main grievance is that the Board does not take them into confidence in planning management of load.

- (vi) The Board should immediately undertake Demand Side Management (DSM) practices for better management of the load. The DSM measures have helped better load management in many States. Serious efforts in this direction are, therefore, called for in the overall interest of energy saving irrespective of whether there is power shortage or not.
11. Copy of the order be given to the petitioner and respondent.

Sd/-
Member

Sd/-
Chairman