

BEFORE THE APPELLATE TRIBUNAL FOR ELECTRICITY
(APPELLATE JURISDICTION)
Appeal No. 189 of 2009

Dated : 24th February, 2011

Coram: Hon'ble Mr. Rakesh Nath, Technical Member
Hon'ble Mr. Justice P.S. Datta, Judicial member

In the matter:

Uttar Haryana Bijli Vitran Nigam Ltd.
Through its General Manager/RA,
Shakti Bhawan, Sector-6,
Panchkula-134109,
Haryana

...Appellant (s)

Versus

Haryana Electricity Regulatory Commission,
Bay No.33-36, Sector-4,
Panchkula-134109,
Haryana

...Respondent(s)

Counsel for the Appellant : Mr. Arunabh Choudhury
Mr. Raktim Gagoi
Mr. G. Panmei
Mr. Ashish Jha
Mr. Parthiv Goswami
Mr. Kashi Vishweshwar

Counsel for the Respondent: Mr. Anand K Ganesan
Ms. Swapna Seshadri
Mr. Rajesh Monga
Ms. Ranjitha Ramachandran
Ms. Sneha Venkataramani

JUDGMENT

HON'BLE MR. JUSTICE P.S. DATTA, JUDICIAL MEMBER

This Appeal by Uttar Haryana Bijli Vitran Nigam Limited is directed against the order dated 18.6.2009 and the order dated 20.11.2008 passed by the Haryana Electricity Regulatory Commission in case No. HERC/PRO 2 of 2008. The order dated 20.11.2008 is in respect of ARR for Distribution and Retail Supply Business Tariff for the Appellant for the year 2008-09, while the order dated 18.6.2009 is the order of review on the prayer of the Appellant whereby rejection was made of the point on which review was sought for.

2. The facts are that the Appellant who is a successor in interest of the erstwhile Haryana State Electricity Board has been vested with the business of distribution and retail supply following the unbundling of the said Board. The Appellant on 30.11.2007 filed an application for Aggregate Revenue Requirement (ARR) for the financial year 2008-09 projecting therein annual revenue requirement of Rs.47712.70 million corresponding to Rs.47540.40 million of expenditure and Rs.1097.30 million of reasonable return less Rs.925.00 million of non-tariff income before the Commission. The

Commission passed a tariff order on 20.11.2008 against which it filed a Review Petition on 14.1.2009 seeking for review of the order of the Commission dated 20.11.2008 on the following points:

- a) Whether the additional loss reduction target of 1% set by the Commission has any adverse impact on the RE subsidy to be paid by the State Government ?
- b) Whether the sale of additional units of electricity available on account of loss reduction was rightly allocated to non agricultural consumers?
- c) Whether the estimation of sale to HT consumer category was accurate?

The Commission rejected the Review Petition following which this appeal has been preferred.

3. According to the Appellant, it had proposed a loss reduction target of 2% in the financial year 2007-08 but the Commission had ordered to reduce the loss level by an additional 2.5% making it 4.5% in just one year. As per the audited figure of the year 2007-08

the loss level was 28.54% and now by setting the target of 25% the Commission was asking for a loss reduction of 3.54% in just one year which is an improbable figure. It is contended that the Commission by directing the utility to reduce loss by an additional 1% over the proposed loss target of 26% in order to generate additional revenue of Rs.52.2. crores deprived the Appellant of additional subsidy. The methodology used for calculating the efficiency gain of Rs.52.2 crores on account of bridging the gap through additional revenue for further loss reduction of 1% ought to be examined by the Commission. The computation of the revenue from the efficiency gain has been arrived at by the Commission by considering the savings /loss reduction from both agriculture and non agriculture category but sales of the saved units i.e. 138 MU to only non agriculture category so as to determine the figure of Rs.52.2 crore was not proper. This computation was wrong because the revenue from efficiency gain is to be generated only by selling the saved units both from agriculture and non agriculture category. This methodology was wrong as it is not realistically possible that the units saved by reducing losses in the agriculture category can be entirely transferred to the non agriculture category for the following reasons:

a) The savings from reduction of commercial loss i.e. theft etc. in non agriculture category mainly leads to increase in the billing/sales to the agriculture category only. If a theft is reported, the consumption is considered for the same category of consumers from which theft is reported and subsequently when the consumer starts consuming the electricity in an ethical way, the consumption of only that category increases. Similarly, in the case of under reporting of load wherein if the correct load is declared or found in the category, the consumption of only that category is going to increase.

b) If the Appellant is able to reduce the commercial loss of he agriculture dominated feeders, then the energy so saved cannot be transferred to another feeder having non agriculture category of consumers. Therefore, the commercial /non technical loss reduced from the agriculture category cannot be translated for sales to non agriculture category. The Commission illegally reduced the subsidy of the Appellant by Rs.8.8. crores.

- c) If the target of the Commission is considered for computing the efficiency gain from reduction of the losses to 25%, the efficiency gain so computed by considering 50% loss saving from technical loss reduction where this saving is sold to non-agriculture categories, and remaining 50% from commercial loss saving to the respective categories only, the revenue so generated shall be only Rs.4.4 crores.
- d) The sale to HT consumer category approved by the Commission has been on higher side for years and the same has been followed in the order for ARR of 2008-09. A chart has been given to show that in the year 2007-08 the actual sale was 1372.57 Mus, while the approved sale was 1438 Mus and in the year 2008-09 the actual sale was 1558 Mus but the Commission approved the sale at 1820 Mus. The actual consumption for every year has been below the estimated sales in HT category. In the financial year 2008-09 there is already a yawning gap for first half of the year between the Appellant's estimated consumption and actual consumption. The Commission has been calculating the revenue on higher side than the Appellant's estimate which

is far less than the actual revenue based on actual consumption, which means that the Appellant was receiving fewer subsidies from the Government which is less than what it ought to have received. Accordingly, the Commission's estimation of sale resulted in the revenue loss of Rs.26.8 crores. Accordingly, the Commission's methodology of calculating efficiency gain and the sales for HT category is wrong and it virtually affects the subsidy of the State Government to the Appellant by a reduction of around 166 crores. The finding of the Commission that HT consumers have not been treated separately is not based on "Best Estimate Basis" and to that extent, this finding would have a cascading effect on the Appellant. The Commission was not justified in holding that the co-relation established by the Appellant between 1% reduction in distribution loss and loss of additional subsidy is misplaced. The Commission was also not justified in holding that additional availability of power on account of lower losses will neither change the hours supplied nor the ALF of the metered tube well consumers and thus, would not impact the calculation of

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sale to the unmetered tube well consumers and resultantly the sale volume to the agriculture tube well consumers will not undergo any change.

4. The Respondent-Commission did not file any counter affidavit but filed a written submission pointing out the following:

- i) As regards the additional loss reduction target of 1%, the Commission approved a higher amount of capital expenditure plan proposed by the Appellant, The servicing of such capital expenditure allowed by the Commission is through tariff of the consumers. If the said capital expenditure programme is executed, it would result in more efficient operation of the distribution system and lower the loss level in the system. Therefore, high level of capital expenditure is co-related to achieving of additional loss level of 1%.
- ii) The quantum of electricity booked to the agricultural consumers is on the basis of assumption. The Appellant was directed by the Commission to file data on segregated agricultural feeders and install MD1 meters to

record the flow of electricity to the agricultural consumers but in vain. Around 2/3rd of the agricultural consumers in the State are unmetered and the supply to such unmetered consumers is on the basis of estimate with tariff on a flat basis irrespective of the units supplied.. Considering the fact that agriculture sales account for about 34% of the total sales of the Appellant, the assumption of agricultural sales distorts the distribution loss level figures and renders the same unreliable.

- iii) Deficit in the agriculture category that is, the difference between the revenue generated and the cost to serve the agriculture tube well consumers which is Rs. 2359.3 crore has been considered as the agriculture subsidy payable by the Government and the impact on the additional sales volume on account of additional 1% loss reduction has been calculated after estimating the agriculture tube well supply and the subsidy payable by the Government of Haryana.
- iv) When the sales volume to the agricultural consumers is only on a projection basis in the absence of metering,

there can be no additional sales taken to the category on account of additional power available. The additional power ought to be distributed to the remaining metered category on proportionate basis. The quantum of Rs.52.2 crores of additional revenue has been arrived at on such basis of additional power available to supply to the remaining metered category of consumers on proportionate basis.

- v) The Commission estimated the quantum of supply to the unmetered agricultural consumers on the basis of the average load factor of the metered tube well consumers; consequently, hours of supply per pump per day is arrived at for the unmetered category and the same is applied to the projected connected load of the unmetered category to arrive at the projected sales volume to the agricultural consumers.
- vi) On the issue of estimation of the agricultural supply quantum, the State Commission has issued several directives to the Appellant not only regarding metering of the consumers but also providing authentic data including

those from the segregated agriculture feeder. In the absence of the Appellant providing such data, the State Commission has continued the methodology followed in the previous years for estimating the sales to the agricultural category.

- vii) On the issue of projection of sales to the High Tension category of consumers out of the additional sales volume, the State Commission has strictly distributed the additional power available among the remaining categories on proportionate basis to their consumption. Only the agricultural category for which the sales are based on assumption in the absence of any metering was excluded. For the other categories, the projections were on the basis of the actual proportion of supply for the previous year. In the circumstances, there can be no grievance of any particular category being estimated with higher sales figures as compared to other categories.

4. In the order dated 20.11.2008 the Commission fixed tariff of the Appellant for distribution and retail supply business for the financial



year 2008-09 and distribution and retail supply tariff in case No. HERC/PRO 2 of 2008. The Appellant was aggrieved only against the finding of the Commission on 3 points which, therefore, are issues before us and which have been mentioned in para 2 of the order. In the review order the Commission dealt with these issues alone and upon analysis rejected the same and stuck to the earlier order. The Commission maintained that RE subsidy was calculated before calculation of the impact of loss reduction target. The Commission considered an amount of Rs.23593 millions to be a gap between revenue and cost of serve agriculture tube well consumers in the financial year 2008-09 which is payable by the Government subsidy. The Commission observed that optimum sales volume to the agriculture tube well consumers based on annual load factor was determined; as such running hours of the tube well could not have allocated any additional sales to this category out of the power available on account of additional 1% distribution loss target. The Commission reasoned that there is no co-relation between 1% reduction in distribution loss and loss of additional subsidy.

5. On the second issue the Commission held as a corollary to the finding on the first issue that so far as metered tube well consumers are concerned sale volume is calculated on the basis of annual load factor and the same is supplied to the projected connected load of the unmetered category to arrive at projected sales volume. It is the definite finding of the Commission that any additional availability of power on account of distribution loss reduction would have no impact or effect on the sales projection of the agriculture tube well consumers; as such additional power on account of reduction of the distribution loss would necessarily be allocated to other categories than agriculture. The premise of this finding is based on the observation of the Commission in its order dated 20.11.2008 where it was held by the Commission *“the rising trend started from FY 2002-03 and peaked in FY 2006-07. This compelled the Commission to scrutinize the underlying ALF data of the metered agriculture tube well consumption which forms the basis of projecting un-metered agriculture tube well consumption. The Commission pointed out quite a few inconsistencies in the data and hence froze the running hours of the unmetered category in FY 2007-08 till authentic field data including those from the segregated agriculture feeder is made*

available. In the absence of such authentic data, the Commission is constrained to continue its existing methodology of estimating sales for the purpose of ARR".

Thus the Commission found that 2/3rd of the supply to the tube well consumers is unmetered. The Commission held that additional availability of power on account of lower reduction of distribution loss will neither change the hour of supply nor the annual load factor of the metered tube well consumers and will have no impact on the calculation of sale to the unmetered tube well consumers.

6. On the 3rd issue the Commission held that the assessment of consumer category wise sales is done on the basis of annual load factor and connected load projected on the basis of CAGR on consumer category-wise past data on sales volume and connected load on the demand side. On the supply side, availability from different sources is worked out after adjusting for transmission and distribution loss to arrive at net available sales to the distribution licensee. The difference between the net available units for sale and sales projected on annual load factor basis is then allocated to all consumers categories except however agriculture tube well

consumers in proportion to their percentage in sale mix. In view of adequate running hours being provided to the tube well consumers there was no necessity of allocating additional volume to them. The Commission observed; "The allocation to non agriculture segment is done strictly in proportion and without prejudice to any consumer category. The quantum of sales including HT industry sales is projected on a best estimate basis following a consistent methodology at the beginning of the financial year. Thus the actual consumer category wise sales, which in Haryana, is largely dependent on actual availability of power as well as need driven short term purchases from the market and power regulatory measures adopted by the utilities during the year, may vary vis-à-vis those approved by the Commission. To take care of such exigencies a 'true up' mechanism exists in the form of Fuel Surcharge Adjustment (FSA) wherein consumer category wise recovery is based on actual consumer category wise sales on a six monthly basis. It would thus be evident that HT consumers are not treated separately and therefore no reconsideration on this point is warranted".

7. Mr. Arunabh Choudhury, learned Counsel for the Appellant submitted that the Appellant had proposed for loss reduction at 2% but the Commission increased it to 4.5%. Since the order was issued much after the commencement of the financial year it was impossible for the Appellant to meet the target. Mr. Choudhury referred to the report of Abraham Committee which observed that the utilities running loss between 20% to 30% can reduce loss not more than 2%. In the year 2008-09, the distribution loss was 27.02% and to reduce the loss at more than 3% high investment is necessary.

8. The second submission of Mr. Choudhury is that by reducing loss to the extent of 1%, the Appellant should theoretically save 138 MUs which could be diverted in non agriculture sector to earn Rs.52.2 crores. Now, the Appellants takes exception to the methodology on the ground that the Commission ignored the ground related to both technical and theft. As regards technical loss, which occurs largely in agriculture sector, it is submitted that reduction of the transmission loss benefits the end consumer, consequently there is no savings in

sale to the non agriculture sector. With respect to theft it is submitted, it is the end user who consumes the same amount of electricity in an ethical manner.. Therefore, in reality there could be no saving by diverting the energy to non-agriculture sector.

9. As regards the third point, it is the submission of the Appellant that sale to HT consumer category approved by the Commission has been consistently on a higher side. The Commission reconciled the actual sale of the year 2008-09 and must not disregard the projection made by the utility which are made on the basis of adjustments of the previous year.

10. The Commission's reasonings as are found in the order impugned are as follows:

- a) Additional loss reduction level of 1% as was fixed by the Commission finds its support from the fact that the Commission at the same time allowed a considerable amount of capital expenditure which if properly incurred

would result in efficient operation of the distribution system and a lower loss level.

- b) Despite the reminders of the Appellant from time to time, no feed back was given to the Commission so as to show the actual quantum of sale to the un-metered category of the agriculture consumers so much so that supply to unmetered consumers has not been quantified and has all along remained the estimated figure . Such assumption of agricultural sale really affects the distribution Company's health.
- c) The amount of agriculture subsidy to be paid by the Government was duly ascertained and taken note of and while estimating additional sales volume on account of additional 1% loss reduction.
- d) Additional revenue on account of additional sales has to be linked to the sale to the non-agriculture sector.

The Commission distributed the additional power to all the categories of the consumers on proportionate basis.

11. Having heard the submissions of the learned Counsel for the parties, we propose to consider three issues as are delineated at page 2 of the judgment in a comprehensive manner. The Tariff Policy of the Government of India framed under section 3 of the Electricity Act 2003 have fourfold objectives:

- a) Ensure availability of electricity to consumers at reasonable and competitive rates:
- b) Ensure financial viability of the sector and attract investments,
- c) Promote transparency, consistency and predictability in regulatory approaches across jurisdictions and minimize perceptions of regulatory risks,
- d) Promote competition, efficiency in operation and improvement in quality of supply.

12. Section 61 of the Electricity Act 2003 that deals with tariff regulations inter-alia provides the following:

- a) the generation, transmission, distribution and supply of electricity are conducted on commercial principles;
- b) the factors which would encourage competition, efficiency, economical use of the resources, good performance and optimum investments;
- c) safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner;
- d) the principles rewarding efficiency in performance;
- e) that the tariff progressively reflects the cost of supply of electricity and also reduces cross subsidies in the manner specified by the Appropriate Commission

Reduction of transmission and distribution loss to a permissible tolerable limit and gradual reduction in cross subsidy are the twin objectives of the Electricity Act following the unbundling of integrated state utilities so that in the interest of the consumers and that too of the utility power sector gets boosted up. Now, if we look at the tariff order dated 20th November, 2008, we find

the Commission's observation "*licensee has considered subsidy amount of Rs.27404 million for the financial year 2008-09, this being the total gap in the ARR for financial year 2008-09. The licensee has made no efforts to calculate cost to serve, cross subsidy and the subsidy required to be paid by the Government under section 61 & 65 of the Electricity Act 2003*",

Importantly, given a look at table 2.11 dealing with the chart of distribution loss, it appears that right from the year 1998-99 down the financial year 2007-08 there has not been improvement in the reduction of distribution loss. In the intermediate period in between the loss level was as high as 32.19% for 2003-04 and in the financial year 2007-08 figure came to 28.79%. The Commission made an observation that drastic concerted efforts are required to be undertaken to control high loss feeders and to bring down the losses to acceptable level. Analysis of the Commission's order which is more than 100 page document would reveal that non arrest of unacceptable level of distribution loss is on account of unaccounted supply of electricity to the agriculture consumers

who are largely unmetered. The Commission was perturbed by the fact that the average running hours of the tube well per day per pump for the metered agriculture consumers which forms the basis of estimated sales volume for the unmetered agricultural tube well consumers increased from 4.39 hours in FY 2002-03 to 5.54 hours in FY 2008-09. The Commission also warned that the authenticity of the metered sales data needed to be put beyond any question because large number of meters were either defective, slow or dead or they were not read or the meter recording was unreliable. A graph has been depicted to show the rising trend in agricultural unmetered tube well consumption gradually from the year 2002-03 which compelled the Commission to scrutinize the underlying additional load factor data of the metered agricultural consumption which forms the basis of the projecting unmetered agriculture tube well consumption. The ARR of the Appellant in the financial year 2007-08 was based on distribution loss level of 28.5 % with additional reduction by 2.5% and the Commission based its calculations for the financial year 2008-09 at a loss level of 26%. In such a

scenario the Commission fixed 1% distribution loss reduction from the level of 26% and additional revenue of approximately Rs.1097.99 million which was expected to be generated on account of 1% distribution loss reduction could be utilized to partly set off net revenue gap. Because of disorder in supply of power to the agriculture consumers, the Commission allocated additional sales on account of additional reduction loss to non agriculture sector which we do not find to be unjust. The Appellant is under misconception that if additional sales is proportionately allocated to the agriculture sector atleast there will be additional subsidy available from the Government is perhaps misplaced. Based on the annual load factor the Commission determined the optimum sales volume to the agriculture tube well consumers; as such there would be no scope further to allocate any additional sale to this category of consumers out of the power available on account of additional 1% distribution loss target. In fact, there is hardly nexus between 1% reduction in distribution loss and loss of additional subsidy. The additional 1% loss reduction target is in the interest of the health of the utility so that the revenue gap can

be bridged. Secondly, as we find, sale volume for the agricultural tube well consumers is calculated on the basis of ALF of the metered tube well consumers; and consequently hours of supply per pump per day to arrive at for the metered category and the same is applied to the projected contracted load of the unmetered category to arrive at a projected sale volume. Therefore, the additional power as it would be made available on account of loss reduction would not co-relate to the sale to the agriculture consumers; and accordingly given a scenario of the chaos and disorder, the Commission thought it fit to allocate additional sale revenue to the non-agriculture sector. To repeat additional power as it would be available on account of loss reduction will not change the supply of power to the agriculture sector; nor it will have any bearing on the additional load factor for the metered tube well consumers as also the unmetered tube well consumers. Thirdly, we do not find any discrimination in the estimation of the sales to the HT consumer category because the allocation to the non-agriculture segment was without prejudice to any other consumer category. It is undeniable that loss in supply takes

place largely in agriculture sector , therefore, it would be proper that supply of the power to the agriculture sector is streamlined. It is argued on behalf of the Appellant that the Utility was willing to take the brunt of the 1% loss reduction but under the circumstances could not take the brunt of 2%. It is also further submitted that even though the petition by the Utility was submitted on time, the order having come late in the year i.e. November, 2008, the Utility was not given a period of 12 months to achieve the approved figure and certainly the same could not have been achieved in a span of 4 months.. The matter of the fact is that the period in question i.e. 2008-09 is over and it is open to the Appellant to approach the Commission during the true up of financials with actual data which understandably is available with the Appellant; as such there is no case of any prejudice being caused to the Appellant by the order impugned.

13. Having thus considered the grounds of appeal, we find no justifiable merit to interfere with the findings of the Commission.

14. We dismiss the appeal without cost.

[Redacted]
(Justice P.S.Datta)
Judicial Member

[Redacted]
(Mr. Rakesh Nath)
Technical member

Dated 24th February, 2011

Index: Reportable/~~Non-Reportable~~

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D/O