

**Before the Appellate Tribunal for Electricity
Appellate Jurisdiction**

Appeal No. 224 of 2006

Dated 22nd January, 2007

**Present: Hon'ble Mr. Justice Anil Dev Singh, Chairperson
Hon'ble Mr. A. A. Khan, Technical Member**

Under Section 111 (2) of Electricity Act, 2003

In the matter of:

Union of India,
Western Railways,
Churchgate Station Building, 5th Floor,
Mumbai- 400 020.

...Appellants

Versus

1. Gujarat Electricity Regulatory Commission,
1st Floor, Neptune Tower,
Opp. Nehru Bridge, Ashram Road,
Ahmedabad- 380 009.
2. Madhya Gujrat Vij Company Limited,
Sardar Patel Vidyut Bhavan,
Race Course,
Baroda – 390 007.
3. Dakshin Gujarat Vij Company Limited,
Nana Varaccha Road, Kapodara,
Near Gajjar Petrol Pump,
Surat- 395 006.
4. Uttar Gujarat Vij Company Limited,
Visnagar Road, Mehsana- 384001.

. . . Respondents

Counsel for the appellant (s): Mr Neeraj Atri,
Ms Sunitha Hazarika,
Mr. Sanjay Sagar, Dy. CEE, W.R.

Counsel for the respondent(s): Mr. M.G. Ramachandran,
Mr. Anand K. Ganesan,
Ms Hemantika Wahi, Mr.
Mr. K. Balram Reddy, Consultant.

Judgement

Per Hon'ble Mr. A.A. Khan, Technical Member

The appeal is preferred by the Western Railway (for short 'W.Rly'); Church gate Station Building, Mumbai against the tariff order dated 06.05.2006 passed by the Gujarat Electricity Regulatory Commission (hereinafter called as 'Commission') for the financial years 2005-06 & 2006-07 in petition Nos. 865/2006, 864/2006 and 863/2006 of the respondent Nos. 2,3 and 4 respectively.

Facts and Discussions

2. The appellant, W Rly, has been purchasing traction power from the erstwhile Gujarat Electricity Board (for brevity called as 'GEB') or its Successor Distribution Companies (hereinafter called as 'DISCOMs') namely Dakshin Gujarat Vij Co. Ltd. (DGVCL), Madhya Gujarat Vij Co. Ltd. (MGVCL), Uttar Gujarat Vij Co. Ltd. (UGVCL) at 132/66

KV beside the DISCOMs of the adjoining States of Maharashtra, Rajasthan and Madhya Pradesh. While, the W. Rly had consumed 475 MkwH. of traction power from Gujarat Discoms during 2004-05 and paid Rs. 239 crores at the tariff rate of Rs. 5.03/kwh, its consumption in the year 2005-06 rose to the level of 503.40 MkwH and paid Rs. 253.60 crores at the rate of Rs. 5.04/kwh. The appellant has complained that the tariff rate charged by the Gujarat discoms is the highest amongst the suppliers to W. Rly. The appellant has also submitted that the Indian Railways being a public utility and has been providing subsidized rail transport in passenger services and also in transporting bulk goods of social needs, an unreasonably high traction tariff makes the operation of electric traction more expensive. In support of this plea, the appellant has cited the suggestions made by the Committee of Secretaries; the 12th report of the Public Accounts Committee on Railways Electrification; National Electricity Policy; National Tariff Policy, report of Integrated Energy Policy submitted by the expert committee etc. and has advanced arguments seeking to rationalize the traction tariff.

3. The impugned order is the first tariff order after the unbundling of Gujarat Electricity Board (GEB). It is to be noted that there has been no revision of energy charges of the Railways for the past six years. The appellant has furnished the following data:
 - (a) In 2004-05, W. Rly has purchased 475 MkWh @ Rs. 5.03/kwh amounting to Rs. 239 crores from GEB for railway traction.
 - (b) In 2005-06 W. Rly has recorded the electricity consumption of 503 MkWh from GEB @ Rs. 5.04/kwh amounting to Rs. 253.6 crores.
 - (c) While the average power purchase cost per kwh of the W. Rly from other sources excluding that of Gujarat, in the year 2005-06, was at the rate of Rs. 4.02/kwh, the rate including the purchase from Gujarat was at substantially higher level of Rs. 4.48/kwh, indicating that the tariff rate of Gujarat power is the highest amongst the other sources of supply to W. Rly.
4. The appellant has submitted that the W. Rly is the single largest consumer of Gujarat Electricity Distribution system at Extra High Tension (EHT) voltage and the high power tariff which constitutes the

major portion of the railways working expenses adversely affects the economics of electric traction, thereby restricting its ability to finance its development plans.

5. The appellant has challenged the impugned tariff order dated 06.05.2006 fundamentally on the grounds mentioned in the succeeding paragraphs.

5.1 **Withdrawal of Power Factor Incentive**

5.1.1 The appellant has submitted that it has been enjoying the rebate in tariff as an incentive on account of improvement in the power factor above 0.95 provided by previous two tariff orders dated 10.10.2003 and 25.06.2004 but the same was withdrawn by the tariff order dated 06.05.2006 ostensibly due to omission, as the aforesaid order in para III of Chaper- 3 ordered that “*The request of the Railways is considered and the tariff for Railway traction is not increased*”. The appellant has however, submitted that the aforesaid withdrawal of

incentive on power factor improvement has effectively increased the tariff being paid.

5.1.2 The appellant has further submitted that the proposal made by the Discoms in its tariff petitions was to introduce KVARh charges in lieu of the Power Factor incentives and Power Factor Charges. It further adds that since the proposal for introducing KVARh charges was dropped on the request of the consumers, the power factor incentives and power factor charges ought to have automatically continued as existed just before the issue of the impugned order.

5.1.3 The impugned order has extended to W. Rly. the provision of power factor adjustment charges of category “HTP-I tariff” which provided an imposition of a disincentive levy of 1% in the tariff if the average Power Factor during the month drops from 90% to 85% and enhanced disincentive levy of 2% if it drops below 85%. The pre-existing incentive on power factor improvement

above 95% was withdrawn. The appellant has also alleged that the power factor incentive was withdrawn without extending reasonable opportunity to consumers to defend the case and was not in consonance with the principles of natural justice. As mentioned above, the provisions of P.F. incentive existed since tariff order dated 10.10.2000 and continued without any changes by the next tariff order dated 25.06.2004 and is as under:

“Power Factor Adjustment Rebate:

If the average power factor of the consumer’s installation in any month is above 95% the consumer will be entitled to a rebate at the rate of 1% in excess of 95% power factor on the total amount of electricity bill for that month under the head “Demand Charges” and “Energy Charges”, for every 1% rise or part thereof in the average power factor during the month above 95% ”.

5.1.4 The appellant has stated that it has availed the total rebate of Rs. 1.39 crores on account of power factor

improvement on electricity consumption of 503 MkWh purchased from Gujarat during the year 2005-06, thus saving 3 paise/unit towards the tariff. The achievement of Power Factor of near unity could be possible by incurring additional investment in capacitor installation by the W. Rly. The appellant has submitted that it would not only benefit the distribution companies but also the country as a whole by minimizing the system losses and improving efficient utilization of system capacity making it compliant to Electricity Act- 2003 and Energy Conservation Act – 2001.

5.1.5 The appellant has averred that the denial of the incentive on power factor improvement will cause an additional burden of 3 paise per unit to the W. Rly and will effectively increase the tariff to it which is in contradiction to para III of Chapter 3 of the impugned order remarking that *“The request of the Railways is considered and the tariff for Railway traction is not increased”*.

5.1.6 In view of the above facts, we find that the Annual Revenue Requirement of the discoms, filed before the Commission for the year 2006-07 had proposed that the replacement of pre-existing provisions of 'Power Factor Adjustment Surcharge' and 'Power Factor Adjustment Rebate' by the charges of the Reactive Energy consumed in KVARh. However, the Commission in its impugned tariff order did not accept the proposal of 'Reactive Energy Charges' and while retaining the disincentive of 'Power Factor Adjustment Surcharge' in the tariff, disallowed the pre-existing 'Power Factor Adjustment Rebate' without stating any reason. The aforesaid order also did not explain the basis of rejecting the proposal of 'Reactive Energy Charges' which contained both incentive and disincentive to the consumers.

5.1.7 The resulting impact of the above issue of the tariff order is that the consumers with Power Factor between 90% to 100%, which is indicative of performance and efficiency,

are neither discriminated nor rewarded and the tariff formulation has not taken into account the guiding factors to encourage competition, efficiency, economical use of resources etc. as provided in Section 61(c) and 61(e). In our considered opinion, in the absence of providing encouragement/incentive, the consumers with 90% Power Factor will not strive to achieve the higher level of Power Factor as it involves additional investment and would not provide them any economic advantage. This undoubtedly is a retrograde step as it would not only lead to retain higher level of energy losses, but would also de-motivate the efficiency improvement on demand-side causing an adverse impact of capacity utilization of the utilities. In all fairness, the consumers ought to have been given opportunity to present their views, particularly when the incentive available to them since 2000-01 is sought to be withdrawn. Also, we observe that a petition filed for review on 30.07.2006 by the appellant was rejected by the Commission on technical

grounds. We hold the view that the appellant deserves the right to be heard by the Commission, on this count.

5.2. **Determination of Cost of Supply.**

5.2.1 Appellant has pointed out that as per Section 61 (g) the tariff charged from any particular class of consumer, ought to have been determined by the Commission on the basis of the cost of supply incurred by the Discoms for supplying power to the respective Class of Consumers. It has grudgingly stated that all the respondent Discoms have discussed the importance of the cost of supply but neither they nor the Commission, despite repeated request made by the appellant through representation, rejoinders, presentations etc., have cared to unbundled the cost of supply to the various class of consumers. The appellant has brought to the notice that in case of supply at 132 KV/66 KV the system losses are at the lowest level as the technical losses are the least and distribution and other commercial losses are non-existent. The cost of supply for the W. Rly would be less compared to

the Average Cost of Supply incurred by Discoms. The appellant has alleged that the non-disclosure of the cost of supply to the various classes of consumers is against transparency and principles of natural justice.

5.2.2. The appellant has submitted that while the impugned order does not reveal the cost of supply to W. Rly, the transmission losses of 1.5% were indicated in “draft discussion paper on open access charges”. In the final order on ‘open access’ notified on 28.02.2006, the average transmission losses of 4.4% have been fixed. The appellant has, therefore, complained that the cost of supply to Railways has been fixed at an unreasonably high level and has requested for rationalization of tariff and reduction in cross-subsidy. The appellant has submitted a comparative data of ‘average cost of traction energy in Rs/kwh’ supplied to Railways by the various Distribution Companies in adjoining states of Maharashtra; Rajasthan; Madhya Pradesh beside Gujarat and has presented that the percentage change of the

‘average cost of traction energy’ in 2005-06 vis-à-vis the base year of 2000-01 has increased to the level of 1.82% for the supply from Gujarat, whereas it has progressively reduced for the supplies sourced from the other states.

5.2.3 The appellant has furnished the data to prove that the tariff of Gujarat Discoms for W. Rly is the highest and has argued that the tariff determination should be done on the basis of the cost-of-supply of electricity to different class of consumers and not on average cost of supply. We observe that the Commission in its first Tariff Order of 25.06.2004 had issued a directive to GEB to conduct a full-fledged cost-of-service study with the instructions that it needed to be completed well in advance of the next tariff filing. The successor Discoms of GEB in their Aggregate Revenue Requirement (i.e. ARR) filing for the financial year 2005-06 and 2006-07 have confirmed that in compliance to the aforesaid directive the report on cost-of-service

study has been submitted to the commission whereas, in the impugned tariff order the Commission in its comments simply 'noted' it without giving any indication of its plan to utilize it in tariff implementation. It smacks of lack of transparency as alleged by the applicant.

5.2.4 It may be pointed out that in compliance to Section 3 of Electricity Act 2003, the NTP is notified on 12.02.2005, and its central theme is to reduce the cross-subsidy so that the tariff progressively reaches nearer to the cost of supply of electricity. As per Section 61(g) of Electricity Act, 2003 and National Tariff Policy (NTP), the electricity tariff should progressively reflect the cost of supply of electricity by reducing the cross-subsidies. As per National Tariff Policy, the Commission could notify a road-map within six months with targets that the cross subsidy is to be brought down to within 20% of average cost of supply (pooled cost

of supply of energy received from different sources) by 2010-11.

5.2.5 While we are on the issue of determining the cost of supply, it may be pointed out that this tribunal in full bench judgement passed on 06.05.2006, in Appeal No. 4, 13, 14, 23, 25, 26, 35, 36, 54 & 55 of 2005, filed by the Punjab industries against the tariff orders of the Punjab State Electricity Regulatory Commission on the issue of cost of supply held thus:

“110. Keeping in view the provisions of Section 61 (g), which requires tariff to ultimately reflect the cost of supply of electricity and the National Tariff Policy, which requires tariff to be within \pm 20% of the average cost of supply, it seems to us that the Commission must determine the cost of supply, as that is the goal set by the Act. It should also determine the

average cost of supply. Once the figures are known, they must be juxtaposed, with the actual tariff fixed by the commission. This will transparently show the extent of cross subsidy added to the tariff, which will be the difference between the tariff per unit and the actual cost of supply.

5.2.6 The aforesaid judgement at para 119 has

further directed that:

- i) The Commission shall determine the cost of supply of electricity to different class and categories of consumers;*
- ii) The Commission shall also determine the average cost of supply;*
- iii) Once the figures of cost of supply and average cost of supply are known, the Commission shall determine the extent of cross subsidies added to tariff in respect of each class/category of consumers;*

5.2.7 This Tribunal in its judgement in Appeal No. 79 of 2005 filed by the appellant. South Central Railway viz-a-viz Andhra Pradesh State Electricity Regulatory Commission and other has clarified as under:

“Special care has been taken by the Parliament to equip the Tribunal to deal with factual, legal and technical matters. In case the Tribunal finds that an order of a Commission suffers from any factual, legal or technical mistake or is not based on any principle or reason or/ and is arbitrary, unjust, unfair, unreasonable or perverse, it can always interfere and set aside the same.”

5.2.8 The aforesaid judgment also reads that :

“In the instant case, the Commission has over looked the principle which was applied for the tariff years 2003-04 and 2004-05, namely that the tariff for the Railway Traction should be gradually reduced to cost-to-serve, like cases of other subsidizing categories. The deviation by the Commission for the year 2005-06 is not based on any reason. In the circumstances, therefore, the

*impugned order of the Commission dated
March 22, 2005 needs to be modified.”*

5.3 Determination of Cross-Subsidy For Category-Wise Consumers

5.3.1 The appellant has complained that the W. Rly. tariff of Gujarat suppliers has been burdened with the highest cross-subsidy amongst all subsidizing category of consumers. It has submitted that the cross subsidy burden on W. Rly. which was of the order of 43% in 2005-06 has increased to the level of 47% by the impugned tariff order. The appellant has contended that the quantum of the element of the cross-subsidy in the tariff of the W. Rly. in respect of Distribution Companies of other states is showing a decreasing trend despite the average cost of supply being lower for them. Further, the order of ‘open access’ passed by the Commission on 28.02.2006 has indicated the cost of supply of Rs. 3.24/unit for Railways and taking it as the basis the then prevailing cross-subsidy is found to be 57.4% (i.e. Rs. 1.86/unit) over and above the cost of supply of Rs. 3.24/unit to Railways.

5.3.2 The appellant has submitted that in view of the aforesaid, the level of cross-subsidy of 57.4% of the cost of supply of Rs. 3.24./unit (i.e. Rs. 1.86/unit) is to be brought down to 20% as per the NTP by 2010-11. Therefore, the balance cross-subsidy of 37.4% (i.e. 57.4-20) is to be eliminated in phased manner by 2010-11 over next five years. Also as per the NTP the multi-year tariff (MYT) regime is to be adopted from 01.04.2006 and revised after 3 years in 2009-10. Thus, the corss-subsidy to be reduced by 22.5% of cost of supply by the year 2009-10.

5.3.3 It needs to be appreciated that the fundamental for the determination of cross-subsidy is to first determine the cost of serving each class of consumers and even though the report of the study in respect of Gujarat has been submitted to the commission, the same has not been processed and adopted for implementation. It is neither reasonable nor justified to decide on isolated issue based on interpretation of indirectly deduced data as done above by the appellant. The data used should be properly

validated. We direct the Commission to expedite the process so that at least for the tariff in financial year 2007-08 onwards the implementation of the finalized road-map based on cost of supply is acted upon, in all earnestness and the gradual reduction of cross subsidy is effected so as to achieve the National Tariff Policy target by 2010-11. While doing so the Commission should keep in view the guidelines of tariff fixation as stipulated in Section 61 of Electricity Act, 2003 and also the other provisions of National Tariff Policy.

- 5.4 As regards the issues concerning maximum demand; minimum billing demand and development charges raised by the appellant we would prefer not to interfere with the process and leave the issues to be decided by the Commission in accordance with its, strategy and vision for harmonizing and rationalizing with other items of the tariff package while ensuring to safeguard the interest of consumers and balancing it with the recovery of the cost of electricity in a reasonable manner as provided by Section 61(d) of Electricity Act -2003.

5.5 In view of the above we pass the following order.

- (a) The Commission is directed to hold a review proceeding on the merits or otherwise of withdrawing incentives on account of improvement in power factor by providing opportunity to W. Rly. and other affected consumers to present their arguments keeping in view the observations made in para 5.1. above and take action accordingly.

- (b) While keeping in view the provisions of the Section 61 of the Electricity Act 2003, National Tariff Policy and our observations in para 5.2 and 5.3 above, the Commission is directed to expedite the process for adoption of the acceptable recommendations of the study-report submitted on cost-of- supply to various class of consumers in Gujarat and come out with a road-map for progressive reduction of the cross-subsidy and its implementation in tariff from the financial year 2007-08 onwards, so as to achieve the target as specified in the National Tariff Policy.

5.6 With above directions the appeal is disposed of but with no order as to cost.

(A.A. Khan)
Member Technical

(Justice Anil Dev Singh)
Chairperson