Appellate Tribunal for Electricity (Appellate Jurisdiction)

Appeal No. 21 of 2010

Dated: 11th November, 2011

Present: Hon'ble Mr. Justice M. Karpaga Vinayagam, Chairperson

Hon'ble Mr. V.J. Talwar, Technical Member,

In The Matter of

Haryana Vidyut Prasaran Nigam Limited, Shakti Bhawan, Sector 6, Panchkula – 134 109

.....Appellant

Versus

- Central Electricity Regulatory Commission 3rd & 4th Floor, Chanderlok Building, 36, Janpath, New Delhi- 110001
- Power Grid Corporation of India Limited,
 B-9 Qutab Institutional Area, Katwaria Sarai,
 New Delhi-110016
- Rajasthan Rajya Vidyut Prasaran Nigam Limited, Jaipur, Sh. Shreemath Pandey, IAS, CMD, Vidyut Bhawan, Jyoti Nagar, Janpath, Jaipur – 302005, Fax-0141-2740168
- Ajmer Vidyut Vitran Nigam Limited,
 Hathi Bata Powr House, Jaipur Road,
 Ajmer 305001
- 5. Jaipur Vidyut Vitran Nigam Limited, First Floor, Vidyut Bhawan, Janpath, Jaipur – 302005. Fax- 0141-2740633.

- 6. Jodhpur Vidyut Prasaran Nigam Limited, Basni Ind. Area, Jodhpur,
- 7. Himachal Pradesh State Electricity Board, Shimla Vidyut Bhawan, Shimla (HP),
- 8. Punjab State Electricity Board,The MallPatiala 147 001
- Power Development Department,
 Government of Jammu & Kashmir, Jammu
 Narwal, Gladni, Jammu –
- Uttar Pradesh Power Corporation Limited, Lucknow,
 UPPCL, Shakti Bhawan, 12, Ashok Marg, Lucknow –
- Delhi Transco Limited,
 Shakti Sadan, Kotla Road,
 ITO, New Delhi 110 002.
- Chandigarh Administration, Chandigarh,
 UT of Chandigarh, Secretariat Office Building,
 Sector 9D, Chandigarh 160009
- 13. Uttrakhand Power Corporation Limited, Dehradun, Urja Bhawan, Kanwali Road, Dehradun 248001
- Bhakra Beas Management Board, Chandigarh,
 Sector 19-B, Madhya Marg, Chandigarh. 160019

.....Respondent(s)

Counsel for Appellant(s): Mr.Neeraj Kumar Jain, Sr Advocate

Mr Sushant Kumar Mr Pratham Kant, Counsel for Respondent(s): Mr Pradeep Misra with

Mr Shushant Pandit &

Mr Manoj Kumar Sharma for R-10

Mr M G Ramachandran with

Mr Rohit Shukla &

Ms Swapna Sheshadari for R -2

Mr Andhendumauli K Prasad with

Mr Ritesh Khare &

Mr Abhishek for R-11

JUDGMENT

PER HON'BLE MR. V J TALWAR, TECHNICAL MEMBER

- 1. The Appellant Haryana Vidhyut Prasaran Nigam is the State Transmission Utility and Transmission licensee in the state of Haryana. 1st Respondent is the Central Electricity Regulatory Commission (Central Commission). 2ndRespondent Power Grid Corporation of India (POWERGRID) is the Central Transmission Utility. Respondents 3 to 13 are either Distribution Licensees or Transmission Licensees in the constituent states of Northern Region. 14th Respondent Bhakra Beas Management Board (BBMB) is a Generating and Transmission Company.
- 2. The present Appeal is directed against the Central Commission's Order dated 11.4.2008 in review Petition No. 133 of 2006 in petition No. 139 of 2005 whereby the Central Commission allowed the petitions of the 2nd Respondent POWERGRID for recovery of charges for Unified Load Despatch Centre (ULDC).
- 3. Aggrieved by the impugned Order of Central Commission dated 11.4.2008, the Appellant, one of the beneficiaries of the ULDC has filed this Appeal.

- 4. The short facts leading to the filing of this Appeal are as follows:
 - (i) POWERGRID (R-2) proposed to establish a Unified Load Despatch Centre Scheme in the Northern Region. This Scheme was devised to operate, monitor and control the regional power grid in a unified, well-coordinated and integrated manner.
 - (ii) The Central Electricity Authority accorded techno economic clearance for ULDC Scheme on 12.1.1994. In March 1995 the Government of India accorded administration and expenditure sanction for the establishment/ augmentation of ULDC Scheme for Northern Region. However, till the final commissioning of the scheme the project cost got increased on account of general price escalation and change in scope of approved items and foreign exchange variation. The revised estimated cost was also approved by Government of India.
 - (iii) The necessary works to put the scheme commercially operational was completed on 11.1.2002 and from 1.8.2002 the scheme was declared to be commercially operational. The POWERGRID (R-2) filed a petition in Petition no. 82 of 2002 claiming that the tariff regulations notified by the Central Commission on 26.3.2001 namely the Central Commission (Terms and Conditions of Tariff) Regulations, 2001 would not be suitable for recovery of cost of the ULDC Scheme from beneficiaries and proposed a levelised tariff meaning thereby that a uniform amount would be recovered for a period of 15 years.

- (iv) The Central Commission passed an interim Order on 9.9.2002 holding that POWERGRID (R-2) was entitled to provisionally charge 70% of the tariff from the date of commercial operation of the ULDC system in Northern Region subject to adjustment in final Order. The Central Commission passed another Order on 24.10.2002 whereby POWERGRID (R-2) was directed to place on record certain additional information.
- (v) The audited account results of the scheme for financial year 2002-03 was specified in the amended Petition that the project cost came to amount at Rs. 57228.65 lakhs. The Central Commission in its Order dated 2.9.2005 adapted this project cost.
- (vi) The Central Commission approved the recovery of loan and equity based on the weighted average rate of interest & Return on Equity. Recovery Factor for loan and equity for 15 years worked out to be 0.107 and 0.1794 respectively using the following formula:

Recovery Factor =
$$\frac{i \times (1+i)^n}{(1+i)^n - 1}$$
 i = rate
 $(1+i)^n - 1$ n = period

- (vii) POWERGRID (R-2) filed another petition being Petition No. 139/2005 before Central Commission for approval of charges for ULDC Scheme for the period from 1.4.2004 to 31.7.2017 and additional capitalization after Date of Commercial Operation during 2002–03 and 2004–05.
- (viii) The Central Commission on Petition No. 139/05 passed Order dated 9.5.2006 approving additional Capital expenditure and De-capitalization on account of Foreign Exchange Rate Variation. Weighted average rate of

interest was allowed @ 6.037% and Return on Equity (RoE) at @ 14% for the period 2004-09. Recovery factors for recovery of loan and equity in 15 years were worked out using the same formula as mentioned in para (vi) above.

- (ix) POWERGRID (R-2) filed an Interlocutory Application (IA) No. 61/2006 in Petition No. 139/2005 which was later on converted into Review Petition no. 133/2006. In this review petition POWERGRID (R-2) claimed that for calculating the recovery factors for the tariff block 2004-09, Return on equity @ 14% and interest on loan @ 6.037% has been used by the Central Commission. The Central Commission has worked out the recovery factors using reduced RoE and rate of interest as above and period for 15 years on basic cost. POWERGRID (R-2) claimed that this methodology adopted by the Central Commission would lead to under recovery of ULDC charges in 15 years. The POWERGRID (R-2) proposed that first 2 year recovery charges to be based on 16% RoE and 6.593% rate of interest for 15 years while 3rd year onward, the recovery must be on the basis of 14% RoE and 6.037% rate of interest for 13 years on outstanding principal amount as on 01.04.2004.
- (x) At this stage the Appellants submitted before the Central Commission that by computing instalments on yearly basis and claiming it on monthly basis, the entire equity amount gets paid back in 167th month and entire loan gets paid back in 175th month, instead of both getting paid back in 180th month. According to the Appellant the 2nd Respondent is benefited by Rs. 19.21 for Rs. 100 equity and by Rs. 4.58 for Rs. 100 loan. To rectify this

situation, it was requested that ULDC charges be computed on monthly basis.

- (xi) The Central commission passed an Order on 6.12.2006 to examine the proposal of POWERGRID (R-2) and the proposals made by various constituents including the appellant by a one member Bench. The matter was then again heard by single member bench which did not approve the contention of the constituents regarding computation of instalment on monthly basis even if the payment is to be made every month.
- (xii) The Central commission vide impugned Order dated 11.4.2008 endorsed the recommendations of the single member bench.
- (xiii) Aggrieved by this impugned Order of the Central Commission dated 11.4.2008, the Appellant has filed this Appeal.
- 5. Learned Sr. Counsel for the Appellant has raised the following contentions in support of his claim:
 - (i) The single member bench of the Central Commission in its Order dated 14.3.2007 has observed that :

"16 In view of the above, I do not recommend getting into complexities associated with introduction of monthly compounding concept proposed by BBMB. I may point out that the issue is generic and not specific to levelised tariff of ULD&C Schemes only. In all generation and transmission tariffs allowed by the commission the fixed charges computed on annual basis are collected through monthly billing with out considering interest payment frequency etc. It would therefore not be rational to consider monthly compounding for ULD&C schemes in isolation."

- (ii) The single Member Bench of Central Commission has not gone into the merit of the case but has justified it on the grounds that since the same methodology is being adopted in generation and transmission scheme, this should be adopted in the ULD&C scheme also.
- (iii) The methodology adopted by POWERGRID (R-2) i.e. computing the instalment on yearly basis and recovering on monthly basis, the constituents will be required to bear an excess amount of Rs. 24.75 crores in the life time of the ULD&C scheme.
- (iv) The single member took a wrong assumption that the monthly compounding concept involves a complex mathematical computations, when the formula for Equated Monthly Instalments is same as adopted by the Central Commission except the value of 'n' (instalments) and 'i' (rate). Value of n should have been monthly instalments (15 x 12) instead of number of year for recovery. Similarly monthly rate should have been adopted instead of yearly rate.
- (v) The finding of the Central Commission to the effect that the issue on hand is generic in nature and not specific to the ULDC Scheme is misplaced. The issue cannot be treated as generic and is specific to the present Scheme.
- (vi) It is clarified that the Appellant has no grievance with levelised tariff, but the only grievance of the appellant is with the mode and manner in which the said amount is recovered by the POWERGRID (R-2).
- (vii) The POWERGRID (R-2) had misread the case of appellant. The appellant had no grievance with the amount of interest payable to the lenders of the

POWERGRID (R-2) calculated in any manner (simple or weighted average method), but the grievance is only with regard to the mode and manner in which it is recovered from the appellant.

- 6. The learned counsel for respondent refuted the allegations made by the Appellant and submitted in reply as follows:
 - i) The Appellant cannot challenge only the recovery part of the tariff Order without challenging the determination part of the tariff Order.
 - ii) Weighted average of the interest payment has been adopted by the 2nd Respondent whereas some of the loans had monthly frequency of the loan repayment while others had six monthly and some had annual. In this manner by adoption of weighted average interest in levelised manner is more beneficial for the constituents including the appellant.
 - iii) The constituents including the appellant is being benefited from the adoption of levelised tariff method instead of conventional front loading method and therefore the appellant cannot challenge only the recovery part of the tariff Order.
 - iv) Monthly recovery to the tariff is in the line of the methodology followed in respect of transmission and distribution tariff and therefore no fault can be ascribed to approval of such methodology.
 - v) It is not that the Central Commission has devised the above methodology because of liability to calculate on monthly basis is too onerous. It has been conscious decision based on well adopted methodology applied in

tariff determination. If the Appellant's submission are accepted, then the entire concept of tariff determination earlier by the Central Government and thereafter by the Central Commission followed by all the State Commissions will have to be changed as in all tariffs, the fixed charges are computed on annual basis but recovered monthly without considering the frequency of interest payment.

- 7. We have heard the learned Sr. Counsel for Appellant and the learned Counsel for Respondents. We have also examined the various Orders passed by first Respondent as well as material papers placed before us, besides the statutory provisions of the Electricity Act 2003 and the relevant Regulations framed by the first respondent. We have also considered the written submissions submitted by both the parties.
- 8. In nutshell, the only grievance of the Appellant is against the method of recovery of the charges by POWERGRID (R-2). According to the Appellant the recovery of charges are computed on yearly basis but recovered on monthly basis. This methodology adopted by the POWERGRID (R-2) would result in over recovery by POWERGRID (R-2). The Appellant has categorically stated that issue is not generic but specific to ULD&C scheme.
- 9. The 2nd Respondent's case is based on the fact that the issue in hand is generic and has been adopted throughout the country for tariff determination. In all tariffs, the fixed charges are computed on annual basis but recovered monthly without considering the frequency of interest payment.

10. In the light of the rival submissions made by the respective parties, following comprehensive question would arise for consideration.

"Whether the Central Commission has correctly computed charges for recovery of loan and equity for ULDC scheme on annual basis while allowing recovery of such charges on monthly instalments."

- 11. Before dealing with the above question, it is to be borne in mind that the transmission tariff are worked out on annual basis but recovered on monthly basis. It is also a fact that the Appellant itself is a transmission utility and its own charges are computed on annual basis by the Haryana Electricity Regulatory Commission and it recovers its charges from beneficiaries on monthly basis. In spite of these, the Appellant has preferred to agitate the issue before this Tribunal. The Appellant has categorically stated before this Tribunal that the issue in hand is not generic but is specific to ULDC scheme. It has, therefore, become necessary to examine the issue in detail and to ascertain as to whether the claim of the Appellant has some substance or it has indulged in frivolous litigation.
- 12. In view of above, the obvious question comes to one's mind is whether there is any difference in the recovery of charges for ULDC Scheme and Transmission Charges for other works approved by the Central Commission. For this purpose we would be required to see the proposal of POWERGRID (R-2) in its petition No. 82 of 2002 before the Central Commission. The proposal of POWERGRID (R-2) has been incorporated in para 7 of the Central Commission's Order2.9.2005 which read as under:

- "7. Due to nature of equipment/services under the Scheme, the high initial cost and financial position of the constituents, a concept similar to levelised tariff has been proposed in the petition, entailing uniform charges over period of assumed life of the Scheme of 15 years for recovery of capital cost. The other components namely, O&M expenses and Interest on Working Capital have not been proposed to be levelised. The petitioner has proposed the following methodology for computation of tariff:
- (a) **Return on equity:** RoE @ 16% on equity has been proposed by the petitioner for the system both for Regional and State portions. **Further, recovery of total equity has been proposed during the period of 15 years.**
- (b) Interest on loan and loan repayment: Interest on loan capital has been computed on the outstanding loans. Interest on loan has been considered by applying weighted average interest rate(s) applicable on actual loan and deployed by the petitioner for the Scheme, both for Regional and State portions. Repayment of total loan for State and Regional /Central Sector portions has been considered by the petitioner during the period of levelised charges of 15 years.
- (c) **Operation and maintenance (O&M) Expenses:** The petitioner has proposed O&M charges for first two years @ 7.5% for Regional/Central Sector portion with provision of annual escalation linked with AICPI /WPI. According to the petitioner, this should be adjusted after the end of 2nd year based on actual O&M expenses. O&M expenses for the State portion have been proposed to be undertaken by the concerned State utility.
- (d) **Interest on Working Capital**: Interest on working capital has been proposed by adopting the following principles.

..... " {emphasis added}

13. It is clear from the above proposal that POWERGRID (R-2) has proposed to recover the equity and loan (principle amount) in fifteen years through tariff. It is also clear that the proposal of POWERGRID (R-2) was not for levelised tariff

but a concept similar to levelised tariff. Now let us see the elements that constitutes generic transmission tariff. The generic transmission tariff constitutes of following components:

Annual Transmission Charges

- a) Depreciation
- b) Return on Equity (RoE)
- c) Interest on Loan
- d) Interest on Working Capital
- e) O&M Charges including
 Employees Cost
 Administrative & General Expenditure
 Repair & Maintenance Expenditure
- 14. It is clear from above that Equity and Loan are not recoverable through transmission charges. The equity invested in the asset is not recovered and remain invested throughout the life of asset and is not paid through tariff. Similarly, repayment of principle amount of loan is not a part of tariff. On the other hand, POWERGRID (R-2) proposed to recover equity as well as loan capital in 15 years through annual charges. Thus, there is a material difference in generic transmission charges and annual charges for ULDC Scheme. Therefore, these two are to be treated differently.
- 15. Single member of the Central Commission in his Order dated 14.3.2007 had observed as under:
 - "16. In view of the above, I do not recommend getting into the complexities associated with introduction of monthly compounding concept proposed by BBMB. I may point out that the issue is generic and not specific to levelised tariff of ULD&C schemes only. In all generation and transmission tariffs allowed by the Commission, the fixed changes, computed on annual basis, are collected through

monthly billing without considering interest payment frequency, etc. It would therefore, not be rational to consider monthly compounding for ULDC &C schemes in isolation."

- 16. The above view of single member was accepted by the bench of the Central Commission in its impugned Order dated 11.4.2008. The relevant portion of Commission's findings are reproduced below:
 - "12. In our view, the respondents have not commented on the methodology recommended by the single-member bench on merit, but have suggested that interest and equity should be calculated and recovered on monthly rest basis. In our view, the suggestion of the respondents falls outside the scope of the present application where the Commission is seized with the issue whether the methodology adopted in the Order dated 9.5.2006 will ensure adequate recovery of the investments made by the petitioner. We agree with the single-member Bench that the question of monthly compounding vis-a-vis annual compounding of return on equity and interest on loan are generic in nature and cannot be considered in isolation. We fully endorse the views of single-member bench on this point in para 16 of his Order dated 14.3.2007 which is extracted hereunder:...." {emphasis added}
- 17. In our considered opinion, the single member as well as the Commission had failed to appreciate the material difference in the methodologies adopted for recovery of charges for ULDC Scheme and generic transmission tariff. The issue raised by the Appellant was well within the scope of proceedings before the Central Commission where the Central Commission was examining as to whether the methodology adopted in the Order dated 9.5.2006 would ensure adequate recovery of investments made by the POWERGRID (R-2). At that stage the Respondent has raised this issue of over recovery by POWERGRID (R-2) by the adopted methodology. The issue raised by the Appellant was very much relevant and the Central Commission should have examined it on merits.

18. Now let us examine the merits of the Appellant's claim. The Central Commission has used the following formula for determining the recovery factors for equity and loan components:

Recovery Factor:
$$\frac{i \times (1+i)^n}{(1+i)^n-1}$$

Where, i= Weighted average rate of interest and RoE respectively and n= period

Recovery factor for loan = $(0.06593 \times 1.06593^{15}) / (1.06593^{15} - 1) = 0.107$

Recovery factor for equity = $(0.16 \times (1.16)^{15})/(1.16^{15}-1) = 0.1794$

- 19. The Appellant has contended that there was nothing wrong with the above formula. However, since instalments are to be paid monthly, Value of 'n' should have been monthly instalments (15 x 12) instead of number of years for recovery. Similarly instead of yearly rate, monthly rate should have been adopted by dividing yearly rate with 12.
- 20. Let us try to understand the averment of the Appellant through the following example. We should keep in mind that as per the Central Commission's Tariff Regulations, interest on loan is payable on average loan during the year.

Example: Let us assume a loan of Rs 1200 is taken at 12% annual interest rate for one year to be paid back in 12 equal monthly instalments. We would now calculate interest payable using various methods viz., (i) as per Tariff Regulations, (ii) as per formula adopted by the Central Commission, (iii) as per modified formula suggested by the Appellant and (iv) on reduced balance method.

a. Interest as per Regulation (Generic transmission charges)

Loan at beginning at the year = Rs 1200

Loan at the end of 11 month = Rs 100

Average loan during the year = (1200+100)/2 = Rs 650

Interest on loan as per Regulations = $650 \times .12 =$ Rs 78.

This method is based on calculation of interest on reducing balance concept as shown in table below. Net amount payable for the month is higher in the beginning of the year. This system of payment of loan is known as 'Front loading'. Net interest paid during the year is same as calculated as per the Regulations i.e. interest on average loan during the year.

Month	Amount at the beginning of month	Interest during the month	Principle installment paid during the month	Total amount paid for the month
1	1200	12	100	112
2	1100	11	100	111
3	1000	10	100	110
4	900	9	100	109
5	800	8	100	108
6	700	7	100	107
7	600	6	100	106
8	500	5	100	105
9	400	4	100	104
10	300	3	100	103
11	200	2	100	102
12	100	1	100	101
Total		78	1200	1278

b. Interest calculated as per formula adopted by the Central Commission

Recovery Factor:
$$\frac{i \times (1+i)^n}{(1+i)^n-1}$$

Here n= 1 and i =0.12

Recovery factor = $(.12 \times (1+.12)^{1})/((1+.12)^{1}-1) = (.12 \times 1.12)/(1.12-1)$

=.12x1.12/.12 = **1.12**

Amount Recovered = 1200 x 1.12 = Rs 1344.00

Interest Recovered = 1344.00-1200.00 = Rs 144 Interest recovered in excess of interest payable as per Regulations = 144 - 78 = Rs 66

C. Interest calculated as per formula suggested by the Appellant

Here n= 12 and i =0.12/12 = 0.01 Recovery factor = $(0.01 \times (1+.01)^{12})/((1+.01)^{12}-1)$ = 0.0888484

Amount Recovered = 1200 x 0.0888484 x 12 = Rs 1279.42

Interest Recovered = 1279.42-1200.00 = **Rs 79.42**

d. Interest calculated as per reducing balance method adopted by banks for recovery of loan in equal monthly instalments. Monthly instalment is worked out by using the above formula. Monthly instalment for a loan of Rs 1200 for one year at 12% annual interest would be 1279.42/12 = Rs 106.62

Month	Amount at the beginning of the month	Interest paid during month	Installment paid	Principle amount repaid
1	1200.00	12.00	106.62	94.62
2	1105.38	11.05	106.62	95.56
3	1009.82	10.10	106.62	96.52
4	913.30	9.13	106.62	97.49
5	815.81	8.16	106.62	98.46
6	717.35	7.17	106.62	99.44
7	617.91	6.18	106.62	100.44
8	517.47	5.17	106.62	101.44
9	416.02	4.16	106.62	102.46
10	313.57	3.14	106.62	103.48
11	210.08	2.10	106.62	104.52
12	105.57	1.06	106.62	105.56
Total		79.42	1279.42	1200.00

21. The above example would amply demonstrate that the methodology adopted by the Central Commission would yield higher recovery of interest than permissible under its own regulations. In fact as per this methodology, interest payable is worked out on loan amount payable at the beginning of the year instead of the average loan during the year as per the Regulations. The

methodology suggested by the Appellant is more accurate and interest calculated as per this method is almost equal to interest calculated as per Regulations.

- 22. Since, in this case equity is also recoverable in equal monthly instalments; the methodology adopted by the Central Commission would result in higher recovery of equity as well. As explained above, the equity is not recovered in generic transmission tariff. Accordingly, it would not matter as to whether Return on Equity is paid on annual basis or monthly basis. It would not matter as to whether equity is levelised or not. As long as equity remains same, the Return on Equity would also remain same under all the circumstances. However, in the present case before us, the equity is also recovered in equal monthly instalments. As such Return on Equity would also diminish with the reduction in balance equity. Single member of the Central Commission could not appreciate this aspect and equalised the methodology adopted in this case with generic transmission tariff.
- 23. In the light of above findings, we accept the contention of the Appellant in as much as the methodology adopted by the Central Commission would result in higher recovery of loan and equity in 15 years. This needs to be corrected. Since, almost nine years have already elapsed since Date of commercial operation; it would not be advisable to rework out the recovery factor from the very beginning and return the excess amount already recovered by the POWERGRID (R-2) to the beneficiaries. On the other hand it would not be proper on our part to allow the error to continue in perpetuity. We would, therefore, direct the Central Commission to work out the monthly instalments

by which the amount of loan and equity is fully recovered with the recovery factor decided by its impugned Order dated 11.4.2008. In other words excess amount recovered by the POWERGRID (R-2) would be adjusted in future instalments by reducing number of instalments appropriately. The recovery of loan and equity would stop thereafter. The question is answered accordingly.

24. Summary of our findings

- a. It is noted that in generic transmission tariff, Equity and Loan are not recoverable through transmission charges. The equity invested in the asset is not recovered and remain invested throughout the life of asset and is not paid through tariff. Similarly, repayment principle of loan amount is not a part of tariff. On the other hand, POWERGRID (R-2) proposed to recover equity as well as loan capital in 15 years through annual charges. Thus, there is a material difference in generic transmission charges and annual charges for ULDC Scheme. Therefore, these two are to be treated differently.
- b. In our considered opinion, the single member as well as the Commission had failed to appreciate the material difference in the methodologies adopted for recovery of charges for ULDC Scheme and generic transmission tariff. The issue raised by the Appellant was well within the scope of proceedings before the Central Commission where the Central Commission was examining as to whether the methodology adopted in the Order dated 9.5.2006 would ensure adequate recovery of investments made by the POWERGRID (R-2). At that stage the Respondent has raised this issue of over recovery by POWERGRID (R-2)

by the adopted methodology. The issue raised by the Appellant was very much relevant and the Central Commission should have examined it on merits.

- C. It is established that the methodology adopted by the Central Commission would yield higher recovery of interest than permissible under its own regulations. In fact as per this methodology, interest payable is worked out on loan amount payable at the beginning of the year instead of the average loan during the year as per the Regulations. The methodology suggested by the Appellant is more accurate and interest calculated as per this method is almost equal to interest calculated as per Regulations.
- d. Since, in this case equity is also recoverable in equal monthly instalments; the methodology adopted by the Central Commission would result in higher recovery of equity as well. As explained above, the equity is not recovered in generic transmission tariff. Accordingly, it would not matter as to whether Return on Equity is paid on annual basis or monthly basis. It would also not matter as to whether equity is levelised or not. As long as equity remains same, the Return on Equity would also remain same under all the circumstances. However, in the present case before us, the equity is also recovered in equal monthly instalments. As such Return on Equity would also diminish with the reduction in balance equity.
- e. In the light of above findings, we accept the contention of the Appellant in as much as the methodology adopted by the Central Commission

would result in higher recovery of loan and equity in 15 years. This needs to be corrected. Since, almost nine years have already elapsed since Date of commercial operation; it would not be advisable to rework out the recovery factor from the very beginning and return the excess amount already recovered by the POWERGRID (R-2) to the beneficiaries. On the other hand it would not be proper on our part to allow the error to continue in perpetuity. We would, therefore, direct the Central Commission to work out the monthly instalments by which the amount of loan and equity is fully recovered with the recovery factor decided by its impugned Order dated 11.4.2008. In other words excess amount recovered by the POWERGRID (R-2) would be adjusted in future instalments by reducing number of instalments appropriately. The recovery of loan and equity would stop thereafter.

- 25. The Appeal is accordingly allowed. The impugned order is set aside with the above directions. However, there is no Order as to costs.
- 26. Pronounced in the open court today the 11th November, 2011.

(V J Talwar) Technical Member (Justice M Karpaga Vinayagam) Chairperson

REPORTABLE/NON-REPORTABLE