

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Coram

- 1. Shri Bhanu Bhushan, Member**
- 2. Shri R. Krishnamoorthy, Member**

Petition No. 131/2004

In the matter of

Approval of tariff in respect of NLC Stage-II Transmission System in Southern Region for the period 1.4.2004 to 31.3.2009.

And in the matter of

Petition No. 134/2004

Approval of tariff in respect of NLC Stage-I Transmission System in Southern Region for the period 1.4.2004 to 31.3.2009.

And in the matter of

Power Grid Corporation of India Ltd., Gurgaon

.... Petitioner

Vs

1. Karnataka Power Transmission Corporation Ltd., Bangalore
2. Transmission Corporation of Andhra Pradesh Ltd., Hyderabad
3. Kerala State Electricity Board, Thiruvananthapuram
4. Tamil Nadu Electricity Board, Chennai
5. Electricity Department, Govt. of Pondicherry, Pondicherry **....Respondents**

ORDER

In these petitions, the petitioner, Power Grid Corporation of India Ltd had sought approval for tariff in respect of its above-named transmission assets in Southern Region for the period from 1.4.2004 to 31.3.2009 based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2004, (hereinafter referred to as “the 2004 regulations”). On completion of pleadings and after hearing the parties, final tariff in respect of the transmission assets for the period 1.4.2004 to 31.3.2009 was awarded by the Commission.

The details of the orders, capital cost considered in these orders and final tariff awarded by the Commission are given in Annexures I to II of this order.

2. Through this order, we are revising the tariff in the process of implementation of the judgment of the Appellate Tribunal for Electricity (hereinafter referred to as “the Appellate Tribunal”) dated 16.5.2007 in Appeal No. 121 of 2005. Briefly, the background of the case is as under:

(a) The petitioner, on its establishment, took-over the transmission network from the central generating companies like NTPC, NHPC, NLC and NEEPCO with effect from 1.4.1992 on book value.

(b) Prior to setting up of the Commission, the tariff for the various transmission systems owned by the petitioner was fixed by the Central Government in Ministry of Power, based on advice from the Central Electricity Authority.

(c) For the purpose of tariff determination, Ministry of Power considered the capital cost on the following basis:

(i) Capital cost as on 31.3.1992 was notionally divided into debt and equity in the ratio of 50:50.

(ii) Cumulative depreciation accrued till 31.3.1992 was deducted from capital cost as at (a) above to arrive at net asset value which was used for tariff purposes.

(iii) Net asset value obtained at (ii) above, was divided notionally into debt and equity in the ratio of 50:50. In other words, both debt and equity as in (i) above were reduced equally by one-half of the cumulative depreciation accruing till 31.3.1992 mentioned in (ii) above.

(iv) This approach was continued during 1.4.1992 to 31.3.1997, with equity getting depleted further by 50% of depreciation amount charged during this period.

(v) The approach was discontinued after 31.3.1997, and there was no further depletion of equity thereafter.

(d) When the Commission determined tariff for the various assets of the petitioner, following the approach adopted by Ministry of Power, 50% of the Net Fixed Asset as on 1.4.1997 was taken as the equity deployment as on 1.4.1997.

(e) Aggrieved by the above principle followed by the Commission, the petitioner made an application, being Petition No 26/2005 urging that in respect of all its assets, the depleted equity amounting to Rs. 64600 lakh through the application of the above methodology be restored.

(f) The said application was dismissed vide the Commission's order dated 11.5.2005, whereupon, the petitioner filed Appeal No. 121 of 2005 before the Appellate Tribunal.

(g) The above appeal was disposed of by the Appellate Tribunal vide its judgment dated 16.5.2007 with the following directions:

“CONCLUSION

33. Thus, we have no hesitation in holding that the aforesaid grave error committed by the Central Government as a regulator while determining tariff for the block year 1992-1997, requires to be rectified with effect from April 1, 2004.

34. In the light of the aforesaid discussion, the issues raised in Para 19 are determined and answered as follows:

ISSUE No.1: The regulator committed grave error in fixing equity while determining tariff for the block year 1992-1997 and 1997-2002.

ISSUE No.2: The appellant is entitled to the restoration of equity of Rs.664 Crore, with effect from April 1, 1992, for the purposes of accounting.

ISSUE No.3: Consequent to restoration of equity, tariff needs to be determined for the period commencing from April 1, 2004.

ISSUE No.4: The Order of the CERC is liable to be set aside.

ISSUE No.5: The CERC shall re-determine the transmission tariff for the period commencing from April 1, 2004.

35. In view of the aforesaid determination, the appeal is allowed. The order of the CERC is set aside and the matter is remitted to it (CERC) for re-determination of the tariff for the period commencing from April 1, 2004 in accordance with law and having regard to the observations made by us.

We make it clear that the appellant shall not be entitled to claim tariff difference from the period anterior to 01.04.2004. “

(h) In pursuance of the above judgment of the Appellate Tribunal, the petitioner filed region-wise applications for revision of tariff for the period 2004-09 after restoration of equity. The project-wise details for revision of equity in respect of the transmission assets in the Southern Region were filed in Petition No 39/2007.

3. As a consequence of the judgment of the Appellate Tribunal, notional equity as on 1.4.2004 stands revised. This has consequently led to the revision of calculation of return on equity and interest on working capital. Restoration of equity does not have any bearing on any other component of tariff.

4. Details of the revised calculation of the annual transmission charges in respect of the transmission assets considered in this order are given in Annexures I to II to this order.

5. The petitioner shall recover the additional amount in six equal monthly installments.

Sd/
(R KRISHNAMOORTHY)
MEMBER
New Delhi, dated 24th January, 2008

sd/-
(BHANU BHUSHAN)
MEMBER

Annexure- I

1. Petition No. 131/2004
2. Approval of tariff in respect of NLC Stage-II Transmission System in Southern Region for the period 1.4.2004 to 31.3.2009.
3. Date of order of approval of tariff: 7.11.2005
4. **Original tariff**
 - (a) Summary of the tariff awarded

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	718.09	718.09	718.09	718.09	718.09
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	2320.57	2320.57	2320.57	2320.57	2320.57
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	157.31	163.11	169.25	175.68	182.55
O & M Expenses	914.97	951.57	990.37	1028.74	1071.04
Total	4110.94	4153.34	4198.28	4243.08	4292.25

- (b) Computation of capital cost

(Rs. in lakh)

Capital cost approved in the order dated 7.11.2005, as on 1.4.2001	40407.00
Admitted capital cost as on 1.4.2004 for calculation of debt and equity	33151.00
Additional capitalization due to works from 1.4.2001 to 31.3.2004	00.00
Additional capitalization due to FERV from 1.4.2001 to 31.3.2004	00.00
Total capital cost as on 1.4.2004 considered for calculation of return on equity	33151.00

- (c) Computation of equity: Rs. 16575.50 lakh at the debt-equity ratio of 50:50

5. **Revised tariff claimed by the petitioner**

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	718.09	718.09	718.09	718.09	718.09
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	2828.63	2828.63	2828.63	2828.63	2828.63
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	166.14	171.94	178.08	184.51	191.38
O & M Expenses	914.97	951.57	990.37	1028.74	1071.04
Total	4627.83	4670.23	4715.17	4759.97	4809.14

6. Revised tariff computations

(a) Capital cost

(Rs. in lakh)

Capital cost approved in the order dated 7.11.2005, as on 1.4.2001	40407.00
Additional capitalization due to works from 1.4.2001 to 31.3.2004	00.00
Additional capitalization due to FERV from 1.4.2001 to 31.3.2004	0.00
Total capital cost as on 1.4.2004	40407.00

(b) Equity and return on equity:

Equity as per order dated 7.11.2005	Rs. 16575.50 lakh
Additions on account of restitution of equity	Rs. 3728.00 lakh
Total equity (50% of capital cost)	Rs. 20203.50 lakh
Return on equity	Rs. 2828.49 lakh per annum

(c) Interest on working capital

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Maintenance Spares	773.35	819.76	868.94	921.08	976.34
O & M expenses	76.25	79.30	82.53	85.73	89.25
Receivables	771.28	778.35	785.84	793.31	801.50
Total	1,620.88	1,677.40	1,737.31	1,800.11	1,867.10
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
Interest	166.14	171.93	178.07	184.51	191.38

(d) Revised annual transmission charges

(Rs.in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	718.09	718.09	718.09	718.09	718.09
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	2828.49	2828.49	2828.49	2828.49	2828.49
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	166.14	171.93	178.07	184.51	191.38
O & M Expenses	914.97	951.57	990.37	1,028.74	1,071.04
Total	4627.69	4670.08	4715.03	4759.83	4809.00

Annexure- II

1. Petition No. 134/2004
2. Approval of tariff in respect of NLC Stage-I Transmission System in Southern Region for the period 1.4.2004 to 31.3.2009.
3. Date of order of approval of tariff: Order dated 3.11.2005 read with order dated 31.7.2006.
4. **Original tariff**
 - (b) Summary of the tariff awarded

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	90.91	90.91	90.91	90.91	90.91
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	336.78	336.78	336.78	336.78	336.78
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	32.54	33.97	35.48	37.07	38.77
O & M Expenses	151.59	157.63	164.17	170.37	177.53
Total	611.82	619.29	627.35	635.14	643.99

- (b) Computation of capital cost

(Rs. in lakh)

Capital cost approved in the order dated 31.7.2006, as on 1.4.2001	7994.16
Admitted capital cost as on 1.4.2004 for calculation of debt and equity	4811.16
Additional capitalization due to works from 1.4.2001 to 31.3.2004	00.00
Additional capitalization due to FERV from 1.4.2001 to 31.3.2004	0.00
Total capital cost as on 1.4.2004 considered for calculation of return on equity	4811.16

- (c) Computation of equity: Rs. 2405.58 lakh at the debt-equity ratio of 50:50.

5. Revised tariff claimed by the petitioner

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	90.91	90.91	90.91	90.91	90.91
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	559.66	559.66	559.66	559.66	559.66
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	37.28	38.76	40.33	41.98	43.74
O & M Expenses	151.59	157.63	164.17	170.37	177.53
Total	839.44	846.96	855.07	862.92	871.84

6. Revised tariff computations

(a) Capital cost

(Rs. in lakh)

Capital cost approved in the order dated 31.7.2003, as on 1.4.2001	7994.16
Additional capitalization due to works from 1.4.2001 to 31.3.2004	00.00
Additional capitalization due to FERV from 1.4.2001 to 31.3.2004	0.00
Total capital cost as on 1.4.2004	7994.16

(b) Equity and return on equity:

Equity as per order dated 31.7.2003	Rs. 2405.58 lakh
Additions on account of restitution of equity	Rs. 1591.50 lakh
Total equity (50% of the capital cost)	Rs. 3997.08 lakh
Return on equity	Rs.559.59 lakh per annum

(c) Interest on working capital

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Maintenance Spares	202.86	215.03	227.93	241.61	256.10
O & M expenses	12.63	13.14	13.68	14.20	14.79
Receivables	139.75	141.00	142.34	143.64	145.11
Total	355.24	369.16	383.95	399.44	416.01
Rate of Interest	10.25%	10.25%	10.25%	10.25%	10.25%
Interest	36.41	37.84	39.35	40.94	42.64

(d) Revised annual transmission charges

(Rs. in lakh)

	2004-05	2005-06	2006-07	2007-08	2008-09
Depreciation	90.91	90.91	90.91	90.91	90.91
Interest on Loan	0.00	0.00	0.00	0.00	0.00
Return on Equity	559.59	559.59	559.59	559.59	559.59
Advance against Depreciation	0.00	0.00	0.00	0.00	0.00
Interest on Working Capital	36.41	37.84	39.35	40.94	42.64
O & M Expenses	151.59	157.63	164.17	170.37	177.53
Total	838.51	845.97	854.03	861.82	870.68