

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Coram:**

- 1. Shri R.Krishnamoorthy, Member  
2. Shri V.S.Verma, Member**

**Petition No.90/2007**

**In the matter of**

Approval of incentive based on availability of transmission system for the year 2006-07 for Western Region.

**And in the matter of**

Power Grid Corporation of India Limited, Gurgaon

**..Petitioner**

Vs

1. Madhya Pradesh Power Transmission Company Ltd., Jabalpur, Patna
2. Maharashtra State Electricity Distribution Co. Ltd., Mumbai
3. Gujarat Urja Vikas Nigam Ltd., Baroda
4. Electricity Department, Government of Goa, Panaji
5. Electricity Department, Administration of Daman & Diu, Daman
6. Electricity Department, Administration of Dadra Nagar Haveli, Silvassa
7. Chhattisgarh State Electricity Board, Raipur
8. Madhya Pradesh Audyogik Kandra Vikas Nigam (Indore) Ltd., Indore

**....Respondents**

**The following were present:**

1. Shri U.K.Tyagi, PGCIL
2. Shri S.K.Niranjan, PGCIL
3. Shri M.M.Mondal, PGCIL
4. Shri D.Khandelwal, MPPTCL

**ORDER  
(DATE OF HEARING: 19.5.2009)**

The petitioner seeks approval for incentive for the year 2006-07 for its transmission system in Western Region, in terms of the Central Electricity Regulatory Commission (Terms & Conditions of Tariff) Regulations, 2004 (hereinafter referred to as "the regulations").

2. Regulation 51 of the regulations provides that:

51. Target Availability for recovery of full transmission charges:

(1) AC System: 98%

(2) HVDC bio-pole links and HVDC back-to-back stations: 95%

3. Regulation 60 of the regulations, as amended, *inter alia*, provides that,-

(1) The transmission licensee shall be entitled to incentive @ 1% of equity for each percentage point of increase in annual availability beyond the target availability prescribed under regulation 51, in accordance with the following formula:

$$\text{Incentive} = \text{Equity} \times [\text{Annual availability achieved} - \text{Target availability}] / 100$$

(2) Incentive shall be shared by the long-term customers in the ratio of their average allotted transmission capacity for the year.

4. Member-Secretary, WRPC under his letter dated 29.7.2008 has certified the availability of intra-regional system of Western Region and inter-regional links connecting WR to other regions except links with Northern Region and Southern Region. The availability of the Ramagudam-Bhadrawati AC links and Vindhyachal HVDC back-to-back has been certified during 2006-07 by Member-Secretary, SRPC and NRPC under their letters dated 3.5.2007 and 30.4.2007 respectively. The necessary details of certified availability are as under:

S.No.	Assets	Availability
1	<b>Intra-regional AC transmission system</b>	99.81%
2.	<b>Inter-regional HVDC systems (AC)</b> Ramgundam-Bhadrawati I & II (SR-WR) Raipur-RourKela (WR-ER)	99.68% 99.71%
3.	<b>Inter-regional HVDC systems</b> Bhadrawati back-to-back I & II (SR-WR) Vindhyachal HVDC back-to-back (WR-NR)	97.29% 98.5884%
4.	<b>Inter-regional AC System</b> Korba-Budhipadar transmission line	99.72%

5. The petitioner has claimed incentive as under::

(Rs. in lakh)			
S.No.	Assets	Pro rata equity	Incentive
1	<b>Intra-regional AC transmission system</b>	76019.54	1375.95
2.	<b>Inter-regional HVDC systems (AC)</b>		
	Ramgundam-Bhadrawati I & II (SR-WR)	1211.75	20.36
	Raipur-Rourkela (WR-ER)	1538.92	26.32
3.	<b>Inter-regional HVDC system</b>		
	Bhadrawati back-to-back I & II (SR-WR)	3958.57	90.65
	Vindhyachal HVDC back-to-back (WR-NR)	4156.44	149.22
4.	<b>Inter-regional AC System</b>		
	Korba-Budhipadar transmission line	441.29	7.59
	<b>Total</b>		1670.09

6. M. P. Power Trading Company Ltd. (MPPTCL) has filed its reply. MPPTCL has stated that incentive may be allowed on revision of equity, based on the judgment of the Appellate Tribunal.

7. In respect of the transmission assets whose equity has been revised as a result of judgment of the Appellate Tribunal, the revised equity has been considered.

8. Incentive has been worked out considering the availability as certified by the Member-Secretary, WRPC, Member-Secretary SRPC and Member-Secretary, NRPC. Based on the above, the petitioner shall be entitled to incentive as under:

(Rs. in lakh)				
S. No.	Assets	Actual % availability	Pro rata Equity (Rs. in lakh)	Incentive Amount (Rs. in lakh)
1	<b>Intra-regional AC transmission system</b>	98.00	75917.84	1374.11
2.	<b>Inter-regional HVDC systems (AC)</b>			
	Ramgundam-Bhadrawati I & II (SR-WR)	99.68	1211.75	20.36
	Raipur-Rourkela (WR-ER)	99.71	1538.92	26.32

3.	<b>Inter-regional HVDC system</b> Bhadrawati back-to-back I & II (SR-WR) Vindhyachal HVDC back-to-back (WR-NR)	97.29 98.59	3958.57 4156.44	90.65 149.15
4.	<b>Inter-regional AC System</b> Korba-Budhipadar transmission line	99.72	441.29	7.59
	<b>Total</b>		<b>87224.81</b>	<b>1668.18</b>

9. The details of calculations in support of the incentive allowed by us are given in the Annexure attached.

10. There are differences between the incentive amount claimed by the petitioner and allowed by us due to pro rata equity and worked out as under:

- (i) For the assets covered under FSC and TCSC for Raipur-Rourkela transmission, pro rata equity of Rs. 3155.95 lakh has been considered as per the order dated 7.8.2009 whereas petitioner has considered pro rata equity of Rs. 3218.56 lakh.
- (ii) For the assets covered under Bhadrawati-Chandrapur transmission system, pro rata equity of Rs. 878.41 lakh has been considered as per the order dated 18.6.2009 against the petitioner's claim of pro rata equity of Rs. 879.12 lakh.
- (iii) For the assets covered under Bus Reactor at Kolhapur transmission system, only provisional transmission charges have been approved. There are some more assets covered under the same transmission system which were commissioned after 2006-07. The petition for final transmission charges is yet to be filed by the petitioner. The petitioner has claimed equity of Rs. 38.37 lakh as per the provisional transmission charges awarded. For the purpose of the incentive, as equity claimed

has not been considered. The petitioner is granted liberty to file separate petition for approval of incentive after approval of the final transmission charges.

- (iv) For the assets covered under Vindhyachal HVDC, the difference is due to the rounding off of eligible availability percentage.

11. The Commission in its order dated 18.7.2007, had provisionally allowed incentive of 80% of that claimed by the petitioner in this petition. The provisional incentive charged by the petitioner shall be adjusted against final incentive for the year 2006-07 approved by us in this order.

12. The incentive approved shall be shared by the respondents, the beneficiaries in the Western Region, in proportion of the transmission charges for the year 2006-07 paid by them in the region.

13. This order disposes of Petition No.90/2007.

Sd/-  
**(V.S.VERMA)**  
**MEMBER**  
New Delhi dated the 27th August 2009

sd/-  
**(R. KRISHNAMOORTHY)**  
**MEMBER**

## ANNEXURE

### Western Region Transmission System

(Rs. in lakh)

Name of the Company: PGCIL									
Name of the Region: Western									
Petition No.:90/2007- Incentive for the years 2006-07									
	Name of the Transmission System/ Line (1)	Petition No. And date of Tariff Order (2)	D.O.C.O. (3)	Equity as per order (4)	Period during the year (Year) (5)	Pro- rata equity (6) =(4)*(5)	Availability of the Transmission System 05-2009 (7)	Availability eligible for incentive (8)	Incentive amount (9) =(4)*(5)*(8)
(A)	<b>INTRA REGIONAL AC SYSTEM</b>								
	Basic availability for incentive								
									<b>98.00%</b>
1	KORBA	117/2004 order dt 14-2-2008	Before 31.03.2001	11538.51	1.00	11538.51	99.81%	1.81%	208.85
2	VINDHYACHAL STAGE-I TR.SYSTEM	111/2004 order dt 14-2-2008	-do-	13494.13	1.00	13494.13	99.81%	1.81%	244.24
3	KAWAS	114/2004 order dt 14-3-2008	-do-	1569.86	1.00	1569.86	99.81%	1.81%	28.41
4	KAKARPAR	115/2004 order dt 14-3-2008	-do-	2485.50	1.00	2485.50	99.81%	1.81%	44.99
5.1	GANDHAR-DEHGAM & GHANDHAR-BHARUCH	112/2004 order dt 11-3-2008	-do-	5872.33	1.00	5872.33	99.81%	1.81%	106.29
5.2	GANDHAR-PADHE I/C PADGHE S/S	112/2004 order dt 14-02-2006	-do-	4594.51	1.00	4594.51	99.81%	1.81%	83.16
5.3	GANDHAR-GANDHAR	112/2004 order dt 14-02-2006	-do-	227.97	1.00	227.97	99.81%	1.81%	4.13
6	VINDHAYACHAL ADDITIONS-STAGE-I TR. SYSTEM	72/2004 order dt. 29-4-2008	-do-	5327.50	1.00	5327.50	99.81%	1.81%	96.43
7	REACTOR AT CHANDRAPUR	116/2004 order dt 29-4-2008	-do-	207.92	1.00	207.92	99.81%	1.81%	3.76
8.1	400 kV D/C VINDHAYACHAL-SATNA & SATNA-BINA LINE	73/2004 Order Dt 29-04-2008	-do-	4013.69	1.00	4013.69	99.81%	1.81%	72.65
8.2	400 kV S/C KORBA-RAIPUR T/L,315 MVA ICT-I ,BUS REACTOR AT RAIPUR & LILO OF KORBA-BHILAI CKT.-III.		-do-	961.06	1.00	961.06	99.81%	1.81%	17.40
8.3	315 MVA ICT -II WITH LILO OF 400 KV D/C BHILAI CHANDRAPUR LINE CKT--II		-do-	131.62	1.00	131.62	99.81%	1.81%	2.38
9.1	400 kV D/C Kolhapur-Mapusa (Circuit-I),ICT-I with associated bays	61/2005 Order dt 29-04-2008	01.01.2003	1025.35	1.00	1025.35	99.81%	1.81%	18.56
9.2	400 kV D/C Kolhapur-Mapusa (Circuit-II) ,ICT-II,Bus Reactor II and associated bays		01.12.2002	2159.11	1.00	2159.11	99.81%	1.81%	39.08
10	FSC & TCSC for Raipur- Rourkela line	73/2009 Order dt 07-08-2009	01.11.2004	3155.95	1.00	3155.95	99.81%	1.81%	57.12
11	Khandwa S/S & LILO of Itarsi- Dhule at Khandwa	88/2009 Order dt 22-07-2009	01.02.2005	2267.46	1.00	2267.46	99.81%	1.81%	41.04
12.1	Tarapur- Padghe Ckt-I	46/2009 Order Dt 19-06-2009	01.03.2005	1533.25	1.00	1533.25	99.81%	1.81%	27.75
12.2	Tarapur- Padghe Ckt-II, 400 kV Tarapur-Boisar TL & LILO of Gandhar- Padghe TL		01.08.2005	2211.81	1.00	2211.81	99.81%	1.81%	40.03
12.3	220 kV Tarapur- Boisar TL		01.09.2005	2202.91	1.00	2202.91	99.81%	1.81%	39.87
13	Raipur- Chandrapur (Bhadrawati) Line	50/2009 Order Dt 15.06.2009	01.06.2005	6300.37	1.00	6300.37	99.81%	1.81%	114.04
14	Bhadrawati- Chandrapur	56/2009 Order dt 18-06-2009	01.05.2006	958.27	0.92	878.41	99.81%	1.81%	15.90
15	LILO of Korba- Raipur at Sipat	42/2009 Order dt 17-06-2009	01.05.2006	154.58	0.92	141.70	99.81%	1.81%	2.56
16.1	Vindhyachal III Satna- Bina Ckt-3	48/2009 Order dt 19-06-2009	01.10.2006	5601.73	0.50	2800.87	99.81%	1.81%	50.70
16.2	Vindhyachal III Satna- Bina Ckt-4	45/2008 Order dt 17-09-2008	01.12.2006	1854.62	0.33	618.21	99.81%	1.81%	11.19

16.3	ICT-II at Satna	48/2009 Order dt 19-06-2009	01.11.2006	474.84	0.42	197.85	99.81%	1.81%	3.58
<b>SUB TOTAL (A)</b>				<b>80324.85</b>		<b>75917.84</b>			<b>1374.11</b>
<b>(B)</b>	<b>INTER REGIONAL AC PROJECTS</b>								
Basic availability for incentive									<b>98.00%</b>
17	RAMGUNDAM- CHANDRAPUR (50%)	138/2004 order dt 14-2-2008	Before 31.03.2001	1211.75	1.00	1211.75	99.68%	1.68%	20.36
18	RAIPUR- ROURKELA (50%)	63/2005 Order dt 9-5-2006	01.04.2003	1538.92	1.00	1538.92	99.71%	1.71%	26.32
19	Korba-Budhipadar line in Western Region (2/3 <sup>rd</sup> equity for WR)	69/2004 Order dt 29-4-2008	Before 31.03.2001	441.29	1.00	441.29	99.72%	1.72%	7.59
<b>SUB TOTAL (B)</b>				<b>3191.96</b>		<b>3191.96</b>			<b>54.26</b>
<b>(C)</b>	<b>INTER REGIONAL HVDC PROJECTS</b>								
Basic availability for incentive									<b>95.00%</b>
20	Singrauli-Vindhyachal TL alongwith HVDC back to back station at Vindhyachal in NR & WR (50%)	113/2004 order dt 14-2-2008	Before 31.03.2001	4156.44	1.00	4156.44	98.59%	3.59%	149.15
21	CHANDRAPUR (Bhadrawati) HVDC Back to Back (50%)	137/2004 order dt 16-4-2008	-do-	3958.57	1.00	3958.57	97.29%	2.29%	90.65
<b>SUB TOTAL (C)</b>				<b>8115.00</b>		<b>8115.00</b>			<b>239.80</b>
<b>TOTAL</b>				<b>91631.81</b>		<b>87224.81</b>			<b>1668.18</b>