

**CENTRAL ELECTRICITY REGULATORY COMMISSION  
NEW DELHI**

**Coram:**

1. Dr. Pramod Deo, Chairperson
2. Shri R.Krishnamoorthy, Member
3. Shri S.Jayaraman, Member
2. Shri V.S.Verma, Member

**Petition No.91/2006**

**In the matter of**

Approval of incentive based on availability of transmission system for the year 2005-06 for Western Region.

**And in the matter of**

Power Grid Corporation of India Limited, Gurgaon

**..Petitioner**

Vs

1. Madhya Pradesh State Electricity Board, Jabalpur
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, Indore

**....Respondents**

**The following were present:**

1. Shri U.K.Tyagi, PGCIL
2. Shri V.V.Sharma, PGCIL
3. Shri M.M.Mondal, PGCIL
4. Shri Prashant Sharma, PGCIL
5. Shri S.K.Niranjan, PGCIL

**ORDER**

**(DATE OF HEARING: 23.4.2009)**

The petitioner seeks approval for incentive for the year 2005-06 for its transmission system in Western Region, in terms of the Central Electricity Regulatory Commission (Terms and 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 9.5.2006 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 by Member-Secretary, SRPC and NRPC respectively during 2005-06. The necessary details of certified availability are as under:

S.No.	Assets	Availability
1	<b>Intra-regional AC transmission system</b>	99.75%
2.	<b>Inter-regional HVDC systems (AC)</b>	
	Ramgundam-Bhadrawati I & II transmission line (SR-WR)	99.69%
	Raipur-Rourkela transmission line (WR-ER)	99.12%
3.	<b>Inter-regional HVDC systems</b>	
	Bhadrawati back-to-back I & II (SR-WR)	99.14%
	Vindhyachal HVDC back-to-back (WR-NR)	98.48%
4.	<b>Inter-regional AC System</b>	
	Korba-Budhipadar transmission line	99.50%

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>	68075.89	1191.33
2.	<b>Inter-regional HVDC systems (AC)</b>		
	Ramgundam-Bhadrawati I & II (SR-WR)	1211.75	20.48
	Raipur-Rourkela (WR-ER)	1538.92	17.24
3.	<b>Inter-regional HVDC system</b>		
	Bhadrawati back-to-back I & II (SR-WR)	3958.57	163.88
	Vindhyachal HVDC back-to-back (WR-NR)	4156.44	144.64
4.	<b>Inter-regional AC System</b>		
	Korba-Budhipadar transmission line	441.29	6.62
	<b>Total</b>		<b>1544.19</b>

6. M. P. Power Trading Company Ltd. (MPPTCL) has filed its reply.

7. Incentive has been worked out considering the availability as certified by the Member-Secretary, WRPC, Member-Secretary SRPC and Member-Secretary, NRPC.

The petitioner shall be entitled to incentive as under:

(Rs. in lakh)				
S. No.	Assets	Equity	Pro rata equity	Incentive Amount
1	<b>Intra-regional AC transmission system</b>	70467.67	67932.15	1188.81
2.	<b>Inter-regional HVDC systems (AC)</b>			
	Ramgundam-Bhadrawati I & II (SR-WR)	1211.75	1211.75	20.48
	Raipur-Rourkela (WR-ER)	1538.92	1538.92	17.24
3.	<b>Inter-regional HVDC system</b>			
	Bhadrawati back-to-back I & II (SR-WR)	3958.57	3958.57	163.88
	Vindhyachal HVDC back-to-back (WR-NR)	4156.44	4156.44	144.64
4.	<b>Inter-regional AC System</b>			
	Korba-Budhipadar transmission line	441.29	441.29	6.62
	<b>Total</b>		<b>79239.12</b>	<b>1541.67</b>

8. The details of calculations in support of the incentive allowed by us are given in the Annexure attached.
9. It is noted that there are differences between the incentive amount claimed by the petitioner and allowed by us. This is on account of difference in equity considered for tariff purpose. The petitioner has shown the total equity as Rs. 79382.85 lakh For the assets which had been declared under commercial operation during 2005-06, *pro rata* equity on the basis of number of months of that year has been worked out. Thus, the total of *pro rata* equity has been calculated as Rs. 79239.11 lakh. In case of Raipur-Rourkela transmission line equity as per petitioner is Rs. 3216.58 lakh whereas we have calculated pro rata equity as Rs. 3151.93 lakh. Similarly, in case of Khandwa sub-station and LILO *pro rata* equity as per the petitioner is Rs. 2160.77 lakh and we have calculated as Rs. 2081.69 lakh.
10. The Commission in its order dated 4.9.2006, 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 2004-05 approved by us in this order.
11. The incentive approved shall be shared by the respondents, the beneficiaries in the Western Region, in proportion of the transmission charges for the year 2005-06 paid by them in the region.
12. This order disposes of Petition No. 91/2006.

Sd-  
(V.S.VERMA)  
MEMBER

sd/-  
(S.JAYARAMAN)  
MEMBER

sd/-  
(R.KRISHNAMOORTHY)  
MEMBER

sd/-  
(DR. PRAMOD DEO)  
CHAIRPERSON

New Delhi dated the 22<sup>th</sup> July 2009

## ANNEXURE

Name of the Company: PGCIL								
Name of the Region: Western								
Petition No.:91/2006- Incentive for the years 2005-06								
								Rs. In lakh
Name of the Transmission System/ Line (1)		Petition No. And date of Tariff Order (2)	D.O.C.O. (3)	Equity as per CERC order (4)	Period during the year (Year) (5)	Availability of the Transmission System - 05-2009 (6)	Availability eligible for incentive (7)	Incentive amount (8) = (4)*(5)*(7)
(A)	<b>INTRA REGIONAL AC SYSTEM</b>							
	Basic availability for incentive							<b>98.00%</b>
1	KORBA	117/2004 Order dt 14-02-2008	Before 31.03.2001	11538.51	1.00	99.75%	1.75%	201.92
2	VINDHYACHAL STAGE-I TR.SYSTEM	111/2004 Order dt 14-02-2008	-do-	13494.13	1.00	99.75%	1.75%	236.15
3	KAWAS	114/2004 Order dt 14-03-2008	-do-	1569.86	1.00	99.75%	1.75%	27.47
4	KAKARPAR	115/2004 Order dt 14-03-2008	-do-	2485.50	1.00	99.75%	1.75%	43.50
5.1	GANDHAR-DEHGAM & GHANDHAR-BHARUCH	112/2004 Order dt 11-03-2008	-do-	5872.33	1.00	99.75%	1.75%	102.77
5.2	GANDHAR-PADHE I/C PADGHE S/S	112/2004 order dt 14-02-2006	-do-	4594.51	1.00	99.75%	1.75%	80.40
5.3	GANDHAR-GANDHAR	112/2004 order dt 14-02-2006	-do-	227.97	1.00	99.75%	1.75%	3.99
6	VINDHAYACHAL ADDITIONS-STAGE-I TR. SYSTEM	72/2004 Order Dt 29-04-2008	-do-	5327.50	1.00	99.75%	1.75%	93.23
7	REACTOR AT CHANDRAPUR	116/2004 Order dt 29-04-2008	-do-	207.92	1.00	99.75%	1.75%	3.64
8.1	400 kV D/C VINDHAYACHAL-SATNA & SATNA-BINA LINE	73/2004 Order Dt 29-04-2008	-do-	4013.69	1.00	99.75%	1.75%	70.24
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	99.75%	1.75%	16.82
8.3	315 MVA ICT II WITH LILO OF 400 KV D/C BHILAI CHANDRAPUR LINE CKT--II		-do-	131.62	1.00	99.75%	1.75%	2.30
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	99.75%	1.75%	17.94
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	99.75%	1.75%	37.78

10	FSC & TCSC for Raipur-Rourkela line	11/2005 Order dt 27-10-2006	01.11.2004	3151.93	1.00	99.75%	1.75%	55.16
11	Khandwa S/S & LILO of Itarsi- Dhule at Khandwa	149/2005 Order dt 26-10-2006	01.02.2005	2081.69	1.00	99.75%	1.75%	36.43
12.1	Tarapur- Padghe Ckt-I	135/2006 Order Dt 06-02-2007	01.03.2005	1446.35	1.00	99.75%	1.75%	25.31
12.2	Tarapur- Padghe Ckt-II, 400 kV Tarapur- Boisar TL & LILO of Gandhar- Padghe TL		01.08.2005	2077.21	0.67	99.75%	1.75%	24.23
12.3	220 kV Tarapur- Boisar TL		1.09.2005	1971.51	0.58	99.75%	1.75%	20.13
13	Raipur- Chandrapur (Bhadrawati) Line	134/2006 Order Dt 06.02.2007	01.06.2005	6129.92	0.83	99.75%	1.75%	89.39
	<b>SUB TOTAL (A)</b>			<b>70467.67</b>				<b>1188.81</b>
<b>(B)</b>	<b>INTER REGIONAL AC PROJECTS</b>							
	Basic availability for incentive							<b>98.00%</b>
14	RAMGUNDAM-CHANDRAPUR (50%)	138/2004 Order Dt 14-02-2008	Before 31.03.2001	1211.75	1.00	99.69%	1.69%	20.48
15	RAIPUR- ROURKELA (50%)	63/2005 Order dt 09-05-2006	01.04.2003	1538.92	1.00	99.12%	1.12%	17.24
16	Korba-Budhipadar line in Western Region (2/3 <sup>rd</sup> equity for WR)	69/2004 Order Dt 29-04-2008	Before 31.03.2001	441.29	1.00	99.50%	1.50%	6.62
	<b>SUB TOTAL (B)</b>			<b>3191.96</b>				<b>44.33</b>
<b>(C)</b>	<b>INTER REGIONAL HVDC PROJECTS</b>							
	Basic availability for incentive							<b>95.00%</b>
17	Singrauli-Vindhyachal TL along with HVDC back to back station at Vindhyachal in NR & WR (50%)	113/2004 Order Dt 14-02-2008	Before 31.03.2001	4156.44	1.00	98.48%	3.48%	144.64
18	CHANDRAPUR HVDC (50%)	137/2004 Order Dt 16-04-2008	-do-	3958.57	1.00	99.14%	4.14%	163.88
	<b>SUB TOTAL (C)</b>			<b>8115.00</b>				<b>308.53</b>
	<b>TOTAL</b>			<b>81774.63</b>				<b>1541.68</b>