

**Petition for Approval of
Fuel Cost Adjustment Surcharge
(1st Quarter FY 2011-12)**

**Submitted to
Punjab State Electricity Regulatory Commission**

By



PUNJAB STATE POWER CORPORATION LIMITED

Abbreviations

1. PSPCL : Punjab State Power Corporation Limited.
2. PSERC : Punjab State Electricity Regulatory Commission
3. CERC : Central Electricity Regulatory Commission
4. FCA : Fuel Cost Adjustment
5. GNDTP : Guru Nanak Dev Thermal Plant, Bathinda
6. GGSSTP : Guru Gobind Singh Super Thermal Plant, Ropar
7. GHTP : Guru Hargobind Thermal Plant, Lehra Mohabbat
8. BBMB : Bhakra Beas Management Board
9. NREB : Northern Regional Electricity Board
10. HP : Himachal Pradesh
11. RSD : Ranjit Sagar Dam
12. MUs : Million Units
13. T & D : Transmission & Distribution
14. FY : Financial Year
15. Cr. : Crore
16. Kw : Kilo Watt
17. Kwh : Kilo Watt Hours
18. Q 1 : (April.11 to June.11)
19. ₹ : Rupees
20. BHP : Break Horse Power.

TABLE OF CONTENTS

1.	Petition for Approval of FCA Surcharge.....	1-212	Petition
2.	Energy Sales.....	6	Meter
3.	Agricultural Consumption.....	6	
4.	Energy Availability.....	7	Energy
4.1	Thermal Generation.....	7	Thermal
4.2	Hydel Generation.....	7	Hydel
4.3	Power Purchase.....	8	
5.	Energy Balance.....	9	Energy
6.	Fuel Cost.....	10	
7.	FCA Surcharge Formula.....	12	
8.	Prayer.....	14	
9.	Annexure.....	15-23	Annex
10.	Av.wt. rate calculations of coal, related data & proofs for GNDTP.....	24-31	
11.	Av.wt. rate calculations of coal, related data & proofs for GHTP	32-35	
12.	Av.wt. rate calculations of coal, related, data & proofs for GGSSTP	36-68	
13.	Av.wt. rate calculations related data & proofs of Power Purchase ...	69-212	

LIST OF TABLES

Table 1: Energy Sales to Metered Categories for 1 st Qtr. (April.11 to June.11)	6
Table 2: Agriculture Consumption for 1 st Quarter (April.11 to June.11)	6
Table 3: Energy Balance for 1 st Quarter (April.11 to June.11)	9
Table 4; T&D Losses % age for 1 st Quarter in past years.....	10
Table 5: Station wise total Fuel Cost amount.....	13
Table 6: Apportionment of fuel cost	14

**BEFORE THE PUNJAB STATE ELECTRICITY REGULATORY
COMMISSION CHANDIGARH**

File No.....

Case No.....

IN THE MATTER OF:

**FILING OF PETITION FOR APPROVAL OF FUEL
COST ADJUSTMENT (FCA) SURCHARGE**

AND

IN THE MATTER OF:

PUNJAB STATE POWER CORPORATION LIMITED,
(herein after referred to as 'PSPCL')
The Mall, Patiala-147001-Applicant

Applicant

1. The Applicant respectively submits as under :-
 - 1.1 The Punjab State Power Corporation Limited (hereinafter referred to as 'PSPCL') is a statutory body reformed by unbundling of erstwhile Punjab State Elec. Board under Section-131, 132, 133 and other enabling provisions of the Electricity Act,2003 and the transfer scheme vide GoP Notification No.1/9/08-EB(PR)/196 dated 16.4.2010 and this company/body has been incorporated under the Companies Act-1956 with the principal objective of engaging in the business of Generation, Trading and Distribution of power in the State of Punjab.

- 1.2 Punjab State Electricity Regulatory Commission, hereinafter referred to as 'PSERC' or 'The Commission', is a body constituted under Section-17 of the erstwhile Electricity Regulatory Commission Act, 1998 & Section-82 of Electricity Act, 2003 and is vested with the authority to regulate Electricity purchase and procurement process of distribution licensee and determine the tariff including the power to approve fuel cost adjustments in the retail tariff rates for the end users of electricity.
- 1.3 PSPCL is filing the current petition for adjustment of tariff for incorporating the effect of change in fuel prices in respect of own thermal generation & power purchased from Central Sectors during the 1st Quarter (April.11 to June.11) of the current financial year by levy of FCA Surcharge under the provisions of Section 62 (4) of the Electricity Act, 2003 and provisions of Regulation-55 of the Conduct of Business Regulations, 2005.
- 1.4 The Commission has issued Tariff Order for FY 2011-12 on 09.5.2011 by determining revenue gap of ₹ 2651.51 Cr. against revenue gap of ₹ 9656.53 Cr. projected by the PSPCL. Out of above determined revenue gap of ₹ 2651.51 Cr. only ₹ 1325.75 Cr. (50%) has been passed on to the consumers by allowing meager increase in tariff for consumers and for remaining part of determined revenue gap of ₹ 1325.76 Cr. (50%), a Regulatory Asset has been created. On dated 13/7/2011 PSPCL has also filed a petition before Appellate Tribunal for Electricity, New Delhi against the Tariff Order-2011-12.
- 1.5 Under Regulation-55 of the PSERC (Conduct of Business) Regulation-2005, PSERC has notified a formula for determining FCA Surcharge (Appendix-7) copy of which is enclosed as Annexure-7, to allow recovery of increase in costs on account of fuel price increases. This petition is being filed to

ensure compliance within time frame and as per notified formula under the provisions of Regulation-55 of PSERC (Conduct of Business) Regulations, 2005. Following sections provide the basis for the FCA Surcharge sought by the PSPCL.

2 Metered Energy Sales

Table 1 summarizes the category wise energy sales for the 1st Quarter (April.11 to June.11) of the FY 2011-12

Table 1 : Energy Sales to Metered Categories for 1st Quarter (April.11 to June.11)

Metered Energy Sales	MUs
Domestic	1770.28
Non-Residential Supply	604.68
Small Power	207.90
Medium Supply	454.68
Large Supply	2037.17
Public Lighting	30.59
Bulk Supply	117.98
Railway Traction	32.18
Theft, less assessment & un-billed Units	75.571
Agriculture (Metered)	37.83
Metered Sales within the State	5368.861

Note : Metered Agriculture Consumption is corresponding to AP load of 237527 Kw.

3 Agricultural Consumption (un-metered connections)

The agricultural consumption based on the sample meter readings for un-metered supply for the 1st Quarter (April.11 to June.11) of FY 2011-12 is 2306.782 MUs. Table 2 summarizes the month-wise connected load and agricultural consumption for the 1st Quarter (April.11 to June.11).

Table 2 : Agricultural consumption for 1st Quarter (April.11 to June.11)

Month	Consumption (MUs)	Connected Load (Kw)
April	488.31	7715288
May	729.06	7769673
June	1089.412	7784043
Total (Q-1)	2306.782	23269004

4 Energy Availability

4.1 Thermal Generation

4.1.1. The actual gross thermal generation for FCA Surcharge calculations for the 1st Quarter (April.11 to June.11) is 4462.706 MUs (Annexure-1) For FCA Surcharge Calculations, PSPCL has taken the Auxiliary Consumption of GNDTP, GGSSTP and GHTP at the levels approved (GNDTP (Unit I & II) 11%, GNDTP (Unit III & IV) 11%, GGSSTP 8.50% and GHTP 9% by the Commission in its Tariff Order for FY 2011-12 works out to 4065.006 MUs [GNDTP Unit-I & II = 246.790 {277.292 (1-0.11)}+GNDTP (unit-III & IV) = 108.475 {121.882 (1-0.11)}+GGSSTP = 2182.586 {2385.340 (1-0.085)}+GHTP + 1527.155 {1678.192 (1-0.09)}]

4.1.2. The Actual Auxiliary consumption (for GHDTP (Unit-I & II), GNDTP (Unit-III & IV), GGSSTP & GHTP) for 1st quarter is 384.939 MUs {30.632+16.985+199.782+137.540} against 397.700 MUs {30.502 + 13.407 +202.754 + 151.037} as per norms fixed by the Commission in its Tariff Order for FY 2011-12.

- 4.1.3. The performance and input parameters for GNDTP, Bathinda, GGSSTP, Ropar and GHTP, Lehra Mohabbat are provided in detail in Annexure 1 & Annexure 2.

4.2 Hydel Generation

- 4.2.1. The net energy available from PSPCL's own hydel stations during the 1st Quarter of FY 2011-12 was 1197.867 MUs {Annexure-3,net after accounting for HP Royalty in Shanan, HP share (free) in RSD, Auxiliary consumption and transformation losses}.
- 4.2.2. The net energy availability from BBMB for the 1st Quarter was 1273.458 MUs (excluding the common pool share of 75.898 MUs). Therefore the net energy available from PSPCL's own & shared hydel stations works out to **2547.223** MUs (1197.867 + 1273.458 + 75.898 = 2547.223) for the 1st Quarter of FY 2011-12.
- 4.2.3. A summary of month-wise total generation for the 1st Quarter of FY 2011-12 is given in Annexure 3.

4.3 Power Purchase

- 4.3.1. The actual net power purchase for the 1st quarter of FY 2011-12 was 3544.757 MUs. Details of month-wise gross power purchases are given in Annexure-4.
- 4.3.2. External Transmission losses on Power Purchase in 1st Quarter of FY 2011-12 are estimated at 2.66% (against 4.83% allowed by the Commission under para 4.8.3) which are slightly on lower side.
- 4.3.3. The Commission while approving the power purchase from Thermal, Gas, Atomic Energy Stations approved 8688 MUs (Ref. Table 4.22 page 108 of Tariff Order 2011-12) from Central Generating Stations of NTPC & NPC for FY 2011-12. For the 1st Quarter (April.2011 to June 2011), PSPCL

incurred ₹ 389.97 Cr. for purchase of 1909.289 MUs from these sources i.e. NTPC & NPC (Ref. Annexure-5), against cost of ₹ 372.50 Cr. derived for purchase of 1909.289 MUs as per the variable cost approved by PSERC for the year 2011-12 (Ref. Annexure-5). Thus, PSPCL had to incur additional expenditure on account of power purchase of ₹ 17.47 Cr. [389.97-372.50= ₹ 17.47 Cr.] (Annexure-5). Thus, change in power purchase cost due to change in fuel cost alone from Central Generating Stations of NTPC & NPC for the 1st Quarter FY-2011-12 works out to ₹ 17.47 Cr. and this amount is proposed to be adjusted through FCA surcharge.

5 Energy Balance

5.1. The T&D losses during the 1st Quarter of the current financial year are 23.96 % as against 25.46% in the same period during the previous financial year. The month-wise details of power availability during FY 2009-10, FY 2010-11 and FY 2011-12 (up to June-2011) are given in Annexure-6.

5.2. Table 3 summarizes the net energy available and net energy requirement of the system for the 1st Quarter of FY 2011-12.

Table 3: Energy Balance for 1st Quarter (April.11 to June.11)

Energy Balance	MUs	Remarks
Energy Requirement		
Metered Sales within the state (including AP metered Theft etc)	5368.861	Ref. Table 1
Sales to Agriculture (Unmetered)	2306.782	Ref. Table 2
Total Sales within state	7675.643	
T&D Losses @ 23.96% (2418.206 x100/10093.849)(unaccountable for energy)	2418.206	
Total Energy Requirement	10093.849	
Energy Availability		
Net Thermal Generation	4077.767	Ref. Annex-3
Hydel Generation	1197.867	Ref. Annex-3
Share from BBMB	1273.458	Ref. Annex-3
Net Power Purchase, banking etc.	3544.757	Ref. Annex-4
Total Energy Availability	10093.849	

- 5.3. The T&D losses in the 1st Quarter of the FY 2011-12 work out to 23.96%. This loss number could not be taken as a representative figure for the year as there are seasonal variations. The losses for the 1st Quarter during past years are given in the Table 4 below. PSPCL would like to submit that the T&D losses for the 1st Quarter have decreased as compared to corresponding figure for the last year.

Table 4 : T&D losses % for 1st Quarter in past years

FY 09-10 Q-1	FY 10-11 Q-1	FY 11-12 Q-1
28.99%	25.46%	23.96%

6. Fuel Cost

- 6.1 PSPCL submits to the Commission that the actual coal cost per MT excluding transit loss for Coal for the 1st Quarter of FY 2011-12 for GNDTP, GGSSTP and GHTP is ₹ 2931, ₹ 2913.63 and ₹ 2865 respectively. For FCA calculation, the Board has taken the transit loss of 2.0% as approved by the Commission in its Tariff Order for FY 2011-12. The Commission has approved the cost of Coal per MT as ₹ 2722, ₹ 2752 & ₹ 2703 per MT for GNDTP, GGSSTP & GHTP respectively (Table 4.18 of Tariff Order 2011-12 Page 100).
- 6.2 PSPCL would like to bring the notice of the Commission that the actual transit losses for coal (excluding PANAM COAL) for the 1st Quarter of FY 2011-12 are 0.87%, 1.72% and 3.06% for GNDTP, GGSSTP and GHTP respectively.
- 6.3 The weighted average calorific value of coal purchased for the 1st Quarter of FY 2011-12 for GNDTP, GGSSTP and GHTP is 3943.37 Kcal/kg, 3937 Kcal/kg and 4072 Kcal/kg respectively.

- 6.4 The actual oil price for oil purchased for GNDTP, GGSSTP and GHTP for the 1st Quarter of FY 2011-12 is ₹ 35021/KL, ₹ 32368/KL and ₹ 39964/KL respectively.
- 6.5 PSPCL would like to bring to the notice of Commission that actual calorific value of oil purchased for the 1st Quarter of FY 2011-12 is 9400 Kcal/litre, 10,000 Kcal/litre and 9500 Kcal/litre for GNDTP, GGSSTP and GHTP respectively, which is as per approved by the Commission in its Tariff Order for FY 2011-12. (Table 4.18 of Tariff Order 2010-11 Page-100).
- 6.6 The Commission had approved total fuel cost amounting to ₹ 3588.17 Cr. for PSPCL own thermal generation for gross generation of 19919 MUs during the financial year 2011-12. Hence the fuel cost for actual generation of 4462.706 MUs during the 1st Quarter FY-2011-12 with all parameters as approved by Commission in its Tariff Order for the FY 2011-12 works out ₹ 799.601 Cr. (Annexure-2) against the above approved generation cost the actual fuel cost for the 1st Quarter FY-2011-12 as per the approved norms works out to ₹ 840.397 Cr. [59.220+28.442+450.707+302.028=840.397] (Annexure-1) for generation of 4462.706 MUs [277.292+121.882+2385.340+1678.192 = 4462.706]. This has resulted in increase of ₹ 40.80 Cr. in the fuel cost on account of change in fuel prices viz. a viz. the fuel cost approved by the Hon'ble Commission.

1	Actual Fuel Cost for 1 st Quarter	= ₹ 840.397 Cr.
2	Fuel cost as approved by Commission for 1 st Q	= ₹ 799.601Cr.
3	Increase in Fuel Cost a/c of Fuel prices	= ₹ 40.796 Cr.

7. Adjustment Amount

The total adjustment amount after taking into account increase in power purchase cost & increase in fuel cost for own thermal generation for 1st Quarter on a/c of increase in fuel prices, works out to ₹ 58.27 Cr. as under :

$$\text{Adjustment Amount} = 40.80 + 17.47 = ₹ 58.27 \text{ Cr.}$$

8. FCA Surcharge Formula

The Commission in its Conduct of Business Regulations, 2005 has approved the fuel cost adjustment formula for adjustment of tariff through FCA surcharge for any change in cost due to changes in fuel cost for PSPCL's thermal stations and Central Generating Stations, which are beyond the control of the PSPCL.

The Formula comprises of two parts:

$$A = C_{(fc.Gen)} + C_{(fc.pp)}$$

A = Adjustment Amount (during the Quarter) in Rs. in Cr.

C_(fc.gen) = Change in fuel cost of PSPCL's thermal stations.

C_(fc.pp) = Change in power purchase cost due to change in fuel cost alone for Central Generating Stations.

Table 5 : Station Wise Total Fuel Cost Amount

C (fc.gen)		Amt. (₹ Cr.)
a.	Change in Fuel cost of GNDTP station Unit-I & II (Ref: Annexure : 1 & 2) (59.220-55.435)	3.785
b.	Change in Fuel cost of GNDTP station Unit-III & IV (Ref:Annexure :1 & 2) (28.442-26.721)	1.721
c.	Change in Fuel cost of GGSSTP station (Ref : Annexure :1&2) (450.707-422.945)	27.762
d.	Change in Fuel cost of GHTP sation (Ref: Annexure 1&2) (302.028-294.500)	7.528
e.	Total Change in Fuel cost of PSPCL's Thermal Stations	40.796 Say 40.80
C (fc.pp)		
f	Change in Power Purchase cost (Ref:Annexure:5)	17.47
A	Total Adjustment Amount during the Quarter (e+f)	58.27

Metered Category :

$$\mathbf{FCAM = Am/U_m}$$

Un-metered Category :

$$\mathbf{FCA_{HP} = A_{HP}/L_{HP}}$$

Where, A_m and A_{HP} are to be arrived at by apportioning A on the basis of consumption of metered and un-metered category.

U_m is the number of units billed to metered consumers during the quarter under consideration.

L_{HP} is the sum of the connected load of un-metered consumers at the end of each month for the quarter under consideration.

Chargeable FCA from the consumers:**Table 6 : Apportionment of Fuel Cost :-**

a	Total consumption of metered category U_m	MU	5368.861
b	Total consumption of un-metered category	MU	2306.782
Apportioning A (₹ 58.27 Cr.) on the basis of consumption of metered & un-metered category for Q1 of FY 2011-12			
c	A_m (Metered category) ($A * a / (a+b)$)	₹ in Cr.	40.76
d	A_{HP} (Unmetered category) ($A * b / (a+b)$)	₹ in Cr	17.51
e	Chargeable FCA from metered category consumers (FCAM)	Paisa/unit	7.59 Say 8.0
f.	Chargeable FCA from un-metered category consumers (FCAHP) (d/LHP)*10^7	₹/Kw ₹/BHP	7.52 5.61

- 1 Excluding Common Pool & Outside State Sales
- 2 Where $LHP=23269004$ KW (un-metered supply)
237527 Kw (metered supply)

9. Prayer:

Pass such other order as is deemed fit and proper in the facts and circumstances of the case brought out above.

August. 26th, 2011

BY THE APPLICANT THROUGH

(Er. N.S.Matharu),
Chief Engineer/ARR&TR,
PSPCL, Patiala.

ANNEXURE-1

Actual Fuel Cost (Coal& Oil) for actual gross generation during 1st quarter (April.11 to June.11) of FY 2011-12 with actual gross calorific value of Oil & Coal as fired, actual price of Coal & Oil and actual quantity of PANAM coal consumerd, but retaining performance parameters as approved by the Commission in its tariff order for the year 2011-12, page 100.

Sr.No.	Items	Derivation	Unit	GNDTP Unit 1 & 2	GNDTP Unit 3 & 4	GGSTP	GHTP	Total
1	2	3	4	5	6	7	8	9
1	Gross Generation	A	MU	277.292	121.882	2385.340	1678.192	4462.706
2	Station Heat Rate	B	Kcal/kwh	2825	3000	2500	2500	
3	Specific oil consumption	C	ml/kwh	1.00	3.50	1.00	1.00	
4	Calorific value of oil	D	Kcal/ltr	9400	9400	10000	9500	
5	Calorific value of coal	E	Kcal/kg.	3943.37	3943.37	3937	4072	
6	Over all heat	F=AB	G.cal	783349.9	365646	5963350	4195480	
7	Heat from oil	G=ACD/1000	G.cal	2607	4010	23853	15943	
8	Heat from coal	H=(F-G)	G.cal	780742.9	361636	5939497	4179537	
9	Oil consumption	I=Gx1000/D	KL	277	427	2385	1678	
10	Transit loss of Coal	J	%	2.00	2.00	2.00	2.00	
11	Consumption of coal excluding transit loss	K=Hx1000/E	MT	197989	91707	1508635	1026409	
12	Qty. of PANAM Coal	L	MT	161265	80404	932316	811648	
13	Qty. of coal other than PANAM Coal (excluding transit loss)	M=K-L	MT	36724	11303	576319	214761	
14	Qty. of Coal other than PANAM Coal(including transit loss)	N=M/(1-J/100)	MT	37473	11534	588081	219144	
15	Total qty. of coal	O=L+N	MT	198738	91938	1520397	1030792	
16	Cost of oil per KL	P	Rs.	35021	35021	32368	39964	
17	Cost of Coal per MT	Q	Rs.	2931	2931	2913.63	2865	
18	Total Cost of Coal	S=QxO/10^7	Rs.Crore	58.250	26.947	442.987	295.322	823.506
19	Total Cost of Oil	R=PxI/10^7	Rs.Crore	0.970	1.495	7.720	6.706	16.891
20	Total Fuel Cost	T=R+S	Rs.Crore	59.220	28.442	450.707	302.028	840.397
21	Actual Fuel cost per Unit		Paisa	214	233	189	180	188
Total amount of FCA (Rs. In Cr.) on account of change in Fuel Cost in respect of PSPCL's own Thermal Stations (840.397-799.601=Rs.40.796 (say 40.80 Cr.)								

ANNEXURE-2

Approved (derived for qtr. from approved values) Fuel Cost (coal & oil) for the actual gross generation during 1st quarter (April, 2011 to June,2011) of 2011-12 with all parameters as approved by the Commission in its Tariff Order for the Year 2011-12 (Table 4.18 Page 100).

Description	Total Fuel Cost approved in T.O.2011-12 (Rs.Cr.)	Gen.during 1st qtr.FY2011-12 (Mus)	Total Generation approved in T.O. 2011-12 (Mus)	Rs.(Cr.)
GNDTP Bathinda Unit-I&II	284.88	277.292	1425	55.435
GNDTP Bathinda Unit-III&IV	198.85	121.882	907	26.721
GGSSSTP Ropar	1765.83	2385.34	9959	422.945
GHTP Lehra Mohabat	1338.61	1678.192	7628	294.500
Total	3588.17	4462.706	19919	799.601

Annexure-3

Monthly Gross State Generation Data for 1st Quarter (April.11 to June.11) of FY 2011-					
Sr.No.	Source	April.11	May.11	June.11	Total.Q-1
STATE GENERATION					
A	PSPCL Thermal Stations				
1	GNDTP, Bathinda	131.994	117.135	150.045	399.174
2	GGSSTP, Ropar	852.690	856.670	675.980	2385.340
3	GHTP, Lehra Mohabbat	652.908	498.598	526.686	1678.192
	Sub-total thermal	1637.592	1472.403	1352.711	4462.706
B	PSPCL Hydel Stations				
1	Shanan HEP	58.215	74.114	76.949	209.278
2	UBDC Hydel Project	20.864	37.243	52.134	110.241
3	Ranjit Sagar Project	87.783	178.009	252.685	518.477
4	Mukerian Hydel Project	5.404	56.706	112.187	174.297
5	Anandpur Sahib Hydel Project	56.998	92.181	88.443	237.622
6	Micro Hydel Projects	0.473	0.518	0.554	1.545
	Sub-total Hydel	229.737	438.771	582.952	1251.460
C	BBMB				
1	PSPCL share	292.439	485.077	495.942	1273.458
2	Common Pool	24.937	25.872	25.089	75.898
	Sub Total	317.376	510.949	521.031	1349.356
D	Total (Thermal+Hydel+BBMB)	2184.705	2422.123	2456.694	7063.522
1	Net Thermal Generation.	Gross Gen.= 4462.706-384.939=4077.767			
2	Energy available from PSPCL Hydel Stns.	Gross. Gen.-Aux. Con.= 1251.460-12.054=1239.406			
3	Net Energy available from PSPCL Hydel Stns.	Gross Gen.-Aux. Cons.-Royalty & RSD Share =1251.460-12.054-41.539=1197.867			
4	Net Energy available from BBMB.	PSPCL Share + Common Pool = 1273.459+75.899=1349.356			

Annexure-4

Power Purchase data for 1st Quarter (April.-2011 to June-2011)					
		Mus			
NET POWER PURCHASE		April.-2011	May.-2011	June.-2011	Total Q-1
A	Central Generating Stations (CGS)				
I	NTPC				
1	Anta (Gas)	13.312	18.377	20.966	52.655
2	Anta (RLNG)	1.017	1.940	2.586	5.543
3	Anta (Liquid)	0.000	0.048	0.000	0.048
4	Auriya (Gas)	22.707	29.532	24.466	76.705
5	Auriya (RLNG)	1.614	2.677	2.349	6.640
6	Auriya (Liquid)	0.000	0.091	0.000	0.091
7	Dadri (GT)	40.919	55.187	52.886	148.992
8	Dadri (RLNG)	2.228	3.057	3.988	9.273
9	Dadri (Liquid)	0.000	0.000	0.000	0.000
10	Singrauli	99.320	143.111	131.215	373.646
11	Rihand-I	71.120	90.441	80.588	242.149
12	Rihand-II	64.598	83.875	74.378	222.851
13	Unchahar-I	9.486	16.805	20.563	46.854
14	Unchahar-II	31.644	29.742	31.996	93.382
15	Unchahar-III	9.434	11.890	12.152	33.476
16	Eastem Region (Farakha)	7.225	9.611	11.226	28.062
17	Kahal Gaon (ER)	15.787	23.483	21.297	60.567
18	Kahal Gaon-II	48.720	43.785	34.855	127.360
19	Jhajjar (NTPC JV)	0.865	0.351	2.305	3.521
20	Dadri-II TPS	5.905	17.271	17.986	41.162
	Sub-Total-NTPC	445.901	581.274	545.802	1572.977
II	NPC				
1	NAPP	19.475	13.002	21.438	53.915
2	RAPP-B (3&4)	53.893	71.310	69.091	194.294
3	RAPP-C (5&6)	23.373	24.831	39.899	88.103
	Sub-Total-NPC	96.741	109.143	130.428	336.312
III	NHPC				
1	Salal	76.462	114.279	111.989	302.730
2	Bairasuil	44.514	54.669	34.294	133.477
3	Tanakpur	2.332	5.651	8.850	16.833
4	Dauliganga	5.287	15.620	19.163	40.070
5	Chamera-I	25.149	39.165	38.721	103.035
6	Chamera-II	13.459	28.966	27.953	70.378
7	Dulhasti	17.973	29.794	29.254	77.021
8	Uri	42.809	49.233	47.655	139.697
9	SEWA-II	7.291	9.223	4.373	20.887
	Sub-total NHPC	235.276	346.6	322.252	904.128
	Sub-total CGS	777.918	1037.017	998.482	2813.417
B	OTHER SOURCES				
1	PTC	0	63.704	139.092	202.796
2	Tala through PTC	1.458	4.918	11.771	18.147
3	Baglihaar though PTC (LT)	53.380	69.527	19.200	142.107
4	Baglihaar though PTC (ST)	40.035	52.146	54.000	146.181
5	NVVNL	19.572	0.000	77.221	96.793
6	Other Traders	8.568	9.576	115.752	133.896
7	Short Term Power Purchase	0.222	0.192	1.000	1.414
8	NJPC	41.393	131.503	133.374	306.27
9	Tehri	27.726	35.867	19.035	82.628
10	Koteshwar (THDC)	2.397	0.000	0.000	2.397
11	UI	-275.151	-88.211	-114.866	-478.228
12	Cogeneration	21.622	29.426	25.000	76.048
13	Bkg HP, UPCL, J&K, Rjs.	0.000	14.400	212.667	227.067
14	Banking through Traders	0.000	0.000	148.817	148.817
15	OAT within Punjab (Wheeling)	-0.013	1.602	0.638	2.227
16	Sale+Banking through traders	-171.636	-32.484	-40.209	-244.329
17	OAT (Import by Punjab cons.)	11.485	14.318	20.832	46.635
18	Sub-total (other Sources)	-218.942	306.484	823.324	910.866
19	Grand Total (CGS+Others)	558.976	1343.501	1821.806	3724.283
20	Less Losses @ 2.66 %	38.995	50.916	89.615	179.526
21	Net Power Purchase.	519.981	1292.585	1732.191	3544.757

Annexure-5

Cost for actual power purchase from Central Generating Stations 1st Quarter (April.-2011 to June-2011) vis-a- vis approved by the Commission in the Tariff Order 2011-12.

Sr. No.	Source	Units Purchase During Q-1 (April.11 to June.11) Mus	VC (P/Unit) Approved by Commission for FY 2011-12 (Table 4.22 page 108-09 of T.O.)	Amount as per approved variable cost (Rs. In Crore)	VC (P/Unit) Actual for 1st Qtr. (April.11 to June.11)	Amount as per actual variable cost (Rs. In Crore)	Difference in Variable Cost (Rs. In Crores) i.e. FCA chargeable.
1	2	3	4	5(Col.3x4)	6	7(Col.3x6)	8(Col.7-5)
I	NTPC						
1	Anta (Gas)	52.655	229.49	12.08	248.13	13.07	0.99
2	Anta (RLNG)	5.543	351.19	1.95	414.88	2.30	0.35
3	Anta (Liquid)	0.048	751.59	0.04	811.42	0.04	0
4	Auriya (Gas)	76.705	242.76	18.62	235.49	18.06	-0.56
5	Auriya (RLNG)	6.64	417.88	2.77	518.73	3.44	0.67
6	Auriya (Liquid)	0.091	878.80	0.08	990.49	0.09	0.01
7	Dadri (GT)	148.992	264.60	39.42	235.38	35.07	-4.35
8	Dadri (RLNG)	9.273	423.91	3.93	495.35	4.59	0.66
9	Dadri (Liquid)	0	760.70	0	0	0	0
10	Singrauli	373.646	139.20	52.01	140.68	52.56	0.55
11	Rihand-I	242.149	161.38	39.08	140.17	33.94	-5.14
12	Rihand-II	222.851	166.49	37.1	145.30	32.38	-4.72
13	Unchahar-I	46.854	199.44	9.34	217.20	10.18	0.84
14	Unchahar-II	93.382	193.40	18.06	212.12	19.81	1.75
15	Unchahar-III	33.476	188.82	6.32	213.40	7.14	0.82
16	Eastem Region (Farakha)	28.062	324.427	9.1	367.85	10.32	1.22
17	Kahal Gaon (ER)	60.567	198.37	12.01	268.82	16.28	4.27
18	Kahal Gaon-II	127.36	191.53	24.39	258.52	32.93	8.54
19	Jhajjar (NTPC JV)	3.521	0	0	249.47	0.88	0.88
20	Dadri-II TPS	41.162	0	0	259.75	10.69	10.69
	Sub-Total-NTPC	1572.977		286.3		303.77	17.47
II	NPC						
1	NAPP	53.915	204.07	11	204.18	11.01	0.01
2	RAPP-B (3&4)	194.294	249.97	48.57	249.94	48.56	-0.01
3	RAPP-C (5&6)	88.103	302.29	26.63	302.29	26.63	0
	Sub-Total-NPC	336.312		86.20		86.2	0
	G.Total	1909.289		372.50		389.97	17.47
Total Adjustment Amount for FCA (Rs. In Cr.) = 17.47							

