Subject:- Segregation of Generation Tariff of PH-1 of Satpura Thermal Power Station Complex under Section 62 & 86(i)(a) of Electricity Act 2003.

ORDER

(Passed on this day of 9th July, 2013)

M/s M.P. Power Generating Company Ltd., Jabalpur

Petitioner

Versus

- 1. M. P. Power Management Co. Ltd., Jabalpur
- 2. Rajasthan Rajya Vidyut Prasaran Nigam Ltd., Jaipur.

Respondents

- 1. MPPGCL filed the subject petition for segregation of annual fixed cost into various power houses of STPS Complex for FY 2012-13 determined by the Commission in its Order passed on 16th April, 2012 in Petition No. 15/2012. This petition is filed by MPPGCL due to decommissioning of 62.5MW Unit No. 3 at STPS, Sarni w.e.f. 01.10.2012.
- 2. The petitioner broadly submitted the following in the petition:
 - "(i) Satpura Thermal Power Station Sarni (STPS Complex) is a thermal power station being operated by MPPGCL having installed capacity of 1142.5 MW comprising 3 power houses: PH-1 (5x62.5MW), PH-2 (1x200+1x210 MW) and PH-3 (2x210 MW).
 - (ii) The PH-1 of STPS Complex was started in the year 1962 and its five units of 62.5 MW capacity were commissioned as indicated below:-

Particulars	Unit-1	Unit-2	Unit-3	Unit-4	Unit-5
Date of Commissioning	06.10.1967	21.03.1968	14.05.1968	10.07.1968	21.03.1970

(iii) The above units have completed more than their fair life (25 years). The performance of these units has deteriorated and is much below the operating norms prescribed by the Commission. The Pollution Control Board of Madhya Pradesh is also insisting for closing down of the units of PH-1 due to high pollution level besides Ministry of Environment & Forests, Government of India while according environmental clearance to 2x250 MW Unit No.10 & 11 of STPS Complex put a condition that the units of 62.5MW capacity shall be decommissioned within 1 year of the commissioning of proposed 2x250 MW units. These are at the verge of commissioning and expected to be commissioned during the

- calendar year 2013-14.
- (iv) The condition of Unit No.3 of 62.5 MW was very poor. Its most of the economizer coils, primary and secondary super-heater coils were misaligned. The turbine control valve were passing severely, causing turbine rolling on opening of ESV for chest heating. There was vibration in bearing No.2 and it was not possible to run this unit and as a result this unit was kept under shut down since 21.09.12 and request was made to CEA for the decommissioning of this unit w.e.f. 01.10.2012.
- The request of MPPGCL to decommission the Unit No.3 of 62.5 MW at STPS Sarni (v) was considered by**CEA** and CEA vide its No. letter CEA/PLG/DMLF/545/2012/219 dated 22.01.2013 accorded approval decommission the unit w.e.f. 01.10.2012. The Government of Madhya Pradesh subsequently accorded approval to de-commission the unit w.e.f. 01.10.2012 vide their letter No. F-3/114/13/10 Bhopal dated 31.01.2013.
- (vi) The Commission vide its order passed on 16.04.2012 determined the Generation Tariff for FY12-13 for the Thermal and Hydel power stations operated by the petitioner. While determining the generation tariff, Commission has determined the Annual Capacity (Fixed) Charges (AFC) for the STPS Complex amounting to Rs. 417.09 crores. The segregation of AFC for the different power stations of STPS Complex viz. PH-1, PH-2 and PH-3 is not available."
- 3. With the above submissions, the petitioner requested the following:
 - a. To determine the Generation tariff of Power House 1 of STPS Complex.
 - b. To allow the petitioner to revise the Bills on pro-rata basis considering the decommissioning of the Unit No.3 of 62.5 MW of STPS Complex w.e.f. 01.10.2012.
 - c. To permit additional recovery on actual payment basis, on account of levies, taxes, duties, service tax, SLDC charges, Pension & Terminal Benefits as and when applicable, Cost of Chemicals & Consumables, Arrears to be paid to employees, Publication expenses etc., as and when paid.
 - d. To permit additional recovery on actual payment basis, in case due to any change in the Government policy or otherwise if any tax liability arises during the year
- 4. Motion hearing in the matter was held on 27th April'2013 when the petition was admitted as amendment petition under Section 62(4) of the Electricity Act'2003 and the petitioner was directed to serve copy of the petition on all respondents and file certain details in respect of de-commissioned unit No. 3 of PH-I at STPS Sarni.

- 5. Vide letter No. 07-12/CS-MPPGCL/MPERC/STPS PH-1/652 dated 29th May 2013, the petitioner informed that copy of the petition has been served to the respondents. The petitioner also informed that the unit No. 5 of 62.5 MW capacity in PH-1 STPS Sarni has also been decommissioned w.e.f. 1st February, 2013 and the approval of the same has been granted by the Central Electricity Authority (CEA) on 13th May, 2013. A copy of the CEA's approval was also enclosed with the aforesaid letter. With the aforesaid contention, the petitioner requested the Commission to consider the effect of decommissioning of Unit 5 also for amendment of the Generation Tariff of STPS Sarni complex. The petitioner also requested for extension of time for submission of the additional submission by 15th June 2013. Considering the request of the petitioner, time extension was granted as sought.
- 6. Vide affidavit dated 13th June, 2013, the petitioner filed the additional information as sought in Commission's order dated 27th April, 2013. Issue-wise information filed by the petitioner is as given below:

i. Issue: Gross Block, equity and the balance loan amount as on date of decommissioning.

MPPGCL's Response:

"Gross Block:

The total Gross Block in respect of 5x62.5 MW STPS Sarni PH-1 based on the Final Opening Balance sheet notified by GoMP vide notification dated 12.06.2008 and subsequent adjustment on account of write offs, negative entries/ adjustments amounts to Rs. 40.02 crores as on 01.04.2009 as per the Depreciation cum Asset Register submitted to Hon'ble Commission.

The books of account for the year FY12 indicates the Gross Block in respect of STPS Sarni PH-1 as Rs. 47.36 crores. This is due to asset addition at STPS PH-1 in the year FY09-10, FY10-11 and FY 11-12. As MPPGCL has availed Special Allowance for STPS PH-1, the regulation does not permit this additional capitalization and same has not been considered by the Commission during true up of FY09-10. Hence Gross Block of Rs. 40.02 Crores has been considered as on the date of decommissioning.

In the Final Opening Balance Sheet the unit wise Gross Block of STPS Power station was not specifically indicated, hence the Gross Block allocated to PH-1 (Rs. 40.02 Crores) has been segregated on prorata basis which works out to Rs. 8.00 Crores per Unit (Rs. 40.02 Crores / 5), the same has been considered in this petition.

in Rs. crores

Particulars	STPS PH-1	Proportionate (MW basis) for each Unit
Gross Block as on 01-04- 2012	40.02	8.00

Equity: The Equity transferred through Final Opening Balance Sheet and apportioned to PH-1 of STPS Sarni was Rs. 14.10 Crores as on 01.06.2005. There was no further addition in equity. On prorata basis the Equity for each unit of STPS PH-1 works out as Rs. 2.82 Crores (Rs. 14.10 Crores / 5-units).

in Rs. crores

Particulars	STPS PH-1	Proportionate (MW basis) for each Unit.
Actual Equity as on 01-04-2012 (transferred through Final opening Balance Sheet apportioned to SPTS PH-1)		2.82

Loan Amount: As per the Proviso 23 of MPERC Generation Tariff Regulation 2009 the principal repayment of the loan assigned to STPS Sarni PH-1 have been met out by the way of depreciation for the control period FY 10 to FY 12 and accordingly no loan balance stands as on 01-10-2012 in respect of PH-1 of STPS Sarni.

ii. Issue: Cumulative Depreciation as on the date of de-commissioning MPPGCL's Response:

The Cumulative depreciation in accordance with the proviso 24 of MPERC Generation Tariff Regulation 2009, for Unit No.3 and 5 of STPS PH-1 works out to Rs.7.10 Crores and Rs.7.15 Crores respectively, which is tabulated below:-

Rs. Crores

Particulars	STPS PH-1	Proportionate (MW basis) for Unit-3	Proportionate (MW basis) for Unit-5	Remarks
Accumulated depreciation as on 01-04-2009	31.76			
Depreciation for FY 10	1.06			As non Asset own
Depreciation for FY 11	1.06			As per Asset cum depreciation registers
Depreciation for FY 12	1.06			submitted to
Depreciation for FY 13 (from 01-04-12 to 01-10-12)	0.53			Commission vide letter dated 02-02-12 without
Accumulated depreciation as on 01-10-2012	35.48	7.10		considering depreciation on asset additions during FY 10
Depreciation for FY 13 (from 01-10-12 to 01-02-13)	0.28			to FY12.
Accumulated depreciation as on 01-02-2013	35.77		7.15	

MPPGCL's Response:

The balance depreciation in accordance with proviso 24 of MPERC Generation Tariff Regulation 2009, of unit No.3 & 5 of STPS PH-1 is worked out and is detailed hereunder:

Rs. Crores.

Particulars	Proportionate (MW basis) for Unit-3	Proportionate (MW basis) for Unit-5
Gross Block (as on date of decommissioning)	8.00	8.00
Accumulated depreciation (as on date of decommissioning)	7.10	7.15
90% of Gross Block	7.20	7.20
Balance depreciation	0.11	0.05

7. The petitioner also submitted the following in its aforesaid submission:

"It is pertinent to mention here that at the time of issuance of MYT order for the control period FY14 to FY16 the Commission has taken into account the decommissioning of Unit No. 3 of STPS PH-1, Sarni. Accordingly the Total Gross Block & Equity of STPS Complex were arrived after proportionately removal of Gross Block & Equity of STPS PH-1 Unit No.3 on prorata basis (Kindly refer para 3.15 & 3.23 of MYT Order).

Subsequently Unit No. 5 has also been decommissioned w.e.f from 01.02.2013 as stated above. It is, therefore, humbly prayed before Hon'ble Commission to kindly consider the impact of decommissioning of Unit No.5 also, in the MYT order for FY 14 to FY16 on the same principles & philosophy as adopted for Unit No. 3, so as to enable MPPGCL for issuance of appropriate Monthly Bills for the control period FY14 to FY16."

- 8. On perusal of the submissions made by the petitioner, the Commission observed the following:
 - (i) The petitioner has now sought segregation of annual capacity (fixed) charges for FY2012-13 and onwards on account of de-capitalization of Unit No. 5 (62.5MW) also.
 - (ii) While passing MYT order dated 1st April, 2013 for control period of FY2013-14 to FY2015-16, the impact of de-capitalization of unit No. 3 had been considered by the Commission based on the information filed by MPPGCL. Therefore, the petitioner has also sought segregation of annual capacity (fixed) charges determined by the Commission for FY2013-14 to FY2015-16 on account of de-capitalization of unit No. 5.
 - (iii) In Para 17 of the petition, the petitioner mentioned that the impact of decommissioning of Units of PH-1 STPS, Sarni shall be taken care, as and when it is captured in books of accounts of MPPGCL. Therefore, the details related to capital cost

- etc. as filed by the petitioner are provisional till finalization of audited accounts of respective years.
- (iv) The gross block, equity and loan for STPS PH-I filed by the petitioner have been segregated unit-wise on the basis of MW capacity of each unit.
- (v) The gross block of Rs. 41.13 Cr for STPS PH-I as reported by the petitioner at the time of processing the MYT petition No. 2 of 2013 has now been revised to Rs. 40.02 Cr by the petitioner due to adjustment in fixed assets.
- (vi) No comments received from any Respondent in the matter.
- 9. The subject petition and the additional submissions filed by the petitioner are examined by the Commission in the following back-drop:
 - (i) The Commission issued the generation tariff order for FY2012-13 on 16th April, 2012 based on the MPERC (Terms and Conditions for determination of generation tariff) Regulations, 2009 and its amendments. In the aforesaid tariff order, the Annual Capacity (fixed) Charges and Energy (variable) Charges were determined for whole STPS complex (PH-I, PH-II & PH-III).
 - (ii) Subsequently, vide order dated 1st April, 2013 in petition No. 02 of 2013, the Commission issued multiyear tariff (MYT) order for FY2013-14 to FY2015-16 based on MPERC (Terms and Conditions for determination of generation tariff) Regulations, 2012. While processing the aforesaid MYT petition, the petitioner informed the Commission about de-commissioning of Unit No.3 (62.5 MW) at STPS, Sarni PH-I (w.e.f. 1st October, 2012) along with other required details. Therefore, the opening gross fixed assets, equity etc. for STPS Complex was considered as on 1st April, 2013 in MYT order after deducting the gross fixed assets and equity of STPS PH-I Unit No.3 as informed by the petitioner.
- 10. Considering the above background and submissions made by the petitioner, the Annual Capacity (fixed) Charges for STPS PH-I are segregated from the Annual Capacity (fixed) Charges of STPS, Complex already determined by the Commission for FY2012-13 and FY2013-14 to FY2015-16 in its Orders dated 16th April 2012 and 1st April, 2013, respectively, with the following approach:
 - i. The Gross Block of Rs.40.02 crores for whole STPS PH-I (5x62.5 MW) (as informed by the petitioner) is considered in this Order. This GFA has been verified from the Asset Register of STPS PH-I (5x62.5 MW) filed by the petitioner. The petitioner also informed that the proportionate gross block (MW basis) for each unit is Rs. 8.00 Cr.

- ii. The Equity of STPS PH-I is worked out on the basis of the closing equity of STPS complex admitted in true-up Order for FY 2009-10 issued on 23rd July 2013. Thereafter, the normative and excess equity for STPS PH-I are worked out in the same ratio of the normative and excess equity to GFA of STPS complex in the aforesaid true-up Order. The excess equity so worked out as on 31st March 2010 becomes zero as on 01st April 2012 after considering repayments equivalent to depreciation for each year allowed in MYT Order dated 3rd March 2010.
- iii. The petitioner has submitted that there is no outstanding loan in respect of STPS, PH-I. Therefore, the interest on loan is considered as nil.
- iv. Operation & Maintenance expenses are worked out on the basis of the norms for Units of STPS, PH-I specified in the Regulations.
- v. The operating parameters for STPS, PH-I are also considered as per the norms prescribed in the applicable regulations. Based on above, the working capital for STPS PH-I is determined separately.
- vi. The other parameters like base rate for return on equity, interest rate on working capital, rate of depreciation, rate of secondary fuel oil etc. are considered same as considered in the tariff orders for respective years. However, the prudence checks on depreciation in each year are applied in accordance with the provisions under Regulations in this regard.
- vii. As per provisions under MPERC (Terms and Conditions for determination of Generation tariff)' Regulations, the generating company may at its discretion avail a special allowance for a unit for meeting the requirement of expenses including R&M works beyond the useful life of the generating unit. The petitioner exercised this option for units of STPS PH-I. Therefore, the special allowance for the units of PH-I is considered as per applicable Regulations. The compensation allowance is not applicable as per provisions under Regulations.
- 11. Based on the above, the segregation of component-wise Annual Capacity (fixed) Charges is done for STPS PH-I for FY2012-13 and FY2013-14 to FY2015-16. The status of Gross Fixed Assets, Normative Equity and Excess Equity of whole STPS complex was determined and finalized by the Commission in its true-up order for FY2009-10 dated 23.01.2013. This being the last true-up exercise, the closing GFA and equity (as on 31st March'2010) as admitted by the Commission is considered in this Order for segregation of the Annual Capacity charges into STPS PH-I and PH-II,PH-III as given below:

Table :1
Status as on 31st March,2010 as per true-up order for FY2009-10 dated 23.01.2013:

	, <u> </u>		
Sr.			_
No.	Particular	Unit	Status
1	Closing GFA for STPS Complex	Rs. Cr.	631.19
2	Normative equity for STPS Complex	Rs. Cr.	187.82
3	Normative equity % of GFA	%	29.76
4	Excess equity for STPS Complex	Rs. Cr.	15.07
5	Excess equity % of GFA	%	2.39
6	GFA of STPS PH-I As per assets register	Rs. Cr.	40.02
7	PH-I GFA percentage of STPS Complex GFA	%	6.34
8	Proportionate normative equity for STPS PH-I	Rs. Cr.	11.91
9	Proportionate excess equity for STPS PH-I	Rs. Cr.	0.96*
10	Total equity for STPS PH-I considered	Rs. Cr.	12.86

^{*} Normative loan (excess equity) is repaid by the depreciation allowed during FY10-11 and FY2011-12.

Table:2

Capi	Capital Cost as on 01.04.2012:			STPS PH-I			
Sr.			FY	FY	FY	FY	
No.	Particular	Unit	12-13	13-14	14-15	15-16	
1	Installed Capacity considered	MW	5X62.5	4X62.5	4X62.5	4X62.5	
2	Opening Gross Block	Rs. Cr.	40.02	32.02	32.02	32.02	
3	Normative Equity	Rs. Cr.	11.91	9.53	9.53	9.53	
4	Opening Cumulative depreciation	Rs. Cr.	33.92	27.57	28.49	28.81	
5	Cumulative depreciation % of GFA	%	84.76	86.10	88.98	90.00	

Table: 3
Annual fixed (capacity) charges for FY2012-13 and FY2013-14 to FY2015-16:

(a) R	(a) Return on equity:								
Sr.	-								
No.	Particular	Unit	FY12-13	FY13-14	FY14-15	FY15-16			
1	Installed Capacity considered	MW	5X62.5	4X62.5	4X62.5	4X62.5			
2	Opening Equity	Rs. Cr.	11.91	9.53	9.53	9.53			
3	Equity addition during the year	Rs. Cr.	0.00	0.00	0.00	0.00			
4	Base Rate of return on equity	%	15.50	15.50	15.50	15.50			
5	Return on equity	Rs. Cr.	1.85	1.48	1.48	1.48			

Table: 4

(b) I	(b) Interest charges on loan:							
Sr.	Doutionlan	T 1:4	FY12-	FY13-	FY14-	FY15-		
No.	Particular	Unit	13	14	15	16		
1	Installed Capacity considered	MW	5X62.5	4X62.5	4X62.5	4X62.5		
2	Opening Loan	Rs. Cr.	0.00	0.00	0.00	0.00		
3	Loan addition during the year	Rs. Cr.	0.00	0.00	0.00	0.00		
4	Weighted average rate of interest	%	0.00	0.00	0.00	0.00		
5	Interest amount	Rs. Cr.	0.00	0.00	0.00	0.00		

Table:5

(c) D	(c) Depreciation:								
Sr. No.	Particular	Unit	FY12-13	FY13-14	FY14-15	FY15-16			
1	Installed Capacity considered	MW	5X62.5	4X62.5	4X62.5	4X62.5			
2	Opening Gross Block	Rs. Cr.	40.02	32.02	32.02	32.02			
	Weighted average rate of								
3	depreciation	%	1.36	3.61	*1.00	0.00			
4	Depreciation amount	Rs. Cr.	0.54	1.16	0.32	0.00			
5	Cumulative depreciation	Rs. Cr.	34.46	28.49	28.81	28.81			

^{*}Cumulative depreciation allowed only up to extent of 90% of the GFA.

Table :6

(d) O	(d) Operation & Maintenance expenses:								
Sr.		T 7 • .	EV. 10 10	TX 14.0 4.4	**************************************	TT 14 5 4 6			
No.	Particular	Unit	FY12-13	FY13-14	FY14-15	FY15-16			
1	Installed Capacity considered	MW	5X62.5	4X62.5	4X62.5	4X62.5			
2	Installed Capacity	MW	312.50	250.00	250.00	250.00			
3	Per MW O&M expenses	Rs. L/MW	25.61	21.62	23.33	25.18			
4	Total O&M expenses	Rs. Cr.	80.03	54.05	58.33	62.95			

Table:7

Special allowance:							
Sr. No.	Particular	Unit	FY12-13	FY13-14	FY14-15	FY15-16	
1	Installed Capacity	MW	312.50	250.00	250.00	250	
2	Applicable special:	L. Rs.	5.91	7.50	8.09	8.74	
3	Amount of special Allowance	Rs. Cr.	18.47	18.75	20.23	21.85	

Table:8

Cost of Secondary fuel Oil:						
Sr.						
No.	Particular	Unit	FY12-13	FY13-14	FY14-15	FY15-16
1	Installed Capacity	MW	312.50	250.00	250.00	250.00
2	NAPAF	%	80.00	80.00	80.00	80.00
3	Gross Generation	MU's	2190.00	1752.00	1752.00	1752.00
4	Normative Sp. Oil Consumption	ml/kWh	2.75	2.75	2.75	2.75
5	Quantity of fuel oil required	KL	6022.50	4818.00	4818.00	4818.00
6	Wt. average rate of sec. fuel oil	Rs./KL	40174.00	40174	40174	40174
7	Cost of sec. fuel oil	Rs. Cr.	24.19	19.36	19.36	19.36

Table:9

Table	•						
(e) Interest on working capital:							
Sr.							
No.	Particular	Unit	FY12-13	FY13-14	FY14-15	FY15-16	
1	Cost of Coal for two months	Rs. Cr.	59.04	47.36	47.36	47.36	
2	Cost of Oil for two months	Rs. Cr.	4.03	3.23	3.23	3.23	
3	O&M Charges for one month	Rs. Cr.	6.67	4.50	4.86	5.25	
	Maint. Spares 20% of the						
4	O&M charges	Rs. Cr.	16.01	10.81	11.67	12.59	
5	Receviables for two months	Rs. Cr.	83.85	66.13	66.99	68.03	
6	Total working capital	Rs. Cr.	169.60	132.03	134.10	136.45	
7	Applicable rate of interest	%	14.00	13.50	13.50	13.50	
8	Interest on working capital	Rs. Cr.	23.74	17.82	18.10	18.42	

Table:10

Annual capacity (fixed) charges:						
Sr.			FY	FY	FY	FY
No.	Particular	Unit	12-13	13-14	14-15	15-16
1	Installed Capacity	MW	5X62.5	4X62.5	4X62.5	4X62.5
2	Return on equity	Rs Cr.	1.85	1.48	1.48	1.48
3	Interest charges on loan	Rs. Cr.	0.00	0.00	0.00	0.00
4	Depreciation	Rs. Cr.	0.54	1.16	0.32	0.00
5	Operation & Maintenance expenses	Rs. Cr.	80.03	54.05	58.33	62.95
6	Interest on working capital	Rs. Cr.	23.74	17.82	18.10	18.42
7	Cost of sec. fuel oil	Rs. Cr.	24.19	19.36	19.36	19.36
8	Special allowance	Rs. Cr.	18.47	18.75	20.23	21.85
9	Compensation allowance	Rs. Cr.	0.00	0.00	0.00	0.00
10	Annual capacity (fixed) charges for PH-I	Rs. Cr.	148.83	112.61	117.81	124.05
	AFC already allowed for STPS, Complex					
11	(excluding compensation allowance of PH-I)	Rs. Cr.	415.06	420.35	431.09	436.45
12	Annual capacity (fixed) charges for PH-II&III	Rs. Cr.	266.23	307.74	313.28	312.40
13	AFC for one unit (62.5 MW)	Rs. Cr.	29.77	28.15	29.45	31.01

Table: 11
Break-up of AFC for billing purpose of STPS, PH-I

Sr.				
No.	Particular	Unit	Amount	Remarks
1	1.04.2012 to 30.09.2012 (183 days)	Rs.Cr.	74.62	All five units considered
				Unit No. 3 de-commissioned
2	1.10.2012 to 31.01.2013 (123 days)	Rs.Cr.	40.12	on 01.10.2012
				Unit No. 5 de-commissioned
3	1.02.2013 to 31.03.2013 (59 days)	Rs.Cr.	14.43	on 01.02.2013
4	01.04.2013 to 31.03.2014 (yearly)	Rs.Cr.	84.46	Unit No. 1, 2 & 4 considered
5	01.04.2014 to 31.03.2015 (yearly)	Rs.Cr.	88.36	- do -
6	01.04.2015 to 31.03.2016 (yearly)	Rs.Cr.	93.04	- do -

- 12. The segregation of annual capacity (fixed) charges for STPS PH-I as mentioned above for FY2012-13 (for 5x62.5) and for FY2013-14 to FY2015-16 (for 4x62.5) shall be finalized during true-up exercise based on the Audited Accounts for the respective year.
- 13. Based on the annual capacity (fixed) charges, as amended above for STPS complex by segregating the aforesaid charges among PH-I and rest of the STPS complex considering decommissioning of 62.5 MW unit No. 3 & 5, the petitioner is allowed to bill and recover the annual capacity (fixed) charges on pro-rata basis as per the above Table No.11 in this order.

Ordered Accordingly

sd/- sd/- sd/
(Alok Gupta) (A. B. Bajpai) (Rakesh Sahni)

Member Member Chairman