

MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION

5th Floor, "Metro Plaza", Bittan Market, Bhopal - 462 016



Petition No.24 of 2015

PRESENT:

Dr. Dev Raj Birdi, Chairman

A.B. Bajpai, Member

Alok Gupta, Member

IN THE MATTER OF:

Approval of Final Generation Tariff of Bansagar – IV, Jhinna Hydel Power Station (2x10MW) for the period 30/08/2006 (i.e. CoD of the station) to 31/03/2014, under Section 62 and 86 (1) (a) of the Electricity Act, 2003.

M.P. Power Generating Company Ltd, Rampur, Jabalpur : PETITIONER

Vs.

1. **M.P. Power Management Company Ltd., Jabalpur**
 2. **M.P. Power Transmission Company Ltd., Jabalpur**
- } : RESPONDENTS**

ORDER
(Passed on this day of 18th November, 2015)

1. Madhya Pradesh Power Generating Company Ltd. (hereinafter called “the petitioner” or “MPPGCL”) has filed the subject petition on 18th May, 2015 for approval of Final Generation Tariff of Bansagar – IV, Jhinna Hydel Power Station (2x10MW) for the period 30/08/2006 (i.e. CoD of the station) to 31/03/2014. The petition has been registered as petition No.24/2015.
2. The Commission issued MPERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2005 {G-26 of 2005} (hereinafter referred to as “the Regulations, 2005”) for the first control period FY 2006-07 to FY 2008-09 notified on 5th December, 2005. The first control period of the Regulations 2005 expired on 31st March, 2009, therefore, the Commission notified MPERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2009 (RG-26(I) of 2009) these Regulations on 08th May 2009 to specify the principles and methodologies for the second Multi Year Tariff control period from FY 2009-10 to FY 2011-12. Further, vide second amendment dated 24th February, 2012, the Commission extended the control period of the aforesaid Regulations up to March, 2013 with appropriate additions. Subsequently, the Commission notified MPERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2012 (RG-26(II) of 2012) on 12th December, 2012 to specify the principles and methodologies for the next Multi Year Tariff control period from FY 2013-14 to FY 2015-16.
3. The subject petition has been filed under section 62 and Section 86 (1) (a) & (b) of Electricity Act, 2003 and this is based on the of aforesaid MPERC Regulations, 2005, Regulations, 2009 and Regulations, 2012. The petitioner has sought approval of final tariff from CoD of the station i.e. 30.08.2006 to 31.03.2014. Therefore, the scrutiny of the subject true-up petition is based on the principles and methodology specified in the Regulations, 2005, Regulations, 2009 and Regulations, 2012 and its subsequent amendments as applicable for each year.
4. Vide its notification dated 3rd Jun 2006, GoMP provided that the MPPGCL will sell entire power generated by the Jhinna Hydel Power Station to MP Power Trading Company Ltd. (now M.P. Power Management Company Ltd.) i.e, Respondent No. 1, at a rate determined by the Commission. A Power Purchase Agreement was executed between MPPGCL and MP Tradeco on 29th November, 2006.

5. Bansagar IV (Jhinna) HPS is the project built on the toe of the Head Regulator of common water carrier canal to divert Sone river water for irrigation & power generation. It is situated at Jhinna village in Satna District of MP. The power station has two units of 10 MW each with a total installed capacity of 20 MW. The design energy of the plant is 80.10 MU's. Date of commercial operation of these Units are as given below:

Generating Unit	CoD
Unit No. 1	20 th August, 2006
Unit No. 2	30 th August, 2006

Back ground of the petition:

6. MPPGCL had filed a petition before the Commission (bearing No. 103/2006) on 10th October, 2006 for determination of provisional generation tariff of Bansagar-IV, Jhinna (2x10 MW). Vide order dated 18th January, 2008, the Commission determined the provisional Annual Fixed Charges for Bansagar-IV, Jhinna, (2x10 MW), for the period from 30/08/2006 to 31/03/2009 in accordance with the applicable MPERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2005.
7. Based on the Capital Cost of ₹ 97.18 Crores admitted in the provisional tariff order, the Commission provisionally determined the Annual capacity charges and allowed its recovery up to 95% of the Annual Capacity Charges subject to retrospective adjustment on determination of its final tariff. In Para 2.60 of the aforesaid provisional tariff order, it was mentioned that MPPGCL should take immediate steps to finalize its accounts as early as possible and file the petition for determination of final tariff.
8. The details of the Annual Capacity Charges approved by the Commission in aforementioned provisional order are as given below:

Provisional Annual Capacity Charges for Jhinna HPS: ₹ Crores

Sr. No.	Particular	(2X10MW)		
		FY06-07 (7-months)	FY07-08	FY08-09
1	Depreciation	1.46	2.50	2.50
2	Interest on loan	2.32	4.29	3.82
3	Return on equity	2.56	4.38	4.38
4	Interest on excess equity	0.18	0.30	0.30
5	Advance Against Depreciation	1.74	3.89	3.89

6	Interest on working capital	0.17	0.55	0.55
7	Other Charges	0.0012	0.002	0.002
8	O&M Expenses	0.85	1.53	1.61
Total Annual Fixed Charges		9.20	17.33	16.94

9. Thereafter, the petitioner had filed MYT petition (No.54/2009) for approval of generation tariff for its power stations for the control period from FY2009-10 to FY2011-12 under MYT Regulations, 2009. Since the petitioner had not filed the petition for determination of Final Generation Tariff for Bansagar-IV, Jhinna, HPS, therefore, the Commission considered the same capital cost and other components for the Bansagar-IV HPS, Jhinna, in the MYT Order dated 03/03/2010 as provisionally admitted by the Commission in the Provisional Tariff Order dated 18/01/2008 and allowed its recovery to the extent of 95% of the AFC subject to retrospective adjustment on determination of final tariff. The details of the Annual Capacity Charges provisionally approved in aforesaid MYT order are as follows:

Annual Capacity Charges provisionally allowed in MYT order dated 3rd March, 2010
(₹ Crores)

Sr. No.	Particulars	AFC provisionally considered		
		FY2009-10	FY2010-11	FY2011-12
1	Depreciation	4.90	4.90	4.90
2	Return on Equity	4.84	4.84	4.84
3	Interest on Loan	3.34	2.98	2.62
4	O&M expenses	1.19	1.26	1.34
5	Interest on working capital	0.33	0.33	0.32
6	Total Fixed Cost	14.60	14.31	14.02

10. Subsequently, the Commission had also issued tariff order for FY2012-13 on 16th April'2012 and MYT order on 1st April'2013 for the next control period of FY2013-14 to FY2015-16 on provisional basis subject to retrospective adjustment on determination of its final tariff. The details of Annual Capacity Charges provisionally allowed in aforesaid tariff orders are as follows:

AFC for FY 2012-13		Amount in ₹ Crores
Sr. No.	Cost Component	FY 2012-13
1	Return on Equity	4.65
2	Interest Charges on Loan (including interest on excess equity)	2.90
3	Depreciation	4.90
4	O&M Expenses	1.42
5	Interest on WC	0.38
Annual Capacity Charges		14.24

AFC for FY 2013-14 to FY 2015-16

Sr. No.	Particular	AFC Allowed (₹ Crores)		
		FY2013-14	FY2014-15	FY2015-16
1	Return on Equity	4.65	4.65	4.65
2	Interest on Loan (including interest on excess equity)	2.57	2.08	1.60
3	Depreciation	4.90	4.90	4.90
4	O& M Expenses	2.25	2.42	2.62
5	Interest on working capital	0.40	0.40	0.40
Total Capacity (fixed) Charges		14.76	14.45	14.16

11. In all the aforesaid tariff orders, the Commission directed MPPGCL to file petition for determination of final generation tariff for Jhinna HPS based on the Annual Audited Accounts of the respective years.
12. Subsequently, the petitioner filed a petition bearing No. 63/2012 on 28/07/2012, with the Commission for determination of final generation tariff for Bansagar-IV, Jhinna HPS (2x10 MW) for 30 years and the aforesaid petition was based on the "Incentive Policy for development of Small Hydro Power Projects in MP" issued on 08/08/2006. Vide Order dated 12/10/2012, the Commission rejected the contention of the petitioner with several observations including that the tariff order dated 30/06/2008 issued by the Commission for procurement of power by distribution licensees from small hydro based generation is not applicable for Bansagar-IV HPS, Jhinna (2x10MW).
13. Aggrieved from the aforesaid order of the Commission, the petitioner filed an Appeal (No. 78/2013) before the Appellate Tribunal for Electricity on 24/01/2013 against the Commission's Order dated 12/10/2012 in Petition No. 63/2012.
14. Hon'ble APTEL vide Order dated **13/05/2014** dismissed the abovementioned appeal and directed the petitioner to file a petition before the Commission for determination of final tariff of the subject generating units. In compliance with the aforesaid order of Hon'ble APTEL, the instant petition has been filed by the petitioner on 18.05.2015 for approval of final generation tariff of Bansagar-IV HPS, Jhinna (2X10 MW).

15. The petitioner broadly submitted the following in the instant petition:

- (i) Books of accounts of MPPGCL have since been finalized for the period till FY14. True up Petitions for MPPGCL Power Stations have been filed before the Commission for the financial years till FY14. Bansagar-IV, Jhinna HPS is not included in these True-up Petitions. As such the instant petition is being filed for approval of final generation tariff of Bansagar-IV HPS, Jhinna (2x10 MW) for the period w.e.f. the Station COD (30/08/2006) till 31/03/2014 and is based on the figures in the audited books of accounts of MPPGCL till FY14.
- (ii) Approved project cost estimate for the Bansagar-IV, Jhinna HPS (2X10 MW) is ₹ 133.10 Crores, as per the breakup given in Table below. The aforesaid project cost estimate was approved by the GoMP vide letter dated 17/12/2002.

Sr. No.	Particulars	Amount (₹ Crores)
1	Civil and E&M Works	105.36
2	Interest During Construction	27.74
3	Total	133.10

- (iii) The total capital expenditure for Bansagar-IV, Jhinna HPS (2X10 MW) as on the Station COD (30/08/2006) is ₹ 102.90 Crores, which includes an amount of ₹ 11.14 Crores towards interest during construction on PFC Loan. Total Capital expenditure for the subject project is ₹ 115.81 Crores which is well within the approved total project cost estimate of ₹ 133.10 Crores. The total project cost at the end of respective Financial Years till FY14, as per the audited books of accounts of MPPGCL.
- (iv) Year wise additional capital expenditure figures, subsequent to Station CoD, as per the audited books of accounts of MPPGCL till FY2013-14 filed in the petition. The total additional capital expenditure of ₹ 12.91 Crores till completion of the Project is within the original scope of work of Bansagar-IV HPS, Jhinna and is in accordance with the Regulation 19 of MPERC Tariff Regulations, 2005.

- (v) *Funding of Bansagar-IV HPS, Jhinna (2X10 MW) has been done through a PFC Loan funding of ₹ 63.90 Crore (Loan No.20102008) and the balance amount has been funded through internal resources of MPSEB/MPPGCL. Year wise project funding for Jhinna as on the Station COD and subsequently till end of FY2013-14 has been detailed in Table 4.0 of the petition.*
- (vi) *Interest and finance charges on loan capital for the period FY07 to FY14 have been worked out considering the terms of PFC loan and in accordance with the prevailing MPERC Tariff Regulations for the respective periods.*
- (vii) *Return on Equity for the period FY07 to FY14 has been computed on paid up equity capital determined in accordance with relevant clauses of the prevailing MPERC Tariff Regulations for the respective periods. Where equity employed is in excess of 30%, the amount of equity for the purpose of tariff has been limited to 30% and the balance amount has been considered as loan. Interest rates applicable on the equity in excess of 30% treated as loan has been taken as specified in respective period's Tariff Regulations. Where actual equity employed is less than or equal to 30% the actual equity has been considered.*
- (viii) *Other charges for the period FY07 to FY14 submitted in the petition are on actual basis. MPPGCL has not considered any tax liability for FY07 to FY14 since no tax has been paid during these years. In case, due to any change in Government policy or otherwise, if any liability of tax and duties arises for any Year, the same shall be charged extra to the beneficiary on actual.*
- (ix) *The Petitioner further submits that most of the expenditure on this hydro project was incurred by erstwhile MPSEB and records of expenditure were not maintained exactly in the formats specified in recent days. Therefore, necessary formats to be filed with the petition have been filled in on best efforts basis and enclosed with this petition. It is submitted that the Petitioner has furnished maximum possible information/details as required under the aforesaid formats to the extent the same is available with the Petitioner. However, the Petitioner has made all out efforts in arranging all material information, duly matching with the books of accounts for ascertaining the project cost on reasonable basis.*

16. Based on the above, the Year wise Annual Capacity (Fixed) Charges and Other Charges claimed by the petitioner for Bansagar-IV HPS, Jhinna (2X10 MW) are summarized as given below:-

Annual Capacity (Fixed) Charges: (Amount in ₹ Crores)

Particulars	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14
Return on Equity	2.53	4.49	4.71	5.28	5.37	5.38	5.38	5.39
Int. & finance charges	3.51	5.82	5.30	5.69	5.43	4.70	3.96	3.22
Depreciation & AAD	2.33	6.45	6.52	6.06	6.11	6.12	6.12	6.12
O&M Expenses	0.90	1.64	1.73	1.19	1.26	1.34	1.42	2.25
Interest on WC	0.44	0.58	0.58	0.41	0.40	0.40	0.45	0.45
Annual Fixed Cost	9.71	18.98	18.85	18.64	18.58	17.93	17.33	17.43
Other Expenses	0.05	0.05	0.79	0.74	0.64	0.65	0.66	0.81
Total Charges	9.77	19.03	19.64	19.37	19.22	18.58	17.99	18.23

17. The petitioner prayed the following:
- Approve the final tariff of Bansagar-IV, Jhinna HPS (2x10MW) as given in Para 32, for the period w.e.f. the Station COD to 31/03/2014 on actual basis.
 - Allow the Petitioner to raise Arrear Bills for the recovery of Annual Capacity (fixed) charges in accordance with applicable tariff Regulations.
 - Permit additional recovery on account of Water Charges, Cess, Rent Rates and Taxes, Duties and Levies, MPERC Fee as and when paid to the Hon'ble Commission, Common expenses, publication expenses, admissible Income tax as per applicable MPERC Regulations, Fringe benefit tax and any other tax, if payable, etc., on actual basis, over and above the capacity charges.

18. The petitioner filed the following documents with the petition:

Sr. No.	Particulars
1	Order passed by Hon'ble Appellate Tribunal for Electricity, New Delhi, on 12/04/2013
2	MPPGCL letter dated 29/04/2013
3	MPERC Order dated 03/05/2013
4	Order passed by Hon'ble Appellate Tribunal for Electricity, New Delhi, on 13/05/2014
5	GoMP's approval to revised project cost estimate of ₹ 133.10 Crore, vide Energy Department letter No. 2204/F3/21/13/2001 dated 17/12/2002
6	Individual draw down details of PFC Loan (No. 20102008)
7	Power Purchase Agreement dated 29 th November, 2006.
8	TEC by CEA vide No. 3/114/91-PAC/2227-33 dated 22/11/1991

- 9 Approval of GoMP letter No. 3615/3724/13/92 dated 31/07/1992
 - 10 Environmental clearance vide letter No. J-11016/90/82-ENV.5 dated 02/06/1984
 - 11 Account Head wise details of actual capital expenditure till FY2013-14.
 - 12 Copy of PFC loan sanction letter dated 25/10/2002 and Copy of MOA with Power Finance Corporation.
19. Further, by affidavit dated 20th August, 2015, the petitioner filed the following additional documents also with its additional submission:

Sr. No.	Particulars
1	Supporting documents in respect of the scheduled CoD
2	Supporting documents in respect of delay in project on part of WRD in completion of Bansagar Dam.
3	Supporting documents in respect of penalties levied on contractors.
4	Explanation regarding the difficulty faced by MPPGCL in submitting the project cost break up as per the formats specified by the Commission
5	Details provided by MPSEB in the respective account codes
6	Details of interest and overhead expenditures rates
7	Project Cost details with loading of interest and overheads rates
8	The updated Asset-cum-Depreciation registers for Bansagar-IV, Jhinna HPS for the period FY 2006-07 to FY 2013-14
9	Photocopy of the work orders awarded to vendors for Civil Work, Plant and Machinery and other major works in the project
10	Copy of the Detailed Project Report prepared in September, 1990.
11	Year-wise wise detailed break-up of Gross Fixed Assets, CWIP and asset additions with respect to Audited Accounts of the respective Years related.
12	Details of the Interest During Construction (IDC) calculations.
13	Calculations for working out weighted average rates of interest on PFC loan
14	Copy of Page No. 47 & 48 of True-up Order for FY08
15	Details regarding quarter wise repayments made to M/s PFC and copies of the supporting PFC documents
16	Break-up of income from other sources for FY 2013-14
17	Details of monthly and yearly actual Capacity Index/Availability Factor

Procedural History:

20. Motion hearing in the subject petition was held on 23rd June, 2015, when the petition was admitted and the petitioner was directed to serve copies of petition on all Respondents in the matter. The respondents were also asked to file their response on the petition if any, by 15th July, 2015.
21. Subsequently, vide Commission's letter dated 25th June, 2015, the information gaps and discrepancies in the subject petition were communicated to the petitioner and it was asked to file a comprehensive reply along with all relevant supporting documents by 30th July, 2015. Vide its letter dated 1st July, 2015, the petitioner confirmed that the copies of petition have been served on all the respondents.
22. Vide letter dated 29th July, 2015, the petitioner sought time extension for filing the reply till 20th August, 2015. By affidavit dated 20th August, 2015, the petitioner filed its response on the issues raised by the Commission. On perusal of the reply filed by MPPGCL, it was observed that the explanation of MPPGCL was lacking clarity on issues regarding assets capitalization and penalties deducted from different agencies.
23. Vide Commission's letter dated 2nd September, 2015, the petitioner was asked to file a comprehensive reply on all such issues which were lacking clarity. Vide letter dated 24th September, 2015, the petitioner filed its response to the issues raised by the Commission.
24. On perusal of the response filed by the petitioner it was observed that regarding issue of penalties recovered from different contractors, the petitioner mentioned that the exact position regarding deduction of penalties from various contractor's bills considered in the project cost claimed in the petition, shall be submitted shortly after a comprehensive review of the old records related to the project, which is taking some time.
25. The details of the issues raised vide Commission's letters dated 25th June, 2015, and 2nd September, 2015, along with the response filed by the petitioner by affidavits dated 20th August, 2015, dated 24th Sept. 2015 and 5th November, 2015 are enclosed as **Annexure-A** of this order.

26. Vide letter dated 7th January, 2015, the petitioner was asked to file draft public notice on gist of the petition in Hindi and English version for inviting comments/suggestions from the stake holders. By affidavit dated 30th January, 2015, the petitioner filed the public notice in Hindi and English version for approval of the Commission.
27. Vide Commission's letter dated 2nd September, 2015, the petitioner was asked to publish the public notice in newspapers in English and Hindi version inviting comments/objections/suggestions from the stake holders. The petitioner was also asked to file its response on the comments if any, offered by the stakeholders by 5th October, 2015.
28. Vide letter dated 7th September, 2015, MPPGCL confirmed that the public notices for offering comments/suggestions from stake holders were published on 5th September, 2015, in the following Hindi & English news papers.
- (i) Swadesh, Jabalpur (Hindi).
 - (ii) Swadesh, Gwalior (Hindi).
 - (iii) Nai Dunia, Bhopal (Hindi).
 - (iv) Nai Dunia, Indore (Hindi).
 - (v) Hindustan Times, Bhopal (English).
29. No comment from any stakeholder was received in the matter. The public hearing in the subject petition was held on 13th October, 2015 wherein only the representatives of the petitioner appeared. By affidavit dated 5th November, 2015, the petitioner filed its final position on deduction of penalty/LD from the contractors.

Analysis of the petition:

Capital Cost as on CoD:

Provisions in Regulation:

30. With regard to the capital cost of the project, clause 18 of the MPERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2005 provides that,

“Subject to prudence check by the commission, the actual expenditure incurred on completion of the project shall form the basis for determination of tariff. The tariff shall be determined based on the admitted capital expenditure actually incurred upto the date of commercial operation of the Generating units/station and shall include capitalized initial spares subject to ceiling norms as stipulated hereunder.

- i) upto 2.5% of original capital cost in case of coal based generating stations,*
- ii) upto 1.5% of original capital cost in case of hydro-generating stations*

Scrutiny of the cost estimates by the Commission shall be with regard to the reasonableness of the capital cost, financing plan, interest during construction, use of efficient technology, and such other matters for determination of tariff and the Commission may obtain expert advice as deemed necessary -----.

Restructuring of capital cost in terms of relative share of equity and loan shall be permitted during the tariff period provided it does not affect tariff adversely. Any benefit from such restructuring shall be passed on to persons sharing the capacity charge in a ratio as may be specified by the Commission”.

Commission's Analysis:

31. In the subject petition, the petitioner filed the total capital expenditure of ₹ 102.90 Crores for Bansagar-IV, Jhinna HPS as on station CoD (30.08.2006) which includes an amount of ₹ 11.14 Crores towards interest during construction. The break-up of the capital cost as CoD filed by the petitioner is as given below:

Break-up of Capital Cost filed by the petitioner:

Sr. No.	Particular	As on CoD (₹ Crores)
1	Residential Colony for Staff.	0.0167
2	Other Buildings	0.0525
3	Hydro Electric, System Dam Spill way	20.2297
4	Hydel works RCC Pipes, storage tank valve etc.	25.7168
5	Hydel Power Generation Plant	56.8094
6	Truck, Tempo, Tractor	0.0033
7	Buses Including Mini Bus	0.0139
8	Jeep and Motor Car	0.0288
9	Computer	0.0321
	Total	102.9032

32. While scrutinizing the capital cost of the Bansagar-IV, Jhinna hydro power project, some background related to capital cost of this project is discussed as under :

- (i) The detailed project report of the Jhinna hydro power station (2X10 MW) was made in September, 1990 indicating the estimated cost of the project as ₹ 43.03 Crores. The estimated capital cost of the project under DPR was further revised to ₹51.06 Crores in August 1991. The break-up of the capital cost as indicated in DPR is as given below:

Break-up of capital Cost:

Sr. No.	Particular	Unit	Capital Cost as per DPR Sept. 1990	Modified Capital Cost as per DPR August, 1991,
1	Capacity	MW	2X10 MW	2X10 MW
2	Civil Works	₹ Crores	15.86	13.93
3	E&M Works	₹ Crores	27.17	27.95
4	Interest During Construction	₹ Crores	included above	9.18
	Total	₹ Crores	43.03	51.06

- (ii) Techno-Economic Clearance (TEC) for the project was granted by CEA Vide letter No. 3/114/91-PSE/2227-33 dated 22nd November, 1991 at an estimated cost of ₹ 51.06 Crores including the interest during construction of ₹ 9.18 Crores.

- (iii) Based on the aforesaid Techno-Economic Clearance, the investment approval for ₹ 51.06 Crores including the interest during construction was conveyed to erstwhile MPSEB vide GoMP letter No. 3615/3724/13/92 dated 31st July, 1992.
- (iv) Vide letter No. 2204/F3/21/13/2001 dated 17.12.2002, GoMP approved the revised estimated project cost of ₹ 133.10 Crores. The details of the estimated project cost in initially approved vis-à-vis revised project cost approved by GoMP are as given below:

Break-up of capital Cost approved by GoMP:

Sr. No.	Particular	Unit	Capital Cost as approved by GoMP dated 31/07/1992	Capital Cost as per revised approval issued by GoMP dated 17/12/2002
1	Capacity	MW	2X10 MW	2X10 MW
2	Civil Works	₹ Cr.	41.88	71.04
3	E&M Works	₹ Cr.		34.32
5	IDC	₹ Cr.	9.18	27.74
	Total	₹ Cr.	51.06	133.10

- (v) The Commission issued provisional tariff order on 18/01/2008 for Bansagar-IV, Jhinna HPS unit 1&2 (2x10MW) (from 30/08/2006 to 31/03/2009) considering the provisional capital cost of ₹ 97.18 Crores based on the available details and documents filed by the petitioner. Details of the capital cost considered by the Commission as on the date of commercial operation of the generating station through aforesaid provisional orders are given below :

Break-up of Project Cost:

Sr. No.	Particular	Unit	Project Cost considered by the Commission in prov. Order dt. 18.01.2008
1	Capacity	MW	2X10 MW
2	Civil Works	₹ Cr.	54.31
3	E&M Works	₹ Cr.	33.59
5	IDC	₹ Cr.	9.28
	Total	₹ Cr.	97.18

Time overrun and cost overrun:

33. With regard to commissioning of the project, it was observed that the environmental clearance for the Project was issued by Ministry of Environment and Forest vide its letter dated 2nd June 1984. The investment approval of the Government of Madhya Pradesh was issued to erstwhile MPSEB vide its letter No. dated 31st July, 1992. As per the PFC loan agreement, the scheduled CoD of the project was October, 2004.

Vide letter 25th June, 2015, the petitioner was asked to inform the scheduled date of commercial operation of the project with all supporting documents in respect of the scheduled CoD be project.

34. By affidavit dated 20th August, 2015, the petitioner informed that the Bansagar-IV, Jhinna Hydel Power Station was scheduled to be declared under commercial operation in Oct 2004, as mentioned in the PFC loan agreement. With regard to delay in project, the petitioner submitted the following:

“The commissioning of PH-IV was directly linked to filling of Bansagar Reservoir upto FRL (Full Reservoir Level), i.e. 341.65 m as the MDDL for operation of PH-IV is 329.86 m. Even raising of Bansagar Dam up to the Crest level, i.e., EL 326.4 m did not serve the purpose of making this Power House operative. The work of Bansagar Dam, being carried out by WRD GoMP, remained in idle stage till its being included under AIBP (Accelerated Irrigation Benefit Plan) floated by the central Govt. in 1996. Considering the time taken in land acquisition of submergence area, rehabilitation and resettlement works and completion of related civil works Bansagar Dam was envisaged to be completed by June 2004 and accordingly the Commissioning of the two Units of Power House –IV were scheduled for July 2004 and Oct 2004.”

35. Based on the above, the details of the scheduled CoD and actual CoD of the Jhinna hydro power project is observed as given below :

Generating Units	Scheduled CoD	Actual CoD	Delay in CoD
Unit No. 1	July, 2004	20 th August, 2006	24-months
Unit No. 2	October, 2004	30 th August, 2006	21-months

36. With regard to delay in commissioning of the project, the petitioner in para 1.6 of the petition submitted that the project was to be constructed and fed from the water to be discharged from Bansagar dam which has been constructed by Water Resources Department of Government of MP (WRD). The construction of Bansagar Dam got

delayed due to various reasons at WRD end. Even if the project would have been completed, the generation was not possible because work of the Bansagar dam was not complete and water level could not be raised to the minimum draw down level.

37. The petitioner further submitted that the commissioning of Power House-IV was directly linked to completion of Bansagar Dam upto full height and filling of Bansagar Reservoir up to FRL. Due to various constraints on the part of WRD, GoMP which was the agency constructing Bansagar Dam, date of completion of dam was revised from time to time by them and ultimately the gates were erected in June 2006 and thereafter the two Units of Bansagar-IV Jhinna HPS were commissioned after achieving the required water level in the Bansagar Reservoir, in Aug 2006. The petitioner mentioned that the delay in COD of the Units was beyond the control of the petitioner, i.e., MPPGCL or the erstwhile MPSEB. The reasons for delay in COD of the Units were also not attributable to the contractor/vendor.
38. With regard to cost implication on the project capital cost due to time over-run and its consequential effect on the cost over-run in different contract packages the petitioner by affidavit dated 20th August, 2015 submitted that the completed project cost till FY201314 as per audited books of accounts is ₹ 115.81 Crores which is within the approved project cost estimate of ₹133.10 Crores and hence there is no cost over run due to time over run. However as per the provisions of contract a price escalation of ₹ 49.29 Lakhs was paid to the contractor for civil works of foundation and superstructure of PH-IV for the period after scheduled COD to the actual COD as per the provisions of the contract. However, this has affected COD in no manner

Liquidated Damages:

39. Vide letter 25th June, 2015, regarding the delay in project, the petitioner was asked to submit the details of liquidated damages (LD) if any, recovered from the vendors/contracts.
40. By affidavit dated 20th August, 2015, the petitioner submitted that the delay in achieving COD of the Units was beyond the control of the petitioner and neither was it attributable to the contractors/vendors. However, LD/Penalty was deducted from the contractors as per the provisions of the contract and the same have been duly accounted for in the project cost booked in the books of accounts. The petitioner further submitted the details of penalty recovered from different following contractors:

- (i) A penalty of ₹ 7.50 Lakhs has been deducted from the bills of different agencies engaged for various civil works pertaining to construction of Bansagar-PH-IV.
 - (ii) Further, a penalty of ₹ 2.17 Lakhs is to be deducted from the final bill of M/s Pilot Engineering entrusted with the work of design, fabrication, supply and erection of draft tube gate.
 - (iii) A penalty amount of ₹ 1.11 Crores has been levied on the contractors for E&M works.
41. On scrutiny of the aforesaid details of penalties recovered from the different contractors, it was not found whether the aforesaid penalties have been duly considered in the project cost claimed in the petition. Vide letter dated 2nd September, 2015, the petitioner was asked to clarify this issue.
42. Vide letter dated 24th September, 2015, the petitioner submitted that on further review of the records for Bansagar-IV Jhinna HPS it has been found that major amount of the penalties deducted from the bills of E&M contractor, M/s BHEL, has been refunded to them on account of approval of extension in delivery date up to 31/07/2006 without levy of L.D./Penalty granted vide BOD MPPGCL's resolution passed in the 28th meeting held on 19/05/2007. The petitioner further submitted that the exact position regarding the penalty amounts finally deducted from various contractor's bills (as considered in the project cost claimed in the petition) shall be submitted shortly after a comprehensive review of the old records related to the project, which is taking some time.
43. Finally, by affidavit dated 5th November, 2015, the petitioner filed the status regarding the penalty deducted from the contractors' bills. The petitioner submitted that on further review of the records for Bansagar-IV Jhinna HPS, it has been found that major amount of the penalties was deducted from the bills of E&M contractor, M/s BHEL, has refunded them on account of approval of extension in delivery date up to 31/07/2006 without levy of L.D./Penalty granted vide BOD MPPGCL's resolution passed in the 28th meeting held on 19/05/2007. The details regarding L.D./Penalty amounts finally deducted from the bills of Civil and E&M contractors as filed by the petitioner are as given below:

Details of Penalty Deducted/Refunded from Contractor's Bills					
(Amount in Lakh ₹)					
SN	Particulars	Penalty Amount Deducted	Penalty Amount Refunded	Net Amount of Penalty Deducted	Balance Penalty amount yet to be to Deducted
		(A)	(B)	(A-B)	(C)
1	E&M Contracts	113.01	98.29	14.72	
2	Civil Contracts	7.50		7.50	2.17
	Total	120.51	98.29	22.22	2.17

44. In view of the above, it is observed that out of total penalty/LD of ₹ 120.51 Lakhs recovered from the E&M and Civil contractors, ₹ 98.29 Lakhs refunded to E&M Contractor on account of approval of extension in delivery date up to 31/07/2006 without levy of L.D./Penalty granted by the BOD. The net amount of penalty deducted is ₹ 22.22 Lakhs and amount yet to be deducted is ₹ 2.17 Lakhs . Therefore, the penalty/LD of ₹ 24.39 Lakhs is deducted from the capital cost as on CoD of the project.
45. It is observed from the above justification submitted by the petitioner that the delay in commissioning of the project is not attributable to the petitioner and the reasons were beyond its control.

Interest during Construction:

46. With regard to IDC of the project, the Commission observed that as per the Techno Economic Clearance issued by CEA, the IDC in estimated project cost was ₹51.06 Crores. Vide letter dated 25th June, 2015, the petitioner was asked to explain the reasons for increase in IDC & FC. The petitioner was also asked to file the impact on IDC due to time over run from the scheduled CoD to the actual CoD along with phasing of expenditure as per scheduled CoD and phasing of actual expenditure incurred on the project.
47. By affidavit dated 20th August, 2015, the petitioner submitted the following:

“The operation of this Power House was directly linked to filling of Bansagar Reservoir up to full height. It is further to submit that activities for raising of Bansagar Dam got momentum only after it was included in the AIBP Scheme of Gol. The Dam was raised up to the Crest height, i.e. EL 326.40 m, in June

2000. Thus looking to the progress of Bansagar Dam, thrust on execution of Power House – IV was given only after June 2000. Therefore, cost of Power House –IV was re-estimated to ₹ 133.10 Crores (including IDC amount of ₹ 27.74 Crores) and the revised project cost was sanctioned by GoMP vide letter dated 17/12/2002.

The actual total cost of installation of Power House–IV against the revised estimated cost of ₹ 133.10 Crores is ₹ 115.81 Crores, till FY14, and is well within the approved revised cost estimate. The reason for rise in the revised project cost estimate for installation of Power House -IV (prepared on March 2002 price levels) was mainly attributed to the rise in cost of labour, material , etc., against the cost of ₹ 51.06 Crores (including IDC amount of ₹ 9.18 Crores) assessed on Sep 1990 price levels. The IDC on PFC loan as on COD is ₹ 11.14 Crores only which is well within the approved IDC amount of ₹ 27.74 Crores in the revised approved project cost estimate of ₹ 133.10 Crores. As such, there is no increase in IDC & FC on PFC loan as against the corresponding figure in the approved revised project cost estimate.

The IDC on PFC loan as on COD is ₹ 11.14 Crores only which is well within the approved IDC amount of ₹ 27.74 Crores in the approved project cost estimate of ₹ 133.10 Crores. As such there is no impact on IDC on PFC loan due to time over run. However, the net impact on IDC due to change in COD cannot be identified.”

48. In view of the above contention filed by the petitioner, the Commission observed that there is marginal increase in IDC amount of ₹ 1.96 Crores from the initial estimated project cost to actual project expenditure as on CoD. The Commission further observed that the initial project estimate was prepared at September, 1990 price level whereas, the project has commissioned in August, 2006. Moreover, the GoMP approved the revised project cost of ₹ 133.10 Crores. including IDC amount of ₹ 27.74 Crores. The actual IDC as on CoD is within the amount approved by GoMP on 17th December, 2002 in revised project cost estimate. It is observed that the delay in construction of Dam is not attributable to the petitioner and the IDC amount claimed in the subject petition is also within the IDC amount in the revised project cost approved by GoMP.

49. On scrutiny of the details and documents filed by the petitioner, It is observed that the capital cost as claimed by the petitioner as on CoD of the generating station is within the revised capital cost approved by the GoMP. It is also observed that the actual IDC as on CoD of the units is within the limit of IDC approved for the project. Therefore, the actual IDC (as on CoD) capitalized in the books of accounts is admitted in this order.
50. While going through the audited accounts of MPPGCL and its break-up of assets capitalized during the year, it is observed that the total assets of ₹108.65 Crores have been capitalized during FY 2006-07 in respect of unit 1&2 of Jhinna hydro power project. It is further observed that the assets of ₹ 0.66 Crores have been capitalized prior to FY 2006-07 in respect of the project. The assets capitalized as on 31st March, 2007 as per audited accounts is ₹ 109.31 Crores whereas, the petitioner claimed assets of ₹ 102.90 Crores as on CoD and ₹ 4.09 Crores as during the year with closing balance of ₹106.99 Crores. as on 31st March, 2007
51. The petitioner in the note of the Annexure-10 mentioned (Details as per audited books of accounts) that the difference in the figure of capital cost claimed in the petition vis-à-vis Annual Audited Accounts is on account of these assets of Bansagar PH-I to III which were erroneously booked in Bansagar-IV and same shall be corrected in the books of accounts for FY 2014-15.
52. The above contention of the petitioner has been verified from the assets-cum-depreciation register of Jhinna HPS submitted by the petitioner. Therefore, the capital cost of ₹102.90 Crores as on CoD as capitalized in the books of accounts and recorded in assets-cum-depreciation register of Jhinna Hydro Power Station (after deducting the penalty of ₹ 0.24 Crore) is admitted in this order as given below.

Break-up of capital Cost approved in this order :

Sr. No.	Particular	Unit	Actual Capital Cost approved as on CoD (30.08.2006)
1	Capacity	MW	2X10 MW
2	Civil Works	₹ Crores.	91.52
3	E&M Works	₹ Crores	
5	IDC	₹ Crores	11.14
	Total	₹ Crores	102.66

Additional Capitalization:

Provision in Regulation:

53. Regarding Additional Capitalization, Clause 20 of the MPERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2005 provides that,

“The following capital expenditure, actually incurred after the date of commercial operation and duly audited, may be considered by the Commission, subject to prudence check

- (a) *due to deferred liabilities within the original scope of work,*
- (b) *on works within the original scope of work, deferred for execution*
- (c) *to meet award of arbitration or satisfaction of order or decree of a court arising out of original scope of works,*
- (d) *on account of change in law,*
- (e) *on procurement of initial spares included in the original project costs subject to the ceiling norm laid down in regulation 18.*
- (f) *any additional works/ services, which have become necessary for efficient and successful operation of a generating station or a transmission or a distribution system but not included in the original capital cost.*

Provided that original scope of work along with estimates of expenditure shall be submitted with the application for provisional tariff.

Provided further that a list of the deferred liabilities and works deferred for execution shall be submitted along with the application for final tariff after date of commercial operation of generating station.”

Commission’s Analysis:

54. The year wise additional capitalization from FY 2006-07 to FY 2013-14 as claimed by the petitioner are as under:

Additional Capital Expenditure	Amount in ₹ Crores
During FY 2006-07 (After CoD)	4.09
During FY 2007-08	5.22
During FY 2008-09	1.39
During FY 2009-10	1.99
During FY 2010-11	0.13

During FY 2011-12	0.05
During FY 2012-13	0.05
During FY 2013-14	0.00
Total	12.91

55. In para 2.5 of the petition, the petitioner mentioned that the above Additional Capital Expenditures till completion of the Project are within the original scope of work of Jhinna HPS and are in accordance with the Regulation 19 of MPERC (Terms and conditions for determination of Generation tariff) Regulations, 2005. The petitioner also filed the year-wise and category-wise break-up of works under additional capitalization of the project in form 9 of the petition as given below:

Amount in ₹ Lakhs

Sr. No.	Particulars	From CoD till 31.03.2007	FY07-08	FY08-09	FY09-10	FY10-11
1	Residential Colony for Staff.	0.05	0.02	0.00	0.14	0.00
2	Other Buildings	0.15	0.06	0.00	0.28	0.00
3	Hydro Electric, System Dam Spill way	49.70	26.39	- 0.11	60.59	0.00
4	Hydel works RCC Pipes, storage tank valve etc.	121.61	63.95	0.00	54.71	0.00
5	Tail race Channel	0.69	0.30	0.00	0.00	0.00
6	Hydel Power Gen. Plant	236.45	4.32	138.27	68.79	17.69
7	Meter Testing laboratory, tools & equipments	0.00	0.00	0.00	0.00	0.26
8	Other Misc. Equipment & Fire Protection System	0.00	0.00	0.00	14.11	0.00
9	Truck, Tempo, Tractor	0.00	- 0.19	0.00	0.00	- 0.14
10	Buses Including Mini Bus	0.00	- 0.55	0.00	0.00	- 0.83
11	Jeep, Motor Car, furniture	0.00	- 2.96	0.00	0.00	0.00
12	Computer	0.00	2.30	1.30	0.00	- 4.12
Total		408.65	521.63	139.47	198.62	12.86

Sr. No.	Particulars	FY11-12	FY12-13	FY13-14	Total
1	Residential Colony for Staff.	0.00	0.00	0.00	0.21
2	Other Buildings	0.00	0.00	0.00	0.50
3	Hydro Electric, System Dam Spill way	0.00	0.00	0.00	136.58
4	Hydel works RCC Pipes, storage tank valve etc.	0.00	0.00	0.00	240.27

5	Tail race Channel	0.00	0.00	0.00	0.98
6	Hydel Power Gen. Plant	0.00	0.00	0.00	893.34
7	Meter Testing laboratory, tools & equipments	0.00	0.00	0.00	0.26
8	Other Misc. Equipment Fire Protection System	0.00	4.71	0.00	18.82
9	Truck, Tempo, Tractor	0.14	0.00	0.00	- 0.19
10	Buses Including Mini Bus	0.83	0.00	0.00	- 0.55
11	Jeep and Motor Car	0.00	0.00	0.00	- 2.80
12	Computer	4.12	0.00	0.00	3.60
Total		5.09	4.71	0.00	1291.03

56. The petitioner has claimed an amount of ₹12.91 Crores as additional capital expenditure from CoD to 31st March, 2014. This additional capitalization mainly pertains to the Hydel Power Plant works of ₹ 8.93 Crores, Hydel works RCC Pipes & storage tank of ₹ 2.40 Crores and works related to Hydro Electric, System Dam Spill way is ₹ 1.36 Crores deferred for execution but within the original scope of work.
57. Vide Commission's letter dated 25th June, 2015, the petitioner was asked to submit the following details :
- Whether the assets added are new or replacement of some old assets?
 - Approval if any, accorded by the competent authority for add. Cap.
 - Whether the addition of asset, is on account of the reasons under (a) to (f) of clause 19 of the MPERC (Terms and Conditions for determination of generation tariff) Regulations, 2005?
58. In response, by affidavit dated 20th August, 2015, the petitioner submitted the following :
- All the assets added are new and as per the original scope of work.*
 - No separate approval was required for additional capital expenditure since all the additional capital expenditure was on account of works as per original scope of work approved by the GoMP vide approval accorded in 2002.*
 - The addition of assets, is on account of the reasons under (a) to (f) of clause 19 of the MPERC (Terms and Conditions for determination of generation tariff) Regulations, 2005.*
59. On further scrutiny of the details of capital cost and year-wise additional capitalization filed by the petitioner, it was observed that the year-wise assets

capitalized as per Annual Audited Accounts from CoD to FY 2013-14 were not matching with the figures filed in the petition. Vide letter dated 2nd September, 2015, the petitioner was asked to file the reasons for the difference in the figures of capital cost and additional capitalization filed in the petition vis-à-vis recorded in Annual Audited Accounts of the respective years.

60. In response, vide letter dated 24th September, 2015, the petitioner submitted the following:

“MPPGCL has done due diligence of expenditure done in MPPGCL period on this project. In this process, voucher wise verification of expenditure was done in consultation with respective divisions. During this process, it was noticed that some amounts which were spent on Bansagar PH-I, II & III have been booked in PH-IV. These amounts have not been claimed in the petitions filed by the Petitioner for those power stations and neither have they been claimed in the True up Petition for FY14. Accordingly, the accounts of Jhinna, HPS was corrected with respect to the previous submissions made and the project cost of Jhinna HPS has got finally revised to ₹ 102.90 Crore as on Station COD and to ₹ 115.81 Crore up to 31/03/2014. In view of this, MPPGCL has humbly submitted in the Petition filed before the Commission to kindly consider the total Project cost of Jhinna HPS as ₹ 115.81 Crore, to kindly permit capitalization of the remaining expenses with the other respective power stations of Bansagar complex and to kindly allow to submit the capitalization of the remaining expenses with the other respective power stations of Bansagar complex before the Commission in the True up Petition for FY15.

The year-wise assets capitalized as per annual audited accounts from CoD to FY 2013-14 available earlier with the Hon'ble Commission are, therefore, not matching with the figures filed in the petition. However, MPPGCL has filed the revised year wise project cost figures wef 01/06/2005 (date of opening balance sheet provided by MPSEB) to 31/03/2014 in Annexure-11 filed with the Petition dated 14/05/2015. Further, the updated Asset-cum-Depreciation registers for Bansagar-IV, Jhinna HPS for the period FY 2006-07 to FY 2013-14 have also been submitted as Annexure-7 to the additional submission dated 20/08/2015. The same may kindly be considered please.”

61. The deferred works are the left over works in different packages within the original scope of approved project cost and these works have now been completed by the petitioner. The year wise assets capitalized by the petitioner on account of additional

capitalization are verified from the audited books of accounts and the assets cum depreciation registers of Jhinna HPS for the respective years in light of submissions made by the petitioner. It is observed that these works which were essential for the generating station have been capitalized in audited accounts and recorded in assets cum depreciation register. Therefore, the additional capitalization on account of these works is considered in this order under clause 2.9(b) of Regulations, 2005.

62. Based on the discussions in the preceding paragraphs, the year-wise details of capital cost as on CoD and additional capital expenditure as on 31.03.2014 allowed in this order are summarized below:

**Capital Cost and Additional Capitalization allowed in this order:
Amount in ₹ Crores**

Year	Opening Assets	Addition	Closing Assets
As on CoD	102.66	4.09	106.75
FY 2007-08	106.75	5.22	111.97
FY 2008-09	111.97	1.39	113.36
FY 2009-10	113.36	1.98	115.34
FY 2010-11	115.34	0.18	115.52
FY 2011-12	115.52	0.00	115.52
FY 2012-13	115.52	0.05	115.57
FY 2013-14	115.57	0.00	115.57
Total		115.57	

Debt-Equity Ratio and Project Funding:

Provisions in Regulation:

63. With regard to debt-equity ratio, clause 20 of MPERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2005 provides that,

“For the purpose of determination of tariff, debt-equity ratio as on the date of commercial operation in case of new generating station or capacity expansion shall be 70:30. The debt-equity amount arrived in accordance with this shall be used for calculation of interest on loan, return on equity, advance against depreciation and foreign exchange rate variation.

Where equity employed is in excess of 30%, the amount of equity for the purpose of tariff shall be limited to 30% and the balance amount shall be considered as loan. The interest rate applicable on the equity in excess of

30% treated as loan has been specified in regulation 22. Where actual equity employed is less than 30%, the actual equity shall be considered.”

Commission’s Analysis

64. The petitioner submitted that the funding of Bansagar-IV, Jhinna HPS (2X10 MW) has been done through PFC Loan of ₹ 63.90 Crores (Loan No. 20102008) and the balance amount has been funded through internal resources of MPSEB/MPPGCL. The major terms of PFC loan filed by the petitioner are as given below:

Loan No. : 20102008

Sanctioned amount : ₹ 63.90 Cr.
 Sanctioned Date : 25 Oct 2002
 Number of installments : 40 Nos.
 Repayment period : 10 years
 Rate of interest (Present rate) : 12.10%
 Date of Commencement of loan repayment : 15.07.2005

65. Year- wise project funding for Bansagar-IV, Jhinna HPS till station COD as filed by the petitioner is as given below:

Details of Project Funding Till COD: (Amount in ₹ Crores)

SN	Particulars	PFC Loan	Internal Resources	Total Project Cost as on CoD
1	During FY 02	00.00	42.14	102.90
2	During FY 03	00.00		
3	During FY 04	22.97		
4	During FY 05	26.17		
5	During FY 06	10.21		
6	During FY 07 (Upto CoD)	01.42		
7	Total Upto CoD	60.77		

66. The actual debt-equity ratio as on CoD is worked out to 59 : 41 which is not as per the limits of normative debt equity ratio of 70:30. Hence, in terms of the above Regulation, the actual debt equity ratio of 70:30 as on CoD is considered for the purpose of tariff. Accordingly, the actual debt and equity of the generating station as on the date of commercial operation of the power house on account of capitalization approved above is worked out as under:

Summary of Capital Cost, Additional Capitalization and Funding as on CoD:

Sr. No.	Particular	Unit	As on CoD
1	Capital Cost as on CoD	₹ Crores.	102.66
2	Loan Component	₹ Crores.	60.63
3	Equity Component	₹ Crores.	42.04
4	Debt - Equity ratio	Ratio	59 : 41
5	Equity eligible for return	₹ Crores.	30.80
6	Excess Equity	₹ Crores.	11.24

67. With regard to funding of Additional Capitalization, the following funding corresponding to the assets capitalized during each year is considered by the Commission :

Approved Funding of the Project :

SN	Particulars	Loan	Total Equity	Normative Equity	Excess Equity	Total
1	As on CoD	60.63	42.04	30.80	11.24	102.66
2	From CoD to 31-3-2007	1.85	2.24	1.227	1.013	4.09
3	As on 31/03/2007	62.48	44.28	32.03	12.25	106.75
4	During FY2007- 08	1.29	3.93	1.566	2.364	5.22
5	As on 31/3/2008	63.77	48.21	33.59	14.62	111.97
6	During FY2008- 09	0.00	1.39	0.417	0.973	1.39
7	As on 31/03/2009	63.77	49.60	34.01	15.59	113.36
8	During FY 2009-10	0.00	1.99	0.597	1.393	1.99
9	As on 31/03/2010	63.77	51.59	34.61	16.98	115.35
10	During FY2010- 11	0.00	0.13	0.039	0.091	0.13
11	As on 31/03/2011	63.77	51.72	34.64	17.08	115.48
12	During FY2011- 12	0.00	0.05	0.015	0.035	0.05
13	As on 31/03/2012	63.77	51.77	34.66	17.11	115.53
14	During FY2012- 13	0.00	0.05	0.015	0.035	0.05
15	As on 31/03/2013	63.77	51.82	34.67	17.15	115.58
16	During FY2013- 14	0.00	0.00	0.00	0.00	0.00
17	As on 31/03/2014	63.77	51.82	34.67	17.15	115.58

Annual Capacity (fixed) Charges:

68. The Tariff for supply of electricity from Jhinna hydro power generating station shall comprise of annual capacity (fixed) charges determined for the period from FY 2006-07 to FY 2008-09 based on the MPERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2005 and for the period from FY 2009-10 to FY 2012-13 based on MPERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2009 and its amendment. The annual capacity (fixed) charges for the year FY 2013-14 is worked out based on the MPERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2012, The annual capacity (fixed) charges of hydro power generating station consists of :

- (a) Return on Equity;
- (b) Interest and Financing Charges on Loan Capital;
- (c) Depreciation;
- (d) Operation and Maintenance Expenses;
- (e) Interest Charges on Working Capital;

Return on Equity:

Provisions in Regulation:

69. With regard to the Return on Equity, Clause 21 of MPERC (Terms and Conditions for determination of Generation tariff) Regulations, 2005 provides as under;

Return on equity shall be computed on the paid up equity capital determined in accordance with regulation 20 and shall be computed at 14% (post tax) per annum unless the Commission allows a lower level for reasons to be recorded.

Provided that return on equity invested in work in progress shall be allowed from the date of commercial operation.

The premium raised by the generating company while issuing share capital and investment of internal resources created out of free reserves, if any, shall also be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilised for meeting capital expenditure and forms part of the

approved financial package. For the purposes of computation of return, the portion of free reserves utilized for meeting the capital expenditure shall be considered from the date the asset created is productively deployed in the generating business -----.

70. Regulation 22 of the Regulations, 2009 and Regulations, 2012 provides that,

“Return on equity shall be computed in rupee terms, on the paid up equity capital determined in accordance with Regulation 21.

Return on equity shall be computed on pre-tax basis at the base rate of 15.5% to be grossed up as per Regulation 22.3 of this Regulation:

Provided that in case of Projects commissioned on or after 1st April, 2009, an additional return of 0.5% shall be allowed if such Projects are completed within the timeline specified in Appendix-I :

Provided further that the additional return of 0.5% shall not be admissible if the Project is not completed within the timeline specified above for reasons whatsoever.

The rate of return on equity shall be computed by grossing up the base rate with the normal tax rate for the Year 2008-09 applicable to the Generating Company:

Provided that return on equity with respect to the actual tax rate applicable to the Generating Company, in line with the provisions of the relevant Finance Acts of the respective Year during the Tariff period shall be trued up separately.

Rate of return on equity shall be rounded off to three decimal points and be computed as per the formula given below:

Rate of pre-tax return on equity = Base rate / (1-t)

Where t is the applicable tax rate in accordance with Regulation 22.3. “

Commission's Analysis

71. The Return on equity for Jhinna hydro power station is worked out considering the following:
- (i) The opening balance of equity as on CoD and for the subsequent years is considered as worked out in para 67 of this order.
 - (ii) The equity amount over and above normative equity is considered as normative loan and scheduled repayment for the excess equity up to 31.03.2009 is considered as per the repayment schedule of actual loan portfolio. For the balance period from 01.04.2009 onwards, the repayment of excess equity is considered as per Regulations, 2009.
 - (iii) Rate of return @ 14% is considered since CoD to 31.03.2009 as per applicable Regulations, 2005. For the period FY09-10 to FY13-14, the rate of return is considered @ 15.5% based on the Regulations, 2009 and the Regulations, 2012.
 - (iv) In para 30 of the petition, it is mentioned that MPPGCL has not considered any tax liability for the period FY 2006-07 to FY 2013-14 since no tax has been paid during these years. Moreover, the petitioner has not filed any tax liability. Therefore, grossing up is not applied on the base rate of return.
 - (v) Debt : equity of 59 : 41 as on CoD as filed by the petitioner is considered and applied as per Regulations in this order.
 - (vi) Details of the equity infusion in the project as on CoD and up to FY 2013-14 considered in this order is as given below:

Equity Approved in this order :

SN	Particulars	Assets Capitalized	Equity Amount	Normative Equity	Excess Equity
1	As on CoD (30.08.2006)	102.66	42.04	30.80	11.24
2	From CoD to 31-3-2007	4.09	2.24	1.227	1.013
4	During FY 08	5.22	3.93	1.566	2.364
6	During FY 09	1.39	1.39	0.417	0.973
8	During FY 10	1.99	1.99	0.597	1.393
10	During FY 11	0.13	0.13	0.039	0.091
12	During FY 12	0.05	0.05	0.015	0.035
14	During FY 13	0.05	0.05	0.015	0.035
16	During FY 14	0.00	0.00	0.00	0.00
17	As on 31/03/2014	115.58	51.82	34.67	17.15

72. Based on the applicable Regulations for the respective years, the Return on Equity for each year is worked out as given below:

Return on equity from FY 2006-07 to FY 2008-09:

Sr. No.	Particular	Unit	FY06-07	FY07-08	FY08-09
1	Opening normative equity	₹ Crores.	30.80	32.03	33.59
2	Normative equity addition during the year	₹ Crores.	1.23	1.57	0.42
3	Closing normative equity	₹ Crores.	32.03	33.59	34.01
4	Average equity	₹ Crores.	31.41	32.81	33.80
5	Base rate of Return on Equity	%	14.00	14.00	14.00
6	Rate of return on equity	%	14.00	14.00	14.00
7	Return on equity	₹ Crores.	4.40	4.59	4.73

Return on equity from FY 2009-10 to FY 2011-12:

Sr. No.	Particular	Unit	FY09-10	FY10-11	FY11-12
1	Opening normative equity	₹ Crores.	34.01	34.61	34.64
2	Normative equity addition during the year	₹ Crores.	0.60	0.04	0.015
3	Closing normative equity	₹ Crores.	34.61	34.64	34.66
4	Average equity	₹ Crores.	34.31	34.62	34.65
5	Base rate of Return on Equity	%	15.50	15.50	15.50
6	Rate of return on equity	%	15.50	15.50	15.50
7	Return on equity	₹ Crores.	5.32	5.37	5.37

Return on equity from FY 2012-13 and FY 2013-14:

Sr. No.	Particular	Unit	FY12-13	FY13-14
1	Opening normative equity	₹ Crores.	34.66	34.67
2	Normative equity addition during the year	₹ Crores.	0.015	0.00
3	Closing normative equity	₹ Crores.	34.67	34.67
4	Average equity	₹ Crores.	34.67	34.67
5	Base rate of Return on Equity	%	15.50	15.50
6	Rate of return on equity	%	15.50	15.50
7	Return on equity	₹ Crores.	5.37	5.37

Interest and Finance Charges:

Provision in Regulation:

73. With regard to the Interest and finance charges, Clause 22 of MPERC (Terms and Conditions for determination of Generation tariff) Regulations, 2005 provides as under;

Interest and finance charges on loan capital shall be computed on the outstanding loans, duly taking into account the schedule of repayment, as per the terms and conditions of relevant agreements of loan, bond or debenture, ordinarily restricted to prevailing rates of PFC / REC Term Lending Rate or the rates specified by the CERC from time to time. Exception can be made for the existing or past loans which may have different terms as per the agreements already executed if the Commission is satisfied that the loan has been contracted for and applied to identifiable generation projects. The interest rate on the amount of equity in excess of 30% treated as loan shall be the weighted average rate of the loan schemes of the generating company.

Provided that all loans considered for this purpose shall be identified with the assets created.

Provided that interest and finance charges of renegotiated loan agreements shall not be considered should they result in higher charges.

Provided that interest and finance charges on works in progress shall be excluded and considered as part of the capital cost.

Interest charges on security deposits, if any, with a generating company shall be considered at the rate specified by the Commission from time to time.

In case any moratorium period is availed of, depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and interest on loan capital shall be calculated accordingly -----.

74. Regulation 23 of the Regulations, 2009 and Regulations, 2012 provides that:

“The loans arrived at in the manner indicated in Regulation 21 shall be considered as gross normative loan for calculation of interest on loan.

The normative loan outstanding as on 1.4.2009 shall be worked out by deducting the cumulative repayment as admitted by the Commission up to 31.3.2009 from the gross normative loan.

The repayment for the Year of the Tariff period 2009-12 shall be deemed to be equal to the depreciation allowed for that Year.

Notwithstanding any moratorium period availed by the Generating Company, the repayment of loan shall be considered from the first Year of commercial operation of the Project and shall be equal to the annual depreciation allowed.

The rate of interest shall be the weighted average rate of interest calculated on the basis of the actual loan portfolio at the beginning of each Year applicable to the Project:

Provided that if there is no actual loan for a particular Year but normative loan is still outstanding, the last available weighted average rate of interest shall be considered.

Provided further that if the generating station does not have actual loan, then the weighted average rate of interest of the Generating Company as a whole shall be considered.

The interest on loan shall be calculated on the normative average loan of the Year by applying the weighted average rate of interest.

The Generating Company shall make every effort to re-finance the loan as long as it results in net savings on interest and in that event the costs associated with such re-financing shall be borne by the Beneficiaries and the net savings shall be shared between the Beneficiaries and the Generating Company, in the ratio of 2:1.-----

Commission's analysis

75. The petitioner has borrowed loan from PFC through scheme No. 20102008 for funding the Jhinna Hydro Power Project. Vide letter dated 25th October, 2002, the PFC sanctioned loan amount of ₹ 63.90 Crores for a period of 10-years under the aforesaid scheme. It is mentioned in Para 3.1 of the loan agreement that the first installment of repayment will become due on 15th July, 2005.

76. On scrutiny of the details of interest and finance charges it is observed that the cumulative repayment of ₹ 7.88 Crores prior to CoD has been made by the petitioner in accordance with the aforesaid provision of the loan agreement. Therefore, the opening loan balance as on CoD is considered after deducting the repayment as on CoD of the project.
77. By affidavit dated 5th November, 2015, the petitioner confirmed that the cumulative repayment of PFC loan amounting to ₹ 7.88 Crores has been done till COD, (as indicated in Form 13 of the petition) from the revenue stream of the company.
78. Vide letter dated 25th June, 2015, the petitioner was asked to file the detailed calculations for working out the weighted average rate of interest for the project from FY 2006-07 to FY 2013-14. The petitioner was also asked to file actual details of the repayment made for PFC loan.
79. By affidavit dated 20th August, 2015, the petitioner filed the calculations for year wise weighted average rate of interest on PFC loan. The petitioner also filed the details of actual repayment made to M/s PFC based on the demand raised by the PFC.
80. Accordingly, the Interest and Financing Charges on Loan for Bansagar-IV, Jhinna hydro power station are worked out by considering the following:
- (i) The equity amount over and above the normative equity (excess equity) is considered as normative loan.
 - (ii) The opening balance of the loan as on CoD and for subsequent years is considered as worked out in para 67 of this order.
 - (iii) The scheduled repayment of loan and excess equity worked out based on the terms and conditions of the loan agreement and in accordance with the Regulation, 2005.
 - (iv) Repayment of the loan is considered from CoD of the project. Prior to CoD , no repayment is considered in accordance to the provisions under the Regulations, 2005.
 - (v) The repayment for the year 2009-10 onwards is considered equal to the depreciation allowed for that year as per the provisions under the Regulations, 2009 and the Regulations, 2012..
 - (vi) The interest on excess equity is worked out by considering the schedule repayment as per actual loan portfolio and year-wise weighted average rate of interest is applied for calculating the interest.

(vii) The weighted average rate of interest has been worked out by the petitioner on the basis of the actual loan portfolio of respective year applicable to the project. Therefore, the same weighted average rate of interest as filed by the petitioner is considered in this order.

81. Accordingly, the Interest and Financing Charges on Loan for Jhinna Hydro Power Project from its CoD (i.e. 30.08.2006) to FY 2013-14 are worked out as given below:

Interest charges on Loan including excess equity from FY 06-07 to FY 08-09:

Sr. No.	Particular	Unit	FY06-07	FY07-08	FY08-09
1	Opening balance of loan including excess equity	₹ Crores.	71.87	70.40	66.40
2	Addition during the year	₹ Crores.	2.86	3.65	0.97
3	Repayment considered during the year	₹ Crores.	4.34	7.66	7.89
4	Closing Balance of Loan	₹ Crores.	70.40	66.40	59.48
5	Average for the year	₹ Crores.	71.14	68.40	62.94
6	Applicable wt. average rate of interest	%	9.37	9.46	9.46
7	Interest amount on Loan	₹ Crores.	6.67	6.47	5.95

Interest charges on Loan including excess equity from FY 09-10 to FY 11-12:

Sr. No.	Particular	Unit	FY09-10	FY10-11	FY11-12
1	Opening balance of loan including excess equity	₹ Crores.	59.48	54.84	48.83
2	Addition during the year	₹ Crores.	1.39	0.09	0.035
3	Repayment considered during the year	₹ Crores.	6.04	6.09	6.10
4	Closing Balance of Loan	₹ Crores.	54.84	48.83	42.77
5	Average for the year	₹ Crores.	57.16	51.84	45.80
6	Applicable wt. average rate of interest	%	11.34	12.10	12.10
7	Interest amount on Loan	₹ Crores.	6.48	6.27	5.54

Interest charges on Loan including excess equity from FY 12-13 to FY 13-14:

Sr. No.	Particular	Unit	FY12-13	FY13-14
1	Opening balance of loan including excess equity	₹ Crores.	42.77	36.70
2	Addition during the year	₹ Crores.	0.035	0.000
3	Repayment considered during the year	₹ Crores.	6.10	6.10
4	Closing Balance of Loan	₹ Crores.	36.70	30.60
5	Average for the year	₹ Crores.	39.74	33.65
6	Applicable wt. average rate of interest	%	12.10	12.10
7	Interest amount on Loan	₹ Crores.	4.81	4.07

Depreciation:

Provision in Regulation:

82. With regard to the Depreciation, Clause 23 of MPERC (Terms and Conditions for determination of Generation tariff Regulations, 2005 provides as under;

“For the purpose of tariff, depreciation shall be computed as following:

The value base for the purpose of depreciation shall be the historical cost of the assets, i.e. actual expenses limited to approved /accepted capital cost:

Provided that the consumer contribution or capital subsidy/ grant etc shall be treated as per the accounting rules notified and in force from time to time.

The approved/accepted cost shall include foreign currency funding converted to equivalent rupee at the exchange rate prevalent on the date of foreign currency actually availed.

Depreciation rates for the purpose of determination of allowable depreciation shall be as per CERC notification. The existing rates are given in Annexure-I of this regulation.

Provided that the total depreciation during the life of the asset shall not exceed 90% of the original cost.

On repayment of entire loan, the remaining depreciable value shall be spread over the balance useful life of the asset.

Depreciation shall be chargeable from the first year of operation. In case of operation of the asset for part of the year, depreciation shall be charged on pro-rata basis.

Depreciation against assets relating to environmental protection shall be allowed on case to case basis at the time of fixation of tariff.”

83. Regulation 24 of the Regulations, 2009 and the Regulations, 2012 provides that;
“For the purpose of tariff, depreciation shall be computed in the following manner:

- (a) *The value base for the purpose of depreciation shall be the capital cost of the assets as admitted by the Commission*
- (b) *The approved/accepted cost shall include foreign currency funding converted to equivalent rupee at the exchange rate prevalent on the date of foreign currency actually availed.*
- (c) *The salvage value of the asset shall be considered as 10% and depreciation shall be allowed up to maximum of 90% of the capital cost of the asset.*

Provided that in case of Hydro generating stations, the salvage value shall be as provided in the agreement signed by the developers with the State Government for creation of the site.

Provided further that the capital cost of the assets of the hydro generating station for the purpose of computation of depreciable value shall correspond to the percentage of sale of electricity under Long-term power purchase agreement at regulated Tariff.

- (d) *Land other than land held under lease and the land for reservoir in case of hydro generating station shall not be a depreciable asset and its cost shall be excluded from the capital cost while computing asset depreciable value.*
- (e) *Depreciation shall be calculated annually based on 'Straight Line Method' and at rates specified in Appendix-II to these Regulations for the assets of the generating station:*

Provided that, the remaining depreciable value as on 31st March of the Year closing after a period of 12 Years from the Date of Commercial operation shall be spread over the balance Useful life of the assets.

- (f) *In case of the existing Projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting the cumulative depreciation including Advance Against Depreciation as admitted by the Commission upto 31.3.2009 from the gross depreciable value of the assets. The rate of Depreciation shall be continued to be charged at the rate specified in Appendix-II till cumulative depreciation reaches 70%. Thereafter the remaining depreciable value shall*

be spread over the remaining life of the asset such that the maximum depreciation does not exceed 90%.-”

Commission’s analysis

84. The petitioner claimed the weighted average rate of depreciation based on the capital cost as on station CoD and addition of the assets during the subsequent years. The details of the year wise weighted average rate of depreciation as worked out by the petitioner are given as below:

Weighted Average rate of Depreciation claimed as on Station COD: (₹ Crores)

SN	Particulars	Project cost as on COD	Dep. Rate as per Regulation 2005	Dep. Amount	Weighted Av. Rate of Dep.
1	Residential Colony for Staff.	0.0167	1.80%	0.0003	
2	Other Buildings	0.0525	1.80%	0.0009	
3	Hydro Electric, System Dam Spill way	20.2297	1.80%	0.3641	
4	Hydel works RCC Pipes, storage tank valve etc.	25.7168	2.57%	0.6609	
5	Tail race Channel	0.0000	2.57%	0.0000	
6	Hydel Power Gen. Plant	56.8094	2.57%	1.4600	
7	Meter Testing laboratory, tools & equipments	0.0000	6.00%	0.0000	
8	Other Misc. Equipment Fire Protection System	0.0000	6.00%	0.0000	
9	Truck, Tempo, Tractor	0.0033	18.00%	0.0006	
10	Buses Including Mini Bus	0.0139	18.00%	0.0025	
11	Jeep and Motor Car	0.0288	18.00%	0.0052	
12	Furniture and Fixture	0.0000	6.00%	0.0000	
13	Others	0.0000	6.00%	0.0000	
14	Computer	0.0321	6.00%	0.0019	
Total		102.903		2.4965	2.43%

Wtd. Average Rate Of Depreciation As On 01/04/2009: (Amount in ₹ Crores)

SN	Particulars	Project cost as on 01/04/2009	Dep. Rate as per Regulation 2009	Dep. Amount	Weighted Av. Rate of Dep.
1	Residential Colony for Staff.	0.0174	3.34%	0.0006	
2	Other Buildings	0.0546	3.34%	0.0018	
3	Hydro Electric, System Dam Spill way	20.9896	5.28%	1.1082	
4	Hydel works RCC Pipes,	27.5725	5.28%	1.4558	

	storage tank valve etc.				
5	Tail race Channel	0.0098	5.28%	0.0005	
6	Hydel Power Gen. Plant	64.8780	5.28%	3.4256	
7	Meter Testing laboratory, tools & equipments	0.0000	5.28%	0.0000	
8	Other Misc. Equipment Fire Protection System	0.0000	5.28%	0.0000	
9	Truck, Tempo, Tractor	0.0014	9.50%	0.0001	
10	Buses Including Mini Bus	0.0084	9.50%	0.0008	
11	Jeep and Motor Car	0.0000	9.50%	0.0000	
12	Furniture and Fixture	0.0007	6.33%	0.0000	
13	Others	0.0001	6.33%	0.0000	
14	Computer	0.0682	15.00%	0.0102	
Total		113.6007		6.0038	5.28%

Wt. Average rate Of Depreciation as on 01/04/2013: (Amount in ₹ Crores)

SN	Particulars	Project cost as on 01/04/2013	Dep. Rate as per Regulation 2012	Dep. Amount	Weighted Av. Rate of Dep.
1	Residential Colony for Staff.	0.0188	3.34%	0.0006	
2	Other Buildings	0.0575	3.34%	0.0019	
3	Hydro Electric, System Dam Spill way	21.5955	5.28%	1.1402	
4	Hydel works RCC Pipes, storage tank valve etc.	28.1195	5.28%	1.4847	
5	Tail race Channel	0.0098	5.28%	0.0005	
6	Hydel Power Gen. Plant	65.7428	5.28%	3.4712	
7	Meter Testing laboratory, tools & equipments	0.0026	5.28%	0.0001	
8	Other Misc. Equipment Fire Protection System	0.1882	5.28%	0.0099	
9	Truck, Tempo, Tractor	0.0014	9.50%	0.0001	
10	Buses Including Mini Bus	0.0084	9.50%	0.0008	
11	Jeep and Motor Car	0.0000	9.50%	0.0000	
12	Furniture and Fixture	0.0007	6.33%	0.0000	
13	Others	0.0001	6.33%	0.0000	
14	Computer	0.0682	15.00%	0.0102	
Total		115.8136		6.1205	5.28%

On scrutiny of the subject petition, it is observed that the weighted average rate of depreciation filed in the petition is not matching with the rate mentioned in the assets-cum-depreciation register. Vide Commission's letter dated 25th June, 2015, the petitioner was asked to file the reasons in this regard.

85. By affidavit dated 20th August, 2015, the petitioner filed the updated assets cum depreciation registers for Bansagar-IV, Jhinna HPS for the period FY 2006-07 to FY 2013-14 and mentioned that the Year wise weighted average rates of depreciation indicated therein are almost same as those filed in the subject petition, except those for FY07 and FY08. With regard to the difference in the figures for FY 2006-07 and FY 2007-08, the petitioner submitted the following reasons:

“For FY 2006-2007, although the assets of Bansagar-IV Jhinna HPS (2X10 MW) were put into commercial operation w.e.f. 30/08/2006, these assets were capitalized in the Books of Accounts at the end of the financial year, i.e., on 31/03/2007, as per the then prevailing practice for capitalization of assets.

In the subject Petition, the weighted average rate of depreciation as on COD (2.43%) has been determined in accordance to MPERC Tariff Regulations 2005 and is based on the total value of assets put to use as on COD, i.e., ₹ 102.90 Crores. This weighted average rate of depreciation (2.43%) has been used for arriving at the depreciation amounts for the period FY07, FY08 and FY09, as per Regulations 2005.

However, as detailed in Annexure-11 filed with the Petition, out of the total value of assets of ₹ 102.90 Crores as on COD an amount of Rs 0.078 Crore only was booked under the account head of Fixed Assets as on the COD and the balance amount of ₹ 102.83 Crores was appearing under the account head of Capital Works in Progress.

In the Asset cum Depreciation Register of Bansagar IV, Jhinna HPS (2X10 MW) for FY07 the weighted average rate of depreciation, i.e. 0.0004%, has been worked out on the basis of date of capitalization of assets in the Books of Accounts, which is 31/03/2007 in the instant case. Accordingly, the aforesaid difference in weighted average depreciation rate indicated in the Assets cum Depreciation Register and that filed in the Petition is on account of capitalization of assets at the end of the financial year (i.e. on 31/03/2007) in the books of accounts even though the assets were already put to use as on COD (i.e. on 30/08/2006).

For FY 07-08, MPPGCL in the subject tariff petition has worked out the weighted average rate of Depreciation of 2.43% as on station COD based on the capital cost up to COD, in accordance to the provisions of MPERC Tariff Regulations 2005. The

above rate of depreciation has been considered for FY07, FY08 & FY09 for calculating the depreciation amounts for these Years.

However, in the Asset-cum-Depreciation Register for FY08 the wt. average rate of depreciation (i.e., 2.28%) has been calculated based on day basis considering the date of capitalization of respective assets in the Books of Accounts. As such, there is a minor difference of 0.15%, in the rate of depreciation considered in the petition for FY08 and that indicated in the Asset cum Depreciation Register.”

86. In view of the above, the depreciation for Bansagar-IV, Jhinna hydro power station is worked out in this order by considering the following:
- (i) Gross Fixed Assets as on CoD i.e. 30th August, 2006 and the assets added in subsequent years till 31st March, 2014 under additional capitalization actually capitalized as per books of accounts and admitted in this order have been considered for determination of depreciation amount.
 - (ii) Depreciation for the period since CoD to 31.03.2009 is worked out in accordance with clause 23 of MPERC (Terms and Conditions for determination of Generation tariff) Regulations, 2005. The Depreciation for the period FY 2009-10 to FY 2012-13 is worked out based on the Regulation 24 of MPERC (Terms and Conditions for determination of Generation tariff) Regulations, 2009 and its amendment. For the year FY 2013-14, the depreciation is calculated as per Regulation 24 of the Regulations, 2012.
 - (iii) Rate of depreciation is considered as per depreciation schedule of the applicable Regulations. The weighted average rate of depreciation as filed by the petitioner has also been verified from the assets-cum-depreciation register for the respective year for Jhinna hydro power project and same has been applied for determination of year-wise depreciation amount for the project.
 - (iv) Depreciation on the assets capitalized shall be chargeable from the first year of operation. During FY 2006-07, the operation of the asset had been for part of the year, therefore, the depreciation shall be charged on pro-rata basis.
87. Based on the above and the applicable Regulations, the depreciation from CoD to FY 2013-14 is worked out as given below:

Depreciation for the period FY 2006-07 to FY 2008-09:

Sr. No.	Particular	Unit	FY06-07	FY07-08	FY08-09
1	Opening Gross Block	₹ Crores.	102.66	106.75	111.97
2	Assets addition during the year	₹ Crores.	4.09	5.22	1.39
3	Closing Gross Block	₹ Crores.	106.75	111.97	113.36
4	Average Gross Block	₹ Crores.	104.71	109.36	112.67
5	Wt. average rate of dep.	%	2.43%	2.43%	2.43%
6	Depreciation amount	₹ Crores	1.48	2.66	2.74
7	Annual depreciation	₹ Crores	2.54	2.66	2.74
8	Cumulative Depreciation including AAD	₹ Crores	4.34	11.99	19.88

Depreciation for the period FY 2009-10 to FY 2011-12:

Sr. No.	Particular	Unit	FY09-10	FY10-11	FY11-12
1	Opening Gross Block	₹ Crores.	113.36	115.35	115.48
2	Assets addition during the year	₹ Crores.	1.99	0.13	0.05
3	Closing Gross Block	₹ Crores.	115.35	115.48	115.53
4	Average Gross Block	₹ Crores.	114.36	115.42	115.51
5	Wt. average rate of dep.	%	5.28%	5.28%	5.28%
6	Depreciation amount	₹ Crores	6.04	6.09	6.10
7	Annual depreciation amount	₹ Crores	6.04	6.09	6.10
8	Cumulative Depreciation including AAD	₹ Crores	25.92	32.01	38.11

Depreciation for the period FY 2012-13 to FY 2013-14:

Sr. No.	Particular	Unit	FY12-13	FY13-14
1	Opening Gross Block	₹ Crores.	115.53	115.58
2	Assets addition during the year	₹ Crores.	0.05	0.00
3	Closing Gross Block	₹ Crores.	115.58	115.58
4	Average Gross Block	₹ Crores.	115.56	115.58
5	Wt. average rate of depreciation	%	5.28%	5.28%
6	Depreciation amount	₹ Crores	6.10	6.10
7	Annual depreciation amount	₹ Crores	6.10	6.10
8	Cumulative Depreciation including AAD	₹ Crores	44.21	50.31

Advance Against Depreciation:**Provision in Regulation:**

88. Clause 2.20 of MPERC (Terms and Conditions for determination of Generation tariff Regulations, 2005 provides as under;

Advance against depreciation shall be permitted for any new projects in addition to allowable depreciation, in the manner given hereunder:

AAD = Loan repayment amount as per regulation 22 subject to a ceiling of 1/10th of loan amount as per regulation 20 minus depreciation as per schedule

Provided that Advance Against Depreciation for any new project shall be permitted only if the cumulative repayment up to a particular year exceeds the cumulative depreciation up to that year,

Provided further that Advance Against Depreciation in a year shall be restricted to the extent of difference between cumulative repayment and cumulative depreciation up to that year.

89. The petitioner filed Advance against Depreciation for the period FY 2006-07 to FY 2008-09 in accordance to the provision under the Regulations, 2005.
90. The Commission observed that the depreciation during the year for the period FY 2006-07 to FY 2008-09 is less than the repayment of normative loan considered in this order. It is further observed that the yearly loan repayment amount is 1/10th of the normative loan. Therefore, the petitioner is entitled to recover AAD for the period FY 2006-07 to FY 2008-09 in accordance with the provisions under Regulations, 2005.
91. The Advance against Depreciation is worked out as given below:

Advance Against Depreciation:

Sr. No.	Particular	Unit	FY06-07	FY07-08	FY08-09
1	Cumulative Loan Repayment	₹ Crores.	4.34	11.99	19.88
2	Cumulative Depreciation	₹ Crores.	1.48	4.14	6.88
3	Loan Repayment	₹ Crores.	4.34	7.66	7.89
4	Dep. for No. of days in operation	₹ Crores.	1.48	2.66	2.74
5	Advance against depreciation	₹ Crores	2.85	5.00	5.15

Operation and Maintenance Expenses:

Provision in Regulation:

92. With regard to the Operation and Maintenance expenses, Clause 3.33 of MPERC (Terms and Conditions for determination of Generation tariff) Regulations, 2005 provides as under;

“In case of the hydro electric generating stations declared under commercial operation on or after 1.4.2006, the base operation and maintenance expenses shall be fixed at 1.5% of the actual capital cost as admitted by the Commission, in the year of commissioning and shall be subject to an annual escalation as per the provisions of clause 2.27 for the subsequent years.”

93. Clause 47.1 of the Regulations, 2009 and its amendment provides as under;

“The Operation and Maintenance Expenses admissible to existing Hydro power stations comprise of employee cost, Repair & Maintenance cost and Administrative and General cost . These norms exclude pension, terminal benefits and incentives to be paid to employees, taxes payable to the Government, MPSEB expenses and fees payable to MPERC. The Generating Company shall claim the taxes payable to the Government and fees to be paid to MPERC separately as actuals. The Pension and Terminal Benefits shall be dealt as per Regulation 26.”

O&M Norms for Hydel Power Stations

Year	O&M Expenses in ₹ in lakh/MW
FY 9-10	5.96
FY 10-11	6.31
FY 11-12	6.68
FY 12-13	7.09

94. Clause 50.1 of the Regulations, 2012 further provides as under;

The Operation and Maintenance expenses admissible to existing hydro power stations comprise of employee cost, Repair & Maintenance (R&M) cost and Administrative and General (A&G) cost . These norms exclude Pension, Terminal Benefits and Incentive, arrears to be paid to employees, taxes payable to the Government, and fees payable to MPERC. The Generating Company shall claim the rate, rent & taxes payable to the Government, cost of chemicals and consumables, fees to be paid to MPERC and any arrears paid to employees separately as actuals. The claim of pension and Terminal Benefits shall be dealt as per Regulation 26.5.

O&M Norms for Hydel Power Stations:

Year	O&M Expenses in ₹ in lakh/MW
FY 13-14	11.23
FY 14-15	12.12
FY 15-16	13.09

Commission's analysis

95. Operation and Maintenance Expenses for Bansagar-IV, Jhinna hydro power station is worked out based on the applicable Regulations for the respective years. Operation and Maintenance Expenses for the period FY2006-07 (i.e. as on CoD) to FY 2008-09 is worked out in accordance to clause 3.33 of Regulations, 2005 which provides that,

“In case of the hydro electric generating stations declared under commercial operation on or after 1.4.2006, the base operation and maintenance expenses shall be fixed at 1.5% of the actual capital cost as admitted by the Commission, in the year of commissioning and shall be subject to an annual escalation as per the provisions of clause 2.27 for the subsequent years.”

96. As per clause 2.27 of Regulations, 2005 inflation on O&M expenses had been allowed @ 6%. The Operation and Maintenance Expenses for the period FY 2009-10 to FY 2012-13 is worked out as per clause 47.1 of the MPERC Regulations, 2009 and its amendment.

97. Operation and Maintenance Expenses for the year FY2013-14 are worked out in accordance with clause 50.1 of the Regulations, 2009. In view of the above, the normative operation and maintenance expenses are worked out as given below:

Operation & Maintenance expenses for the period FY 2006-07 to FY 2008-09:

Sr. No.	Particular	Unit	FY 2006-07	FY 2007-08	FY 2008-09
1	Installed Capacity	MW	20	20	20
2	Capital Cost as on CoD admitted	₹ Crores.	102.66	102.66	102.66
3	Base rate	%	1.50	1.50	1.50
4	Escalation Rate	%	0.00	6.00	6.00
5	Escalated base rate	%	1.50	1.59	1.69
6	Norms for O&M expenses	L/MW	-	-	-
7	Total O&M expenses	₹ Crores.	1.54	1.63	1.73

Operation & Maintenance expenses for the period FY 2009-10 to FY 2011-12:

Sr. No.	Particular	Unit	FY 2009-10	FY 2010-11	FY 2011-12
1	Installed Capacity	MW	20	20	20
2	Norms for O&M expenses	L/MW	5.96	6.31	6.68
3	Total O&M expenses	₹ Crores.	1.19	1.26	1.34

Operation & Maintenance expenses for the period FY 2012-13 and FY 2013-14:

Sr. No.	Particular	Unit	FY 2012-13	FY 2013-14
1	Installed Capacity	MW	20	20
2	Norms for O&M expenses	L/MW	7.09	11.23
3	Total O&M expenses	₹ Crores.	1.42	2.25

Interest on Working Capital:**Provision in Regulation:**

98. With regard to the Interest on working Capital, Clause 3.34 of MPERC (Terms and Conditions for determination of Generation tariff) Regulations, 2005 provides as under;

The Working Capital shall cover:

- (i) *Operation and Maintenance expenses for one month;*
- (ii) *Maintenance spares @ 1% of the historical cost escalated @ 4% per annum from the date of commercial operation; and*
- (iii) *Receivables equivalent to two months of fixed charges for sale of electricity, calculated on normative capacity index.*

99. Clause 48.1 of MPERC the Regulations, 2009 and clause 51.1 of the Regulations, 2012 provides as under;

The Working Capital shall cover:

- (i) *Maintenance spares @ 15% of normative O&M expenses;*
- (ii) *Receivables equivalent to two months of fixed cost; and*
- (iii) *Operation and Maintenance Expenses for one month.*

Commission's analysis

100. Interest Charges on Working Capital for Bansagar-IV, Jhinna hydro power station is worked out by considering the following:

- (i) Interest on working capital since CoD to 31.03.2009 is worked out in terms of clause 3.34 of MPERC Regulations, 2005.

- (ii) The interest on working capital for the period FY 2009-10 to FY 2012-13 is worked out for Jhinna hydro power project as per clause 48.1 of the MPERC Regulations, 2009. For the year FY 2013-14, the interest on working capital has been worked out in terms of clause 51.1 of the Regulations, 2012.
- (iii) The rate of interest on working capital up since CoD to 31.03.2009 is considered as per clause 2.30 of the Regulations, 2005 which provides that it shall be on normative basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on April 1 of the relevant year plus 1%.
- (iv) The rate of interest on working capital for the period FY 2009-10 to FY 2012-13 is considered in terms of clause 27.1 of Regulations, 2009 and its amendment notified on 3rd December, 2010 which provided that,
“Rate of interest on working capital to be computed as provided subsequently in these Regulations shall be on normative basis and shall be equal to the State Bank Base Rate as on 1st of April of that year plus 4.00%. The interest on working capital shall be payable on normative basis notwithstanding that the Generating Company has not taken working capital loan from any outside agency or has exceeded the working capital loan compared to the working capital required on the normative basis.”
- (v) For the year FY2013-14, the rate of interest on working capital is worked out in terms of clause 27.1 of the Regulations, 2012 which provides that,
“Rate of interest on working capital to be computed as provided subsequently in these Regulations shall be on normative basis and shall be equal to the State Bank of India’s Base Rate as on 1st of April of that year plus 3.50%. The interest on working capital shall be payable on normative basis notwithstanding that the Generating Company has not taken working capital loan from any outside agency or has exceeded the working capital loan compared to the working capital required on the normative basis.”
101. Maintenance spares for the working capital for the period FY 2006-07 to FY 2008-09 are worked out based on the capital cost of the project capitalized as on CoD as per books of accounts.

102. The Interest Charges on Working Capital for Jhinna HPS from CoD to FY 2013-14 are worked out in terms of the applicable Regulations as given below:

Interest on working capital from CoD to FY 2008-09:

Sr. No.	Particular	Unit	FY06-07	FY07-08	FY08-09
1	O&M Charges for one month	₹ Crores.	1.54	1.63	1.73
2	Maint. Spares @ 1% of historical cost with 4% annual escalation	₹ Crores.	1.03	1.07	1.11
3	Receivables for two months	₹ Crores.	3.11	3.53	3.52
4	Total working capital	₹ Crores.	5.67	6.23	6.37
5	Applicable rate of interest	%	11.25	13.25	13.25
6	Interest on working capital	₹ Crores.	0.64	0.83	0.84

Interest on working capital from FY 2009-10 to FY 2011-12:

Sr. No.	Particular	Unit	FY09-10	FY10-11	FY11-12
1	O&M Charges for one month	₹ Crores.	1.19	1.26	1.34
2	Maint. Spares @ 15% of the O&M charges	₹ Crores.	0.18	0.19	0.20
3	Receivables for two months	₹ Crores.	3.27	3.26	3.15
4	Total working capital	₹ Crores.	4.64	4.71	4.69
5	Applicable rate of interest	%	12.25	11.75	12.25
6	Interest on working capital	₹ Crores.	0.57	0.55	0.57

Interest on working capital from FY 2012-13-10 and FY 2013-14:

Sr. No.	Particular	Unit	FY12-13	FY13-14
1	O&M Charges for one month	₹ Crores.	1.42	2.25
2	Maint. Spares @ 15% of the O&M charges	₹ Crores.	0.21	0.34
3	Receivables for two months	₹ Crores.	3.06	3.09
4	Total working capital	₹ Crores.	4.69	5.67
5	Applicable rate of interest	%	14.00	13.20
6	Interest on working capital	₹ Crores.	0.66	0.75

Summary of Annual Capacity Charges:

103. Annual Capacity (fixed) Charges for Bansagar-IV, Jhinna Hydro Power Project (2X10 MW) from CoD to FY 2013-14 are worked out in terms of the applicable Regulations, as given below:

Annual capacity (fixed) charges from FY 2006-07 to FY 2008-09:

Sr. No.	Particular	Unit	FY06-07	FY07-08	FY08-09
1	Return on equity	₹ Crores.	4.40	4.59	4.73
2	Interest charges on loan & excess equity	₹ Crores.	6.67	6.47	5.95
3	Depreciation	₹ Crores.	2.54	2.66	2.74
4	Advance Against Depreciation	₹ Crores.	2.85	5.00	5.15
5	Operation & Maintenance expenses	₹ Crores.	1.54	1.63	1.73
6	Interest on working capital	₹ Crores	0.64	0.83	0.84
	Annual capacity (fixed) charges	₹ Crores.	18.64	21.18	21.15
	AFC for 7-Months during FY07	₹ Crores.	10.87	21.18	21.15

Annual capacity (fixed) charges from FY 2009-10 to FY 2011-12:

Sr. No.	Particular	Unit	FY09-10	FY10-11	FY11-12
1	Return on equity	₹ Crores.	5.32	5.37	5.37
2	Interest charges on loan & excess equity	₹ Crores.	6.48	6.27	5.54
3	Depreciation	₹ Crores.	6.04	6.09	6.10
4	Advance Against Depreciation	₹ Crores.	0.00	0.00	0.00
5	Operation & Maintenance expenses	₹ Crores.	1.19	1.26	1.34
6	Interest on working capital	₹ Crores	0.57	0.55	0.57
	Annual capacity (fixed) charges	₹ Crores.	19.60	19.55	18.92

Annual capacity (fixed) charges from FY 2012-13 and FY 2013-14:

Sr. No.	Particular	Unit	FY12-13	FY13-14
1	Return on equity	₹ Crores.	5.37	5.37
2	Interest charges on loan & excess equity	₹ Crores.	4.81	4.07
3	Depreciation	₹ Crores.	6.10	6.10
4	Advance Against Depreciation	₹ Crores.	0.00	0.00
5	Operation & Maintenance expenses	₹ Crores.	1.42	2.25
6	Interest on working capital	₹ Crores	0.66	0.75
	Annual capacity (fixed) charges	₹ Crores.	18.36	18.54
	Less non tariff income for FY13-14	₹ Crores.	-	0.07
	Net AFC allowed in this order	₹ Crores.	18.36	18.47

104. The annual capacity charges allowed in this order shall be subject to retrospective adjustment with the charges provisionally considered and allowed by the Commission in its all earlier orders dated 18th January, 2008, MYT order dated 3rd March, 2010, tariff order dated 16th April, 2012 and MYT order dated 1st April, 2013 for Bansagar-IV, Jhinna project. The aforesaid annual capacity charges are at normative Capacity Index/Availability and shall be pro-rated at actual Capacity Index/Availability.

Normative Capacity Index/Plant Availability Factor:

105. For the period FY 2006-07 to FY 2008-09, the normative capacity indices for recovery of the full capacity charges for both the projects shall be as defined in clause 3.28 of the MPERC (Terms and Conditions for determination of the Generation Tariff) Regulations, 2005. The recovery of the capacity charges, primary and secondary energy charges and incentive for the period FY 2007 to FY 2009 shall be governed in accordance with the relevant provisions under Regulations, 2005.
106. For the control period FY 2009-10 to FY 2012-13, the normative Plant Availability Factor of the Hydro Power Station shall be as defined in clause 46.1 (3) of the MPERC (Terms and Conditions for determination of the Generation Tariff) Regulations, 2009 and amendment thereof. For the year FY 2013-14, the normative Plant Availability Factor of the Hydro Power Station shall be as defined in clause 49.1 (3) of the MPERC (Terms and Conditions for determination of the Generation Tariff) Regulations, 2012.
107. The aforesaid annual capacity (fixed) charges allowed in this order are on normative Capacity Index / Plant Availability Factor of hydel power stations as per applicable Regulations. The recovery of annual capacity (fixed) charges shall be made by the petitioner from CoD to 31.03.2009 in accordance with clause 58 of the Regulations, 2005 and from FY 2009-10 to FY 2012-13 in accordance with the clause 50 of Regulations, 2009. The recovery of annual capacity (fixed) charges for FY 2013-14 shall be made by the petitioner in accordance with the clause 53 of the Regulations, 2012. The aforesaid annual capacity (fixed) charges shall be prorated with respect to actual capacity index/plant availability factor achieved during the year.
108. Despite repetitive directions of the Commission and also the directions of Hon'ble Appellate Tribunal for Electricity for filing the final tariff petition, this petition was filed

with an inordinate delay. Therefore, the recovery of excess amount if any, as a result of this order shall not bear any interest. The other conditions shall remain same as per the provisional orders dated 18.01.2008 issued by the Commission.

Other Charges:

Petitioner's submission:

109. With regard to the other charges, the petitioner submitted the following:

- ❖ *Other expenses comprise of Water Charges, Cess on Auxiliary Consumption, Rent Rates and Taxes, MPERC Fee, and Common Expenses.*
- ❖ *Water Charges, Rent Rates and Taxes, Common Expenses indicated in the Books of Accounts of MPPGCL for Bansagar Complex, are consolidated expenditure figures for the complete complex. These expenses for Bansagar-IV HPS, Jhinna have, therefore, been worked out on pro-rata basis.*
- ❖ *Water Charges which are payable to the government have been claimed as captured in the Audited Books of Accounts of respective year. It is submitted that the Water Charges of Bansagar Complex for FY07 & FY08 have already been allowed by the Hon'ble Commission in the True-up orders for respective Years. Therefore, the same has not been claimed in the instant petition. For FY09 the Hon'ble Commission, vide True Up Order of FY09, has allowed Water Charges amounting to ₹22.08 Crores towards Bansagar PH-1, PH-2 & PH-3 as against the total amount of ₹22.78 Crores filed by the Petitioner for Bansagar Complex. Accordingly MPPGCL has claimed the balance amount of ₹0.70 Crores towards Water Charges for Bansagar PH-IV Jhinna HPS. For FY10 to FY14, MPPGCL has worked out Water Charges on pro rata basis based on the figures captured in the audited books of accounts of MPPGCL for the respective years.*
- ❖ *Cess on Auxiliary Consumption which is payable to the government has been claimed based on the generation figures of respective years at the specified rate of 10 paise/unit. Hon'ble commission in the True Up order for FY07 has already allowed Cess on Auxiliary Consumption for Bansagar complex. Therefore, the same has not been claimed in the instant petition. For FY08 to FY12, MPPGCL has claimed Cess on Auxiliary Consumption at the specified rate of 10 paise/unit. From Sept 2012 onwards, Cess on Auxiliary*

Consumption is not levied on MPPGCL, therefore no amount has been claimed for FY13 and FY14.

- ❖ Common Expenses are the expenditure incurred in management of cash flow, etc., and have been paid to MPSEB in accordance to GoMP notification dated 03/06/2006. Common expenses for Jhinna HPS, for the period FY07 to FY14, have been claimed as per audited books of accounts of MPPGCL for the respective years on pro rata basis.
- ❖ Rent, Rates and Taxes for Jhinna HPS have been claimed on prorata basis based on the figures in the audited books of accounts for the respective Years. Rent, Rates & Taxes of Bansagar Complex for FY07, FY08 & FY09 have already been allowed by the Commission in True up Orders for respective Years, therefore the same have not been claimed in the instant petition.
- ❖ Year wise Other Expenses being claimed in the Petition are detailed in the table given below:-

Other Expenses (Amount in Cr. ₹)

Particulars	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14
Water Charges	0.0000	0.0000	0.7006	0.6641	0.5509	0.5855	0.6476	0.7961
Cess on Auxiliary Consumption	0.0000	0.0041	0.0061	0.0036	0.0039	0.0010	0.0000	0.0000
Rent rates & taxes	0.0000	0.0000	0.0000	0.0002	0.0032	0.0026	0.0026	0.0034
MPERC Fee	0.0020	0.0020	0.0020	0.0020	0.0060	0.0060	0.0060	0.0060
Common Expenses	0.0506	0.0483	0.0840	0.0654	0.0802	0.0512	0.0046	0.0000
Total	0.0526	0.0545	0.7927	0.7352	0.6442	0.6463	0.6608	0.8055

- ❖ MPPGCL has not claimed the expenditure towards actual Pension & Terminal benefits as these are being claimed by the Transmission Licensee.

Commission's Analysis:

110. The petitioner has claimed water charges, Cess on Auxiliary Consumption, rent, rates and taxes, filing fee, common expenses, etc. on actual basis, over and above the annual capacity (fixed) charges.

111. The petitioner is allowed to recover the fee paid by the petitioner to MPERC for determination of generation tariff, cess and ED as applicable and water charges and cess on usage of water levied by the Statutory Authorities from the beneficiaries on pro-rata basis. The Commission had not allowed the MPSEB common expenses in previous tariff orders. Therefore, these expenses are not allowed in this order also. In addition to the other charges as approved above, the petitioner is entitled to recover the taxes on pro-rata basis if any, paid to the Government and levied by Statutory Authorities on actual in terms of the applicable Regulations for each year.
112. This order is for the final generation tariff Order for Bansagar-IV, Jhinna hydro power project from CoD to 31.03.2014. The petitioner must take steps to implement the Order after giving seven (7) days' public notice in accordance with Clause 1.30 of MPERC (Details to be furnished and fee payable by licensee or generating company for determination of tariff and manner of making application) Regulations, 2004 and its amendments and recalculate its bills for the energy supplied to Distribution Companies of the State / M.P. Power Management Company Ltd. since CoD to 31.03.2014. The petitioner must also provide information to the Commission in support of having complied with this Order. The deficit/surplus amount as a result of this order shall be recovered or passed on to the three Distribution Companies of the state in terms of applicable Regulation in the ratio of energy supplied to them in equal monthly installments during FY 2015-16.
113. With the above directions, the subject petition stands disposed of.

(Alok Gupta)
Member

(A. B. Bajpai)
Member

(Dr. Dev Raj Birdi)
Chairman

Date: 18th November, 2015

Place: Bhopal

Annexure-A

Commission's observation on the petition and the response of the petitioner:

Vide Commission's letter dated 25th June, 2015, the information gaps and discrepancies in the subject petition were communicated to the petitioner. By affidavit dated 20th August, 2015, the petitioner filed its response on the issues raised by the Commission. The issue-wise response filed by the petitioner is as given below:-

Scheduled CoD:

i) **Issue:**

The Environmental clearance for the Project was issued by Ministry of Environment and Forest vide its letter dated 2nd June 1984. The investment approval of the Government of Madhya Pradesh was issued to erstwhile MPSEB vide its letter No. dated 31st July, 1992 for the estimated cost of R 51.06 Crores. As per the PFC loan agreement, the scheduled CoD of the project was October, 2004.

In view of the above, the petitioner is required to inform the scheduled date of commercial operation of the project. The documents in support of the scheduled CoD be also furnished by the petitioner.

MPPGCL's reply:-

The scheduled date of commercial operation of Bansagar-IV, Jhinna Hydrel Power Station was Oct 2004, as mentioned in the PFC loan agreement.

The environmental clearance issued by the Ministry of Environment and Forest, Gol, in June 1984 was for Bansagar Multipurpose Project and Bansagar (Tons) Hydrel Project. Initially Bansagar (Tons) Hydrel Project had three Power Houses having capacities of 3x105 MW (PH-I), 2X15 MW (PH-II) and 3X15 MW (which was later changed to 3X20 MW) (PH-III). Later on, in 1989 it was decided to utilize the releases to be made into CWC (carrying irrigation portion of water releases of M.P. and U.P. share) for generating power. As such separate administrative approval for ₹ 51.06 Crore was accorded by GoMP in 1992 for construction of Bansagar Hydrel Power Station PH-IV (2X10 MW) under Bansagar/ Tons Multipurpose Project based on the techno economic clearance given by CEA in 1991. Since Bansagar PH-IV (2X10 MW) is a part of Bansagar Multipurpose project and being located at the toe of head regulator, it did not involve utilization of any additional land, separate

submergence, rehabilitation, resettlement and forest, etc., and therefore Bansagar-IV, Jhinna HPS did not require a separate environmental and forest clearance.

The commissioning of PH-IV was directly linked to filling of Bansagar Reservoir upto FRL (Full Reservoir Level), i.e. 341.65 m as the MDDL for operation of PH-IV is 329.86 m. Even raising of Bansagar Dam up to the Crest level, i.e., EL 326.4 m did not serve the purpose of making this Power House operative. The work of Bansagar Dam, being carried out by WRD GoMP, remained in idle stage till its being included under AIBP (Accelerated Irrigation Benefit Plan) floated by the central Govt. in 1996. Considering the time taken in land acquisition of submergence area, rehabilitation and resettlement works and completion of related civil works Bansagar Dam was envisaged to be completed by June 2004 and accordingly the Commissioning of the two Units of Power House –IV were scheduled for July 2004 and Oct 2004.

Supporting documents in respect the aforesaid scheduled dates for commercial operation are attached (**Annexure-1**).

Cost overrun due to delay in CoD:

ii) **Issue:**

The petitioner is required to file detailed justification for the time over-run or delay if any, in the CoD of the station along with the supporting documents indicating reasons for delay in commissioning of the project. It needs to explain that the delay in CoD was beyond the control of the petitioner. If the reasons for delay are attributable to the contractor/vendor, all such reasons be informed to the Commission.

MPPGCL's reply:-

As submitted in the reply to item at Sr. No. i) above, the commissioning of Power House-IV was directly linked to completion of Bansagar Dam upto full height and filling of Bansagar Reservoir up to FRL. Due to various constraints on the part of WRD, GoMP which was the agency constructing Bansagar Dam, date of completion of dam was revised from time to time by them and ultimately the gates were erected in June 2006 and thereafter the two Units of Bansagar-IV Jhinna HPS were commissioned after achieving the required water level in the Bansagar Reservoir, in Aug 2006. The delay in COD of the Units was beyond the control of the petitioner, i.e., MPPGCL or the erstwhile MPSEB. The reasons for delay in COD of the Units were also not attributable to the contractor/vendor.

Copies of supporting documents in this regard are attached (**Annexure-2**).

iii) **Issue:**

The petitioner is required to provide the implications on the project capital cost due to time over-run and its consequential effect on the cost over-run with the details of the escalation paid during the period after scheduled CoD to the actual CoD, in different contract packages.

MPPGCL's reply:-

The total completed project cost till FY14 as per audited books of accounts is ₹ 115.81 Crore which is well within the approved project cost estimate of ₹133.10 Crore and hence there is no cost over run due to time over run. However as per the provisions of contract a price escalation of ₹ 49.29 Lakhs was paid to the contractor for civil works of foundation and superstructure of PH-IV for the period after scheduled COD to the actual COD as per the provisions of the contract. However, this has affected COD in no manner.

iv) **Issue:**

With regard to delay in project, the petitioner is required to submit complete details of liquidated damages (LD) if any, recovered from the vendors/contracts.

MPPGCL's reply:-

As submitted in the reply to item at Sr. No. i) above, the delay in achieving COD of the Units was beyond the control of the petitioner (MPPGCL or the erstwhile MPSEB) and neither was it attributable to the contractors/vendors. However, LD/Penalty was deducted from the contractors as per the provisions of the contract and the same have been duly accounted for in the project cost booked in the books of accounts.

*A penalty amounting to ₹ 7.50 Lakhs has been deducted from the bills of different agencies engaged for various civil works pertaining to construction of Bansagar-PH-IV. Further, a penalty amounting to ₹ 2.17 Lakhs is to be deducted from the final bill of M/s Pilot Engineering entrusted with the work of design, fabrication, supply and erection of draft tube gate of PH-IV. A penalty amount of ₹ 1.11 Crore has been levied on the contractors for E&M works. Copies of the supporting documents are attached (**Annexure-3**).*

Capital Cost and additional capitalization:

v) **Issue:**

The project cost of ₹ 51.06 Crores has approved by GoMP. The petitioner has submitted that the actual expenditure of the project as on CoD and as on 31st March, 2014 is ₹ 102.90 Crores and ₹ 115.81 Crores, respectively. This

indicates that actual expenditure has become more than the double of the project cost originally approved for the project.

Therefore, the petitioner is required to file component-wise details of the estimated project cost originally approved by GoMP vis-a-vis the actual project cost as on 31st March, 2014 by giving the reasons for increase in cost of each component.

MPPGCL's reply:-

As submitted in the reply to item at Sr. No. i) above, the operation of Bansagar-IV, Jhinna HPS (2X10 MW) was directly linked to filling of Bansagar Reservoir up to full height. It is further to submit that the activities for raising of Bansagar Dam got momentum only after it was included in AIBP scheme of Gol. The Dam was raised up to the Crest height, i.e. EL 326.40 m, in June 2000. Thus looking to the progress of Bansagar Dam thrust on execution of Bansagar PH-IV was given only after June 2000. Therefore, the cost of Bansagar PH-IV was re-estimated to ₹ 133.10 Crore which was subsequently sanctioned by GoMP vide letter dated 17/12/2002 (Please refer Annexure-5 on page 93 of the Petition).

The actual cost of installation of Bansagar PH-IV as per the audited books of accounts of MPPGCL, as against the revised estimated cost of ₹ 133.10 Crore, is ₹ 115.81 Crore which is well within the approved revised cost estimate. The reason for rise in cost estimate for installation of Bansagar PH-IV to ₹ 133.10 Crore (prepared on March 2002 price level basis) was mainly attributed to the rise in cost of labor, material, etc., against the earlier estimated approved project cost of ₹ 51.06 Crore, which was assessed on Sep 1990 price levels.

An explanation regarding the difficulty being faced by MPPGCL in submitting the project cost break up as per the recent formats specified by the Commission is given in attached **Annexure-4**. However, a broad break up of revised approved project cost estimate of ₹ 133.10 Crore vis-à-vis the original approved project cost estimate of ₹ 51.06 Crore and the total project cost as per actual execution and booked in the books of accounts, as on COD and till March 2014 is given in the table below:-

(Amount in Cr. Rs.)

S. No.	Particulars	Original Project Cost Estimate approved by GoMP in July 1992	Revised Project Cost Estimate approved by GoMP in Dec 2002	Project Cost as per Audited Books of A/c	
				As on COD	As on 31/03/2014
1	Civil Works	13.93	34.32		
2	E&M works	27.95	71.04		

3	IDC	9.18	27.74		
	Total	51.06	133.10	102.90	115.81

vi) **Issue:**

The following is the break-up of project cost provisionally admitted by the Commission in provisional tariff order:

Particular	Expenditure as on CoD (Rs Crores)
E&M Work	33.59
Civil Works	54.31
IDC	9.28
Total	97.18

The petitioner is required to file the same break-up of the actual cost incurred on the project as on CoD and as on 31st March, 2014, based on the Audited Accounts.

MPPGCL's reply:-

As humbly submitted in reply to the item v) above MPPGCL is not able to file the details in the format desired by the Commission for the reasons explained in Annexure-4. However, the total project cost of Jhinna HPS (2X10 MW) as on the Station COD and as on 31/03/2014, based on the audited accounts of MPPGCL, are as given in the table in item v) above. The same may kindly be referred to.

vii) **Issue:**

The petitioner had filed the Assets-cum-Depreciation register for Jhinna HPS for the period FY2006-07 to FY2010-11 with the earlier MYT petition. The petitioner is required to file the Assets-cum-Depreciation register for FY2011-12 to FY 2013-14 also for this power station.

MPPGCL's reply:-

*The updated Asset-cum-Depreciation registers for Bansagar-IV, Jhinna HPS for the period FY 2006-07 to FY 2013-14 are attached herewith (**Annexure-7**).*

viii) **Issue:**

On perusal of the Assets-cum-Depreciation register, it is observed that the figures of opening GFA, assets addition during the year and closing GFA filed in the petition are not matching with the figures in Assets-cum-Depreciation Register. The petitioner is required to reconcile these figures & rectify the aforesaid discrepancy.

MPPGCL's reply:-

The updated and reconciled Asset-cum-Depreciation registers for Bansagar-IV, Jhinna HPS for the period FY 2006-07 to FY 2013-14 are attached (Annexure-7).

ix) **Issue:**

The petitioner is required to submit the copy of work orders awarded to vendors for Civil Work, Plant and Machinery and other major works in the project.

MPPGCL's reply:-

As desired, photocopy of the work orders awarded to vendors for Civil Work, Plant and Machinery and other major works in the project are attached (Annexure-8).

x) **Issue:**

The petitioner has claimed additional capitalization during FY 2006-07 to FY 2013-14 mentioning that the works added under additional capitalization were under the original scope of work. The petitioner is required to establish its aforesaid contention and furnish the Detailed Project Reports of the project along with the details regarding original scope of work so that the assets capitalized as on CoD and also works added under additional capitalization be identified in the aforesaid documents.

MPPGCL's reply:-

As desired, a copy of the DPR, updated in Aug 1991, is enclosed (Annexure-9). The scope of work has been defined in the DPR. As already submitted in the Petition, all the works completed up to COD and the additional capitalization subsequent to COD are as per the original scope of work only.

xi) **Issue:**

With regard to the additional capitalization claimed in the petition, the petitioner is required to submit the following details :

- a) **Whether the assets added are new or replacement of some old assets?**
- b) **Approval if any, accorded by the competent authority for add. Cap.**
- c) **Whether the addition of asset, is on account of the reasons under (a) to (f) of clause 19 of the MPERC (Terms and Conditions for determination of generation tariff) Regulations, 2005?**

MPPGCL's reply:-

- d) *All the assets added are new and as per the original scope of work.*

- e) *No separate approval was required for additional capital expenditure since all the additional capital expenditure was on account of works as per original scope of work approved by the GoMP vide approval accorded in 2002.*
- f) *The addition of assets, is on account of the reasons under (a) to (f) of clause 19 of the MPERC (Terms and Conditions for determination of generation tariff) Regulations, 2005.*

xii) **Issue:**

The petitioner has submitted the details of capital cost for the project as on COD and year wise additional capitalization as on 31/03/2014 as per Audited Accounts of the company. The Annual Audited Accounts of MPPGCL are for the Company as a whole and it is difficult to substantiate the assets capitalized for the Jhinna hydro power project. The petitioner is required to submit the year-wise and power station wise detailed break-up of Gross Fixed Assets, CWIP and asset additions with respect to Audited Account of the respective years related to the subject project in the consolidated audited accounts of the company as a whole for each financial year relevant to the subject petition.

MPPGCL's reply:-

*As desired, the year-wise and power station wise detailed break-up of Gross Fixed Assets, CWIP and asset additions with respect to Audited Accounts of the respective Years related to the subject project in the consolidated audited accounts of the company as a whole for each financial year relevant to the subject petition are attached (**Annexure-10**).*

Interest during Construction:

xiii) **Issue:**

As per the Techno Economic Clearance issued by CEA, the estimated project cost was Rs. 51.06 Crores including ₹ 9.18 Crores of IDC. The petitioner is required to explain the reasons for increase in IDC & FC.

MPPGCL's reply:-

As humbly submitted in the reply to item at Sr. No. i), the operation of this Power House was directly linked to filling of Bansagar Reservoir up to full height. It is further to submit that activities for raising of Bansagar Dam got momentum only after it was included in the AIBP Scheme of Gol. The Dam was raised up to the Crest height, i.e. EL 326.40 m, in June 2000. Thus looking to the progress of Bansagar Dam, thrust on execution of Power House – IV was given only after June 2000. Therefore, cost of Power House –IV was re-estimated to ₹ 133.10 Crore (including IDC amount of ₹ 27.74 Crore) and the revised project cost was sanctioned by GoMP vide letter dated

17/12/2002. The actual total cost of installation of Power House–IV against the revised estimated cost of ₹ 133.10 Crore is ₹ 115.81 Crore, till FY14, and is well within the approved revised cost estimate. The reason for rise in the revised project cost estimate for installation of Power House -IV (prepared on March 2002 price levels) was mainly attributed to the rise in cost of labour, material , etc., against the cost of ₹ 51.06 Crore (including IDC amount of ₹ 9.18 Crore) assessed on Sep 1990 price levels. The IDC on PFC loan as on COD is ₹ 11.14 Crore only which is well within the approved IDC amount of ₹ 27.74 Crore in the revised approved project cost estimate of ₹ 133.10 Crore. As such, there is no increase in IDC & FC on PFC loan as against the corresponding figure in the approved revised project cost estimate. However, due to the reasons explained in Annexure-4, MPPGCL is not in a position to identify the net impact on IDC & FC.

xiv) **Issue:**

The impact on IDC due to time over run from the scheduled CoD to the actual CoD along with phasing of expenditure as per scheduled CoD and phasing of actual expenditure incurred on the project be filed by the petitioner.

MPPGCL's reply:-

The IDC on PFC loan as on COD is ₹ 11.14 Crore only which is well within the approved IDC amount of ₹ 27.74 Crore in the approved project cost estimate of ₹ 133.10 Crore. As such there is no impact on IDC on PFC loan due to time over run. However, as submitted in reply to item xiii) above, due to the reasons explained in Annexure-4, the net impact on IDC due to change in COD cannot be identified.

xv) **Issue:**

Details of the IDC calculation along with its soft copy in respect of interest up to CoD of unit(s) showing interest amount along with applicable rate of interest and financial charges be filed by the petitioner.

MPPGCL's reply:-

*Details of the IDC calculation along with its soft copy in respect of interest up to COD of units showing interest amount and financial charges are attached (**Annexure-11**). The applicable rates of interest have been submitted in the Annexure-6 attached with the petition and the same are also indicated in the detailed calculations for working out the Year wise weighted average rates of interest attached herewith (**Annexure-12**).*

Tariff filing Formats:

xvi) **Issue:**

The petitioner has not filed the full details in Form HPS-5B regarding the break-up of capital cost of hydro power project. The petitioner is required to file the Form HPS-5B with complete details like original project cost (initially approved) for the project, revision of project cost at different points of time, actual project cost, liability and the variance in project cost with the reasons of variance in this regard.

MPPGCL's reply:-

Form HPS-5B has been filed in the Petition; however the same is not as per the format prescribed by MPERC. This is so because the details in the instant petition have been filed as per the audited books of accounts of MPPGCL. Bookings in various account heads of the books of accounts of MPPGCL do not directly map/match to the list of items as per Form HPS-5B prescribed by the Commission. As such it is difficult to present the project cost details as captured in the audited books of accounts in the prescribed Form HPS-5B. Moreover, the submission made in Annexure-4 attached herewith may also be kindly referred to, wherein the difficulty being faced by MPPGCL in submitting the project cost break up as per the formats specified by the Hon'ble Commission have been explained.

In the context, it is humbly submitted that MPPGCL had earlier also filed final tariff petitions in respect of its other projects, such as 210 MW ATPS Extn. Unit No. 5, 500 MW SGTPS Extn. Unit No. 5, etc., based on the audited books of accounts. In those petitions also the details in Form 5B were filed as per the details maintained in the books of accounts of MPPGCL and were not in the format of Form 5B. Appreciating the genuine difficulty, the Hon'ble Commission had kindly considered the same and had determined final tariff for those projects based on the submissions made by MPPGCL in corresponding petitions. It is, therefore, humbly requested to kindly consider the submissions made in Form HPS-5B in the instant petition based on the figures appearing in the audited books of accounts of MPPGCL.

xvii) **Issue:**

The petitioner has not filed the Form HPS 5C relating to break-up of capital cost for plant and equipment of the project. Detailed break-up of the capital cost as per format be filed by the petitioner.

MPPGCL's reply:-

It is humbly submitted that the project cost details in respect of Bansagar-IV, Jhinna HPS (2X10 MW) have been submitted in Form HPS-5B filed in the Petition on the basis of figures appearing in the audited books of accounts of MPPGCL, although the same is not as per the format prescribed by MPERC. This is so because, the

bookings under various account heads in the books of accounts of MPPGCL do not directly map/match to the list of items as per Form HPS-5B or HPS-5C prescribed by the Commission. As such it is difficult to present the project cost details as captured in the audited books of accounts exactly in the Form HPS-5B and Form HPS-5C. MPPGCL, is therefore, not in a position to submit further details in Form HPS-5C (Break up of Capital Cost for Plant & Equipment) apart from those already submitted in form HPS-5B with the petition. It is, therefore, humbly requested to kindly accept the project cost details submitted in Form HPS-5B as per the audited books of accounts and not insist for submission of Form HPS-5C separately.

xviii) **Issue:**

The petitioner has not filed the Form HPS 5D relating to Construction/Supply/Service packages. Detailed break-up of all works covered under Construction/Supply/Service packages of the project in form HPS 5D be submitted.

MPPGCL's reply:-

As submitted in attached Annexure-4, even if the form HPS-5D is derived from the order copies based on best efforts, it will not match with the project cost as certified in the books of accounts. Therefore, submission of the same may kindly be exempted.

However, copies of the orders for Construction/ Supply/ Service packages as far as available are attached herewith (Annexure-8).

xix) **Issue:**

In form HPS 14 regarding draw down schedule for calculation of IDC, the details of quarterly infusion of equity are not indicated. The petitioner is required to file the same.

MPPGCL's reply:-

It is humbly submitted that the details of equity infusion in the project, as far as available, have already been submitted in the Petition in Form HPS-16 and on page 24 of the Petition.

GoMP has provided opening equity of ₹ 1915.08 Crore in final opening balance sheet. The Hon'ble Commission has considered the figure in its True Up Order for FY 2007-2008 (Annexure-13). Out of this amount of ₹ 1915.08 Crore the Commission has considered equity of ₹ 1544.90 Crore in the projects under Commercial Operation and balance equity of ₹ 370.18 Crore was considered part of CWIP (Annexure-14). Funding of equity up to COD may kindly be considered as part of this amount of ₹ 370.18 Crore. It is pertinent to mention that the opening

equity was provided by GoMP on lump sum basis and allocation was considered by Hon'ble Commission, therefore the breakup for the period prior to COD may not be possible. It is, therefore, requested to kindly consider the same.

Depreciation:

xx)

Issue:

The rate of depreciation filed by the petitioner is appearing on higher side. Further, the weighted average rate of depreciation filed in the petition is not matching with the rate mentioned in the assets-cum-depreciation register. The petitioner is required to file the reasons for higher rate of depreciation claimed in the petition.

MPPGCL's reply:-

The weighted average rates of depreciation as filed in the Petition have been arrived at as per the provisions of the applicable MPERC Tariff Regulations for the respective control periods. It is humbly requested to kindly refer the updated Asset-cum-Depreciation Registers for Bansagar-IV, Jhinna HPS for the period FY 2006-07 to FY 2013-14 attached herewith (Annexure-7). The Year wise weighted average rates of depreciation indicated therein are almost same as those filed in the subject petition, except those for FY07 and FY08. Reasons for differences in the figures for FY07 and FY08 are as given below:

For FY 2006-2007:

Although the assets of Bansagar-IV Jhinna HPS (2X10 MW) were put into commercial operation w.e.f. 30/08/2016, these assets were capitalized in the Books of Accounts at the end of the financial year, i.e., on 31/03/2007, as per the then prevailing practice for capitalization of assets.

In the subject Petition, the weighted average rate of depreciation as on COD (2.43%) has been determined in accordance to MPERC Tariff Regulations 2005 and is based on the total value of assets put to use as on COD, i.e., ₹ 102.90 Crore. This weighted average rate of depreciation (2.43%) has been used for arriving at the depreciation amounts for the period FY07, FY08 and FY09, as per Regulations 2005.

However, as detailed in Annexure-11 filed with the Petition, out of the total value of assets of ₹ 102.90 Crore as on COD an amount of Rs 0.078 Crore only was booked under the account head of Fixed Assets as on the COD and the balance amount of ₹ 102.83 Crore was appearing under the account head of Capital Works in Progress.

In the Asset cum Depreciation Register of Bansagar IV, Jhinna HPS (2X10 MW) for FY07 the weighted average rate of depreciation, i.e. 0.0004%, has been worked out on the basis of date of capitalization of assets in the Books of Accounts, which is 31/03/2007 in the instant case. Accordingly, the aforesaid difference in weighted average depreciation rate indicated in the Assets cum Depreciation Register and that filed in the Petition is on account of capitalization of assets at the end of the financial year (i.e. on 31/03/2007) in the books of accounts even though the assets were already put to use as on COD (i.e. on 30/08/2006).

For FY 07-08:

As submitted above, MPPGCL in the subject tariff petition has worked out the weighted average rate of Depreciation of 2.43% as on station COD based on the capital cost up to COD, in accordance to the provisions of MPERC Tariff Regulations 2005. The above rate of depreciation has been considered for FY07, FY08 & FY09 for calculating the depreciation amounts for these Years.

However, in the Asset-cum-Depreciation Register for FY08 the weighted average rate of depreciation (i.e., 2.28%) has been calculated based on day basis considering the date of capitalization of respective assets in the Books of Accounts. As such, there is a minor difference of 0.15%, in the rate of depreciation considered in the petition for FY08 and that indicated in the Asset cum Depreciation Register for FY 08.

xxi) **Issue:**

The petitioner has claimed the Advance Against Depreciation (AAD) for the period FY2006-07 to FY2008-09. The petitioner is required to justify its claim in light of the applicable Regulations.

MPPGCL's reply:-

MPPGCL has claimed the Advance Against Depreciation (AAD) for the period FY 2006-07 to FY 2008-09 in accordance with the clause 2.20 under Regulation 23 of MPERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2005 (G-26 of 2005). Detailed calculations for the AAD claimed in the petition have been submitted in Table 6.6.2 on page 33 of the Petition.

Interest and finance charges:

xxii) **Issue:**

Detailed calculations for working out the weighted average rate of interest for Bansagar-IV (Jhinna) project from FY 2006 to FY 2014 be filed with supporting documents.

MPPGCL's reply:-

As desired, the documents giving detailed calculations for working out the weighted average rates of interest for Bansagar-IV (Jhinna) project from FY 2006 to FY 2014 are attached (Annexure-12).

xxiii) **Issue:**

With regard to the actual repayment, the petitioner is required to explain with all supporting documents that how the repayment on loan has been arrived at and considered till March, 2009.

MPPGCL's reply:-

The repayment on PFC loan till March 2009 has been arrived at and considered as per the quarterly demands raised by M/s PFC. Details regarding quarter wise repayments made to M/s PFC are attached herewith along with copies of the supporting PFC documents (**Annexure-15**).

xxiv) **Issue:**

The petitioner has filed the interest on excess equity. Detailed calculations be filed in this regard.

MPPGCL's reply:-

It is humbly submitted that detailed calculations in respect of interest on excess equity filed in the Petition has already been submitted in Table 4.7.2 on page no. 27 of the Petition. The same is reproduced herewith for kind reference please:-

Interest On Excess Equity Considered As Loan: (Amount in Cr. ₹)

Particulars	FY07	FY08	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14
Gross Excess Equity as on beginning of Year/ at COD	11.27	12.28	14.64	15.62	17.01	17.10	17.14	17.17
Cumulative repayment of excess equity till beginning of the Year/As on COD	0.00	1.13	2.35	3.82	3.82	3.82	3.82	3.82
Net Excess Equity at the beginning of the Year/As on COD	11.27	11.15	12.29	11.80	13.19	13.28	13.32	13.35
Repayment Installment for Excess Equity for the Year	1.13	1.23	1.46	0.00	0.00	0.00	0.00	0.00
Additional Excess Equity deployed during the Year	1.01	2.37	0.98	1.39	0.09	0.04	0.03	0.00

Net Excess Equity at the End of the Year	11.15	12.29	11.80	13.19	13.28	13.32	13.35	13.35
Average Excess Equity for the Year	11.21	11.72	12.05	12.50	13.24	13.30	13.33	13.35
Weighted Av, Rate of Intt. (%) for Normative Interest	9.37%	9.46%	9.46%	11.34%	12.10%	12.10%	12.10%	12.10%
Annual Intt. On Excess Equity	1.05	1.11	1.14	1.42	1.60	1.61	1.61	1.62
Days of operation in the Year	214	366	365	365	365	366	365	365
Total Intt. on Excess Equity for days in operation	0.62	1.11	1.14	1.42	1.60	1.61	1.61	1.62

Non-tariff income:

xxv) **Issue:**

Income from other sources reflected in audited books of accounts is for MPPGCL as whole. The Power station wise detailed break-up of the various components of income from other sources for FY 2013-14 duly reconciled with the Annual Audited Accounts for FY 2013-14 be filed.

MPPGCL's reply:-

The Power station wise detailed break-up of various components of income from other sources for FY 2013-14 duly reconciled with the Annual Audited Accounts for FY 2013-14 is attached (**Annexure-16**).

Details regarding capacity index and PAF:

xxvi) **Issue:**

Details of monthly and yearly actual Capacity Index for the project since CoD to 31st March, 2009 duly certified by SLDC be submitted in accordance with the Regulations, 2005.

MPPGCL's reply:-

Details of monthly and yearly actual Capacity Index for the project since CoD to 31st March, 2009 are attached herewith along with supporting documents issued by SLDC (**Annexure-17**).

xxvii) **Issue:**

Details of monthly and yearly actual Plant Availability Factor of the Bansagar-IV (Jhinna) project for the period April, 2009 to March, 2014 duly certified by SLDC be submitted.

MPPGCL's reply:-

*Details of monthly and yearly actual Plant Availability Factor of the Bansagar-IV (Jhinna) project for the period April 2009 to March 2014 as certified by SLDC are attached herewith along with supporting documents (**Annexure-17**).*

On scrutiny of the above-mentioned response filed by the petitioner, it was observed that the response of the petitioner on certain core issues was either inadequate or needs clarity. Vide letter dated 2nd September, 2015, the observations of the Commission on all such issues were communicated to the petitioner seeking its reply by 24th September, 2015. Vide letter dated 24th September, 2015, the petitioner filed its response along with the supporting documents. The issue-wise response filed by the petitioner is as given below:-

i. Issue:

It is informed that the following amount has been deducted from the bills of different agencies engaged for project works:

- a. **The penalty of ₹ 7.50 Lakhs has been deducted from the bills of different agencies engaged for various civil works.**
- b. **The penalty of ₹ 2.17 Lakhs is to be deducted from the final bill of M/s Pilot Engineering entrusted with the work of design, fabrication, supply and erection of draft tube gate of PH-IV.**
- c. **The penalty amount of ₹ 1.11 Crore has been levied on the contractors for E&M works.**

In view of the above, the petitioner is required to confirm whether the aforesaid penalties have been duly considered in the project cost claimed in the petition.

MPPGCL's submission:-

In respect of the submission made earlier regarding penalty amounts deducted from the bills of different contractors/agencies, it is humbly submitted that on further review of the records for Bansagar-IV Jhinna HPS it has been found that major amount of the penalties deducted from the bills of E&M contractor, M/s BHEL, has been refunded to them on account of approval of extension in delivery date up to

31/07/2006 without levy of L.D./Penalty granted vide BOD MPPGCL's resolution passed in the 28th meeting held on 19/05/2007.

It is, however, humbly submitted that the exact position regarding whether the penalty amounts finally deducted from various contractor's bills have been duly considered in the project cost claimed in the petition shall be submitted shortly after a comprehensive review of the old records related to the project, which is taking some time. The same may kindly be permitted.

Issue:

- ii. **On scrutiny of the details of capital cost and year-wise additional capitalization, it is observed that the year-wise assets capitalized as per Annual Audited Accounts from CoD to FY 2013-14 are not matching with the figures filed in the petition. Therefore, the reasons for the difference in the figures of capital cost and additional capitalization filed in the petition vis-à-vis recorded in Annual Audited Accounts of the respective years be submitted.**

MPPGCL's submission:-

As humbly submitted in the Petition, MPPGCL has done due diligence of expenditure done in MPPGCL period on this project. In this process, voucher wise verification of expenditure was done in consultation with respective divisions. During this process it was noticed that some amounts which were spent on Bansagar PH-I, II & III have been booked in PH-IV. These amounts have not been claimed in the petitions filed by the Petitioner for those power stations and neither have they been claimed in the True up Petition for FY14. Accordingly, the accounts of Bansagar-IV, Jhinna, HPS was corrected with respect to the previous submissions made and the project cost of Bansagar-IV, Jhinna HPS has got finally revised to ₹ 102.90 Crore as on Station COD and to ₹ 115.81 Crore up to 31/03/2014. In view of this, MPPGCL has humbly submitted in the Petition filed before the Hon'ble Commission to kindly consider the total Project cost of Bansagar-IV, Jhinna HPS (2X10 MW) as ₹ 115.81 Crore, to kindly permit capitalization of the remaining expenses with the other respective power stations of Bansagar complex and to kindly allow to submit the capitalization of the remaining expenses with the other respective power stations of Bansagar complex before Hon'ble Commission in the True up Petition for FY15.

The year-wise assets capitalized as per annual audited accounts from CoD to FY 2013-14 available earlier with the Hon'ble Commission are, therefore, not matching with the figures filed in the petition. However, MPPGCL has filed the revised year wise project cost figures wef 01/06/2005 (date of opening balance sheet provided by

MPSEB) to 31/03/2014 in Annexure-11 filed with the Petition dated 14/05/2015. Further, the updated Asset-cum-Depreciation registers for Bansagar-IV, Jhinna HPS for the period FY 2006-07 to FY 2013-14 have also been submitted as Annexure-7 to the additional submission dated 20/08/2015. The same may kindly be considered please.

iii. Issue:

It is informed that the CoD of the Units of Jhinna HPS has been delayed by 2 years approx. The petitioner is required to file the details of IDC, if any, increased due to delay in Commissioning of the project.

MPPGCL's submission:-

As humbly submitted in MPPGCL's reply at item Sr.No. xiv) in the additional submission dated 20/08/2015, the IDC on PFC loan as on COD is ₹ 11.14 Crore which is well within the IDC amount of ₹ 27.74 Crore in the approved project cost estimate of ₹ 133.10 Crore. As such there is no impact on IDC on PFC loan due to time over run. However, as submitted in reply to item xiii) in the additional submission dated

20/08/2015, due to the reasons explained in Annexure-4 attached therein, the net impact on IDC due to change in COD cannot be identified. It is further to submit that in the submission dated 20/08/2015 it has also been submitted that there was no delay in achieving COD of the Units which was attributable to MPPGCL or its agencies engaged for the same.

In respect to the aforesaid submission on issue No. 1, By affidavit dated 5th November, 2015, the petitioner filed its final position on penalty/LD deducted from contractors as follows:

In respect of the submission made earlier regarding penalty amounts deducted from the bills of different contractors/agencies, it is humbly submitted that on further review of the records for Bansagar-IV Jhinna HPS it has been found that major amount of the penalties deducted from the bills of E&M contractor, M/s BHEL, has been refunded to them on account of approval of extension in delivery date up to 31/07/2006 without levy of L.D./Penalty granted vide BOD MPPGCL's resolution passed in the 28th meeting held on 19/05/2007 (**Annexure-1**).

The exact position regarding L.D./Penalty amounts finally deducted from the bills of Civil and E&M contractors is as given in table below:

Details of Penalty Deducted/Refunded from Contractor's Bills					
<i>(Amount in Lakh ₹)</i>					
SN	Particulars	Penalty Amount Deducted	Penalty Amount Refunded	Net Amount of Penalty Deducted	Balance Penalty amount yet to be to Deducted
		(A)	(B)	(A-B)	(C)
1	E&M Contracts	113.01	98.29	14.72	
2	Civil Contracts	7.50		7.50	2.17
	Total	120.51	98.29	22.22	2.17

Supporting statements in this regard are attached herewith (**Annexure-2** and **Annexure-3**). The net penalty amounts finally deducted from various contractors' bills have been booked as non-tariff income.