CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition No. 156/GT/2013

Coram:
Shri Gireesh B. Pradhan, Chairperson
Shri A.K.Singhal, Member
Shri A.S. Bakshi, Member

Date of Hearing: 05.03.2015
Date of Order: 04.02.2016

In the matter of

Approval of generation tariff of Uri-II Hydroelectric Project (4 x 60 MW) for the period from 11.10.2013 to 31.3.2014

And

In the matter of

NHPC Limited
NHPC Office Complex,
Sector-33, Faridabad,
Haryana-121003 **…Petitioner**

Vs

1. Power Development Department
Government of J&K,
New Secretariat, Jammu – 180 001

2. Haryana Power Purchase Centre,
Shakti Bhawan, Sector 6,
Panchkula – 134 109

3. Punjab State Power Corporation Ltd
The Mall, Secretariat Complex,
Patiala – 147 001

4. Uttar Pradesh Power Corporation Ltd
Shakti Bhawan, 14, Ashok Road,
Lucknow – 226 001

5. BSES Rajdhani Power Ltd
BSES Bhawan, Nehru Place,
New Delhi – 110 019

6. BSES Yamuna Power Ltd
BSES Bhawan, Nehru Place,
New Delhi – 110 019

7. Tata Power Delhi Distribution Ltd
33 KV Sub-station, Hudson Lane, Kingsway Camp,
New Delhi – 110 009

8. Rajasthan Rajya Vidyut Prasaran Nigam Ltd
Vidyut Bhawan, Janpath,
Jaipur – 302 205

9. Jaipur Vidyut Vitran Nigam Ltd
Vidyut Bhawan, Janpath,
Jaipur – 302 205

10. Jodhpur Vidyut Vitran Nigam Ltd
New Power House, Industrial Area,
Jodhpur – 342 003

11. Ajmer Vidyut Vitran Nigam Ltd
Old Power House, Hatthi Bhatta,
Jaipur Road, Ajmer – 305 001

12. Uttrakhand Power Corporation Ltd
Urja Bhawan, Kanwali Road,
Dehradun – 248 001

13. Engineering Department,
Union Territory of Chandigarh, Sector 9D,
Chandigarh – 160 009 **…Respondents**

Parties present:

Shri A. K. Pandey, NHPC
Shri S.K. Meena, NHPC
Shri C. Mohan, NHPC
Shri Piyush Kumar, NHPC
Shri R. B. Sharma, Advocate, BRPL

ORDER

Background

This petition has been filed by the petitioner, NHPC Ltd, a generating company owned and controlled by the Central Government, for determination of tariff in respect of its Uri–II Hydroelectric Project (4 x 60 MW) (the generating station) from the anticipated date of commercial operation (i.e 1.12.2011) to 31.3.2014 based on the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009 ('the 2009 Tariff Regulations').

2. The generating station is a purely a run-of-the-river type project, with no diurnal pondage for peaking, with provision of 10% overloading on continuous basis. The project was sanctioned by the Central Government on 1.9.2005 at a cost of ₹172479 lakh, including IDC and FC of ₹6661 lakh at February 2005 price level, with scheduled date of completion in 51 months from the date of approval.

3. The generating station was originally scheduled to be commissioned by November, 2009. The date of commercial operation was however revised to 1.12.2011. The petitioner filed Interlocutory Application on 1.1.2013 (I.A No 1/2013) with revised tariff filing forms based on the revised anticipated date of commercial operation (COD) as on 1.2.2013 and submitted that the generating station could not be declared commercially operational on 1.12.2011 due to occurrence of heavy floods during September, 2011 and local unrest by land oustees during March, 2012 to June, 2012, which delayed the project construction work. It has also submitted that the capital cost of the project as on revised anticipated COD is ₹209461 lakh, excluding un-discharged liability of ₹7795 lakh.

4. The actual date of commercial operation of the units and the generating station are as under:

Unit-I	11.10.2013
Unit-II	1.12.2013
Unit-III	11.10.2013
Unit-IV / Generating station	1.3.2014

5. The petitioner vide affidavit dated 4.10.2013 had submitted that the audited capital expenditure of ₹203980.66 lakh incurred as per books of accounts as on 30.6.2013, includes CWIP amounting to ₹196470 lakh. Accordingly, in line with the methodology adopted in other orders and based on the submissions of the petitioner vide affidavit dated 4.10.2013, the Commission vide its order dated 14.2.2014 has granted interim tariff of the generating station considering 85% of the capital cost of as on 30.6.2013, subject to the determination of final tariff of the generating station based on the RCE approved by the Central Government and the recommendations of the Designated Independent Agency (DIA) on the vetting of capital cost of the generating station.

6. The capital cost allowed for the purpose of interim tariff for 2013-14, after adjustment of liabilities, in order dated 14.2.2014 is as under:

(₹ in lakh)

Capital cost as per Balance Sheet as on 30.6.2013	203980.66
Less: Liabilities as per Balance Sheet	5358.62
Total Capital cost (for all 4 units)	198622.04
Capital cost for interim tariff for 4 units (85% of the total capital cost)	168828.74
Capital cost for interim tariff for 3 units (75% of capital cost considered for	126621.55

provisional tariff of 4 units)	
Capital cost for interim tariff for 2 units (50% of capital cost considered for provisional tariff of 4 units)	84414.37

7. The apportioned capital cost as on COD of each unit allowed by the said order dated 14.20.2014 is as under:

(₹ in lakh)

COD of Unit-I & Unit-III (11.10.2013) (two units)	COD of Unit-II (1.12.2013) (three units)	COD of Unit-IV (31.3.2012) (anticipated) (all four units)
84414.37	**126621.55**	**168828.74**

8. The Commission while granting interim tariff for the generating station vide order dated 14.2.2014 has observed as under:

> *"16. As stated, RCE on completion of the project is yet to be submitted by the petitioner to the Govt. of India for approval. The project involves time overrun of about 46 months (as on COD of two units) and cost overrun of ₹49835 lakh and the 'Appraisal Report on completion cost of the project' duly vetted by the designated agency is yet to be submitted to the Commission. The petitioner has submitted detailed justification / reasons for time & cost overrun of the project and same will be considered at the time of determination of final tariff of the project, along with approved RCE by the Central Government and appraisal report on the capital cost of the generating station as vetted by the designated independent agency along with its recommendations, to be submitted by the petitioner."*

9. The petitioner vide affidavit dated 13.8.2014 has amended the petition and has revised the annual fixed charges of the generating station for the period from 2013-14 (11.10.2013 to 31.3.2014) based on the capital expenditure incurred up to the COD of the respective units, duly certified by the auditors and the actual additional capital from COD of generating station till 31.3.2014. It has also submitted that determination of tariff has been necessitated as the project has been declared under commercial operation and the accounts for the period 2013-14 has been finalized by the statutory auditors. As regards Revised Cost Estimate (RCE), the petitioner has submitted that the RCE in respect of the generating station which was submitted to the MOP, GOI had been returned on 9.10.2012 with a direction to the petitioner to update the completion cost, so that the RCE is approved only once to avoid repeated examination. Accordingly, the petitioner has submitted that the RCE of the project based on the completion cost of ₹2290.02 crore has been submitted to the MOP, GOI for approval.

10. The annual fixed charges claimed by the petitioner vide affidavit dated 13.8.2014 is summarized as under:

Units	Period	Amount *(₹in lakh)*
Units - I & III	11.10.2013 to 30.11.2013	3800.84
Units - I to III	1.12.2013 to 28.2.2014	9464.22
Units - I to IV	1.3.2014 to 31.3.2014	3799.98
	Total	**17065.04**

11. During the hearing on 5.3.2015, the petitioner has pointed out that the DIA report dated 14.8.2014 on the Vetting of capital cost of the project had been filed on 19.8.2014 and copies of the said report have been served on the respondents. The Commission after hearing the parties, reserved its order in the petition after directing the petitioner to submit additional information / documents on the following:

> *"(i) Approval of the Board of Directors of the NHPC for the RCE submitted to Ministry of Power, Government of India during July, 2014.*
>
> *(ii) Interest on normative loan amounting to ₹3.23 crore has been claimed during the period from 2001-02 to 2004-05. Copy of the PIB note submitted to the Central Government for the original sanction dated 1.9.2005 along with details and justification of the activities for which funds were deployed since 2001-02 to the project sanction dated (1.9.2005).*
>
> *(iii) Correspondences made by NHPC with the Central Government as regards the IDC quoted in original CCEA approval and the IDC & FC amount considered in the RCE for ₹2290.02 crore.*
>
> *(iv) Reconciliation statement clarifying the difference between the capital cost recommended by DIA for ₹2146.85 crore as on COD (1.3.2014) and the gross block position as per balance sheet of ₹2113.21 crore as on 31.3.2014."*

12. The petitioner vide affidavits dated 8.4.2015 and 22.7.2015 has filed the additional information as sought for by the Commission and has served copies of the same on the respondents. Reply to the petition has been filed by the respondents, PSPCL, UPPCL and BRPL and the petitioner has filed its rejoinder to the said replies. Based on the submissions of the parties and the documents available on record we now proceed to determine the tariff of the generating station as stated in the subsequent paragraphs.

Capital Cost

13. The project was originally sanctioned by Govt. of India on 1.9.2005 at the cost of ₹1724.79 crore including IDC & FC of ₹66.61 crore at February, 2005 Price level, with the completion schedule of 51 months i.e by 30.11.2009. This works out to ₹7.19 crore/MW.

14. As stated, the petitioner, in terms of the direction of the MOP, GOI had submitted the RCE for approval of MOP, GOI based on the completion cost of ₹2290.02 crore including IDC & FC of

₹386.31 crore at February, 2014 Price Level, on 30.7.2014, and the same is pending. The petitioner has also submitted that the contingent liabilities for ₹1190.19 crore as on 31.3.2014 has not been considered in the RCE as the same is subjudice/arbitration /pending with statutory authorities. As against the completion cost of ₹2290.02 crore recommended by the CEA to the MOP, GOI for approval, the petitioner, in the petition has claimed the capital cost of ₹2179.56 crore. The DIA in its report dated 14.8.2014 has recommended the capital cost of ₹2146.85 crore for the generating station. The Board of Directors of the Petitioner Company in its 385th meeting held on 29.6.2015 has approved the capital cost of ₹2290.02 crore and the same has been submitted by the petitioner vide affidavit dated 22.7.2015, in terms of the directions of the Commission.

15. The respondent, BRPL in its reply dated 16.9.2013 has submitted that since, the RCE is under approval and would take some time, the tariff for the project may be limited to the approved estimate cost of ₹1724.79 crore including IDC and FC. It has also submitted that the Commission has adopted this principle while determining the tariff of Teesta HEP Stage-V of the petitioner by limiting the tariff to the sanctioned capital cost in order dated 5.1.2010. The respondent has further submitted that the tariff so determined shall be trued up as and when the competent authority approves the RCE of this project. The respondent has also stated that since the details of time and cost overrun are appraised by PIB and CCEA while according approval to the RCE, it is important for the Commission to wait for determination of final tariff after having the benefits of such a report on time and cost overrun and RCE. It has further pointed out that no purpose would be served on the DIA report on vetting of capital cost if tariff is decided based on the capital cost derived by the petitioner on the basis of actual/ anticipated expenditure.

16. The respondent, UPPCL vide affidavit dated 10.9.2014 has submitted that the capital cost of ₹2146.85 crore as recommended by the DIA is most authentic as RCE has not yet been approved and the capital cost of ₹2179.56 crore as claimed by the petitioner is based on the certificate of statutory auditor. In response, the petitioner has clarified that the approved cost of ₹1724.79 crore is based on the December 2005 price level which should be definitely higher due to increase in

material cost, labour and taxes. The petitioner has also clarified that the Commission may consider the capital cost vetted by the DIA and the RCE approved by MOP, GOI. It has further submitted that in the absence of the above the Commission has power under Regulation 5 and 7 of the 2009 Tariff Regulations to decide tariff on prudence check of the capital cost incurred by the petitioner.

17. We have examined the submissions of the parties. The petitioner vide affidavit dated 13.8.2014 has revised the annual fixed charges of the generating station based on the capital expenditure incurred upto the COD of the respective units duly certified by Auditors. Regulation 7 of the 2009 Tariff Regulations provides for vetting of capital cost of hydro power projects by independent agencies or experts designated by the Commission. The Commission has also empanelled independent agencies for vetting of capital cost of new hydro power projects and by order dated 2.8.2010, has issued guidelines for vetting of capital cost by DIA or experts. In terms of this, the petitioner had engaged M/s. Aquagreen Management Private Limited (AEMPL) as DIA for vetting of the capital cost and the DIA has submitted its report on 14.8.2014. In this background and considering the fact that the approval of RCE by the MOP, GOI may take some more time, we are of the considered view that the report of the DIA on vetting of capital cost, can be considered for determination of the admissible capital cost of the project. Accordingly, we proceed to examine the report of the DIA on the capital cost of the project, along with the submissions of the parties, for the determination of capital cost and the annual fixed charges of the generating station, as stated in the below mentioned paragraphs.

Time Overrun

18. The petitioner has submitted detailed justification for time and cost overrun in Annexure VI of the affidavit dated 28.12.2012 in I.A. No. 1/2013 in Docket No. 46/GT/2011 (Petition No. 156/GT/2013). The main reasons for the delay as submitted by the petitioner are on account of:

(a) Natural Calamities

(i) Earthquake in project area
(ii) Unexpected heavy rain during construction period

(b) Local Socio-political problems

(i) Shri Amarnath Shrine Board agitation in 2008
(ii) Widespread agitation in year 2010
(iii) Agitation in year 2012

(c) Engineering challenges

(d) Miscellaneous reasons

(i) Widening of national highway in year 2007 and 2008
(ii) Collapse of the under-construction bridge

19. The petitioner has also submitted the detailed justification for the variation in the cost of major items which includes Land, C-works, Power plant Civil works, Miscellaneous, Environment and Ecology, Establishment, etc. The petitioner has stated that the reasons for time overrun and cost overrun were beyond the control of the petitioner and that it has strived hard to complete the project successfully by optimizing the cost and time despite facing several adversities.

20. The Commission in its order dated 14.2.2014 had granted interim tariff of the generating station considering 85% of the capital cost of ₹203980.66 lakh (less liabilities), as on 30.6.2013.In the said order, the Commission also observed that the detail justification/ reasons for time and cost overrun of the project submitted by the petitioner will be considered at the time of determination of final tariff of the generating station. However, the Commission vide Record of Proceedings of the hearing held on 17.9.2013 had directed the petitioner to submit information on the following:

> *"The original PERT chart clearly indicating the start date, activities involved till COD of different units, scheduled time for each activity, Critical Path Activities and float available in each of the defined activity. The PERT chart corresponding to the actual time taken against each defined activity till commissioning/COD of different units."*

21. In response, the petitioner vide affidavit dated 4.10.2013 has submitted the relevant information.

22. The respondent, UPPCL in its reply dated 2.2.2013 has submitted that the justified amount of increase in cost due to time overrun and cost overrun may be decided by the Commission in view of the explanation given by the petitioner. The respondent BRPL in its reply dated 16.9.2013 has objected to the submissions of the petitioner and has pointed out that the details of time overrun furnished by the petitioner are general in nature and have not been substantiated by any documentary evidence. It has also submitted that the petitioner has undertaken the responsibility of completing the project within the timeline of 51 months and hence, the time overrun in the execution of the project is due to factors entirely attributable to the petitioner or his contractor. Accordingly, the respondent has submitted that the time overrun may be disallowed.

23. The DIA in its report dated 14.8.2014 had considered the documents / information / clarifications furnished by the petitioner concerning the project and has accordingly submitted its recommendations on the capital cost.

24. The project was accorded CCEA clearance in September, 2005 with the stipulated completion period of 51 months i.e. November, 2009. However, based on the actual dates of commercial operation of the generating units, there has been a time overrun of 51 months. It is noticed that the major constraints during construction which had effected the implementation of the project, as submitted by the petitioner and considered by DIA in its report are as under:

(a) Earthquake in Project area
(b) Unexpected heavy rain/flood during construction period
(c) Disturbance in Kashmir Valley
(d) Engineering Challenges; and
(e) Widening of National Highway

Views of DIA on Time Overrun

25. Based on the submissions of the petitioner on the above reasons for time overrun, the views of the DIA are as under:

> ''The petitioner has mentioned that the Upstream cofferdam has been washed away in March, 2007, May, 2010 and April, 2011 which led to a delay of eight months from March, 2007, one month in May, 2010 and two months from April, 2011. Therefore, the generating company has contended that the washing of upstream cofferdam three times has led to overall project delay of eleven months. This contention of generating company is not correct because the upstream cofferdam has been designed as per the DPR for a non-monsoon flood and as per DPR clause 9.1.2, the project has been conceived for cofferdam getting adversely affected for three monsoon periods. Therefore, washing away of cofferdam for three monsoon seasons is as per the approved DPR. Therefore, the delay in construction due to washing/damage of cofferdam cannot be considered as time overrun.
>
> Generating company has also furnished the details of the disturbances due to law and order problem in the Kashmir valley which has led to delay in completing the major works. The geological and engineering challenges include slides and flash floods to Golta nallah has also been furnished in the delay in construction of the project. From the perusal of the details furnished by the generating company regarding the time overrun and excluding the delays due to cofferdam washing as explained above, the total time delay as per the generating company own documents works out to be 46 months.
>
> From the actual completion of the major structures as furnished by generating company it is seen that the head race tunnel and tail race tunnel was completed in March, 2013 while the underground power house was completed in June, 2013. As such the Civil works should have been completed within 97 months (51+46) from 21st September, 2005, the date of commencement of civil works by contractor. Thus, the date of completion of all the civil works of the project works out to be October' 2013.

It is also important to note that as per the E&M contract the work was awarded on 29th December' 2006 with a completion time of 40 months, as such the E&M works should have been completed by 29th February' 2010. However, due to delay of C-works due 5to the reasons explained above and non-completion of power house and tail race tunnel. The E&M works delayed and hence, it can be safely inferred that when the C-Works should have been completed by October' 2013, the E&M works and project commissioning should have been taken place in the next four months.

As per the actual completion of major activities accomplished by Uri-II HE Project, the plugging of diversion tunnel has been shown to have been completed on 4th February' 2013. Considering a time of two months for reservoir filling and testing, etc., Water Conductor System should have been ready for supply of water to the turbines by 4th April' 2013. By this time it can be safely inferred that the power house erection should have been completed because the plugging of diversion tunnel for a small reservoir based Run-of- the river diagonal peaking scheme, like Uri-II HE Project is normally taken up when the power house and E&M erection are completed. This is also collaborated with boxing up of the generator by 13th November' 2012 as per the actual schedule. As such it is clear that the E&M erection was very well ready for the commissioning of project staring from April' 2013 up to July' 2013 based on 1 month gap between commissioning of 2 consecutive units but Commissioning was delayed for 3 months due to local disturbance. As such the project should have been completed and the units commissioned as per the following schedule

- Unit-I - 4th July, 2013
- Unit-II - 4th August, 2013
- Unit-III - 4th September, 2013
- Unit-IV - 4th October, 2013

However, the generating company has reported that the units were actually commissioned on various dates mentioned below:

- Unit-I - 11th October, 2013
- Unit-II - 1st December, 2013
- Unit-III - 11th October, 2013
- Unit-IV - 1st March, 2013

Thus, there is a delay in commissioning of 4 units attributable to the generating company as given below:

- Unit-I - Around 3 months
- Unit-II - Around 4 months
- Unit-III - Around 1 month
- Unit-IV - Around 5 months

As such the IDC for the period of 3 months (3.25 on average) as above for the project capital cost is attributable to the developer."

26. The details of time overrun claimed by generating company and considered by the DIA is tabulated as under:

Sl No.	Major reasons for delay	Delay claimed by Petitioner (in months)	Time overrun considered by the DIA (AEMPL)	Findings of the DIA
1.	**Earthquake in project area**	6 (from October, 2005 to March, 2006)	6	
2.	**Unexpected Heavy rains /flood during construction period**			
2 (a)	Coffer dam Washed away-High flood	8 (from March, 2007 to October, 2007)	0	As per DPR clause 9.1.2 the project has been conceived for cofferdam getting washed away for three monsoon seasons. Due to this time overrun claimed by the petitioner cannot be considered
2 (b)	Massive slide- Right bank	2 (from January to February, 2008)	0	
(c)	Coffer dam washed away-High flood	1 (May, 2010)	0	
(d)	Overtopping of bund at TRT outlet	2 (from July,2010 to August, 2010)	0	
(e)	Coffer dam Washed away-High flood	2 (from April to May, 2011)	0	
(f)	Overtopping of bund at TRT outlet.	2 (from September to November, 2011)	0	
(g)	Overtopping of bund at TRT outlet.	1 (September,2012)	0	
3	**Disturbance in Kashmir valley**			
3 (a)	Agitation by Shri Amarnath Shrine Board	2 (from July, 2008 to September, 2008)	1	Due to time overlapping of I month with heading Excavation in TRT
(b)	Agitation due to Soian incident in valley	1.5 (from June, 2009 to July, 2009)	1.5	
(c)	Intermittent bandhs/ curfew by different organization in valley causing blockade of NH-1A	1 (from January to February, 2010)	0	Due to time overlapping of I month with heading Excavation in TRT
(d)	Civil unrest in valley	6 (from June, 2010 to November, 2010)	6	
(e)	Strike by land out sees	5 (from March to August, 2012)	5	
(f)	Escalation of cross border tension	0.5 (January, 2013)	0.5	
(g)	Civil unrest & incidents of bandhs	1 (from February,2013 to March 2013)	1	
(h)	Filing of upstream water conductor system was delayed due to resistance by locals	1(March, 2013)	1	
4	**Engineering challenges**			
4 (a)	During heading excavation of Tail Race Tunnel (TRT), Riverine material was encountered. Tackling of this difficult zone at 223 M took almost one year	12 (from August, 2007 to August, 2008)	12	

(b)	Benching excavation in the above areas of TRT	8 (from October, 2009 to May, 2010)	8	
5	**Widening of National High Way** (NH-1A) by BRO adversely affected the progress of works being executed by M/s HCC in Adit 2 & 3, power house complex, surge shaft and TRT as the supply of material, concrete, etc., as well as movement of labor/ staff was delayed	9 (from April, 2007 to December, 2007)	4	Due to time overlapping of one month with heading Excavation in TRT
	Total	**50**	**46**	

Thus, the project work could never progress smoothly during the period of agitation and frequently remained suspended due to shortage of either essential material/supplies or skilled manpower leading to delay in the commissioning of the project. Accordingly, the delay of 46 months in the execution of the various works for appears to be reasonable and this additional overtime has been considered in the vetting of capital cost."

27. Accordingly, the DIA in its report dated 14.8.2014 has observed that delay in the execution of various works for around 46 months beyond the scheduled commissioning as envisaged in CCEA sanction, appears to be reasonable and this additional time overrun has been considered in the vetting of capital cost.

28. In response to the findings of the DIA in its report dated 14.8.2014 as above, the petitioner has submitted its comments on 30.9.2014 as summarized under**:**

(a) Prima facie the report submitted by DIA is not in accordance with clause 7 (3) of the CERC Guidelines for vetting of capital cost. The guidelines are for preparation of DPR only and not for appraisal of completion cost or RCE.

(b) Once there is time overrun in project on justified reasons, the actual establishment is bound to increase which has been ignored by the DIA.

(c) DIA is inconsistent in its approach while vetting the capital cost of different projects. In case of Chamera-III it had allowed the work charged establishment @ 2% of value of works but the same has been denied in this project.

(d) Actual expenditure incurred on some of the expenses such as special tools & plants, losses on stock, audit and account charges, etc. is less than the sanctioned cost and the DIA has allowed less amount than the actual expenditure**.**

29. In addition to the above, the petitioner has submitted that the time overrun on account of overtopping of bund at Tail Race Tunnel for 2 months during 2011 and 1 month during 2012 has been disallowed by DIA on the ground that washing out of 'upstream coffer dam' for three monsoon seasons is as per DPR of the project. Moreover, the overtopping of bund at Tail Race

Tunnel outlet is in no way related to washing out of upstream coffer dam, but was contributed by unprecedented flood in Golta Nallah. Also, the time overrun of 3 months (September, 2011 to November, 2011 and September, 2012) disallowed by DIA does not overlap with any other activities. The petitioner has submitted that the DIA has disregarded the following facts while not considering IDC for 3 months:

(i) The period during which delay on account of overtopping of bund at TRT outlet has occurred is not overlapping with any other activities.

(ii) DIA has erred in interlinking delay on account of overtopping of bund at TRT with delay on account of washing away of coffer dam.

(iii) Overtopping of bund at TRT was on account of flash flood in the Golta Nalla (TRT outlet Nalla)

Analysis and decision

30. We have considered the submissions of the parties and the documents available on record. It is observed that as against the completion schedule of 51 months from 1.9.2005, the petitioner has taken a time line of 102 months for completion of the project, resulting in a time overrun of 51 months in the completion of the project. Out of this time overrun of 51 months, the DIA based on the findings, has observed that the delay of 46 months is not attributable to the petitioner. On scrutiny of the reasons and the justification submitted by the petitioner for the delay and the findings of the DIA, we are of the considered view that the stoppage of work and the consequential time overrun of 46 months, as per the following break-up, is beyond the control of the petitioner:

- 6 months due to earthquake i.e from October, 2005 to March, 2006
- 4 months due to Widening of National highway i.e from April, 2007 to July, 2007.
- 5 months due to combined effect of widening of National highway and due to encountering of Riverine material during excavation of TRT i.e from August, 2007 to December,2007
- 7 months from January, 2008 to July, 2008 due to encountering of Riverine material during excavation of TRT.
- One month i.e August, 2008 due to agitation by Amarnath Shrine Board.
- 1.5 months between June to July,2009
- 8 months i.e from October, 2009 to May, 2010 due to combined effect of benching excavation of Riverine material in TRT and intermittent bandhs/ curfew by different organizations in valley causing blockade of NH-1A.
- 6 months i.e from June, 2010 to November, 2010 due to combined effect of Civil unrest in valley and overtopping of bund at TRT outlet due to heavy rain and flood.

- 5 months delay between March, 2012 to August, 2012 due to strike by land out sees.
- 2.5 months between January, 2013 to March, 2013 due to combined effects of escalation of cross border tension, civil unrest & incidents of bandh and resistance of locals while filling of upstream water conductor system.

31. It is noticed that the disallowance of 3 months delay on account of overtopping of bund at TRT outlet Nalla by the DIA in its report, considering the same to be delay caused due to washing away of coffer dam, has been objected to by the petitioner. The petitioner has clarified that the delay on account of overtopping of bund at TRT due to flash flood in the Golta Nalla cannot be linked with the delay on account of washing away of coffer dam and that the period of three months i.e from 16th September, 2011 to 15th November, 2011 and September, 2012 (one month) does not overlap with any other activities. In consideration of this submission, we are of the considered view that the time overrun of 3 months (16th September, 2011 to 15th November, 2011) was also beyond the control of the petitioner and the delay on this count cannot be attributable to it. Accordingly, the total time overrun of 49 months (46+3), in our view, is not attributable to the petitioner and the same is condoned.

32. Considering the stipulated time line of 51 months for completion of the project from 1.9.2005 along with the time overrun of 49 months condoned as above, the project should have been completed within the revised time line of 100 months (51+49) from 1.9.2005 i.e by the end of December, 2013. In terms of the revised timeline, the CODs of all the four units, considering a gap of one month for COD of each unit as per GOI sanction, would be 1.10.2013, 1.11.2013, 1.12.2013 and 1.1.2013. In consideration of the revised COD dates of the units as against the actual CODs of the units, the time over run attributable to the petitioner would be as under:

Units	Revised scheduled CODs of Units	Actual CODs of the units	Time over run attributable to the petitioner
Unit-I	1.10.2013	11.10.2013	11 days delay
Unit-III	1.11.2013	11.10.2013	No delay- COD declared before 20 days
Unit-II	1.12.2013	1.12.2013	No delay
Unit-IV	1.1.2014	1.3.2014	Two months delay

33. In our view, the delay in COD of Unit-I gets nullified due to the early declaration of COD of Unit-III. However, we hold that the delay of two months in the declaration of COD of Unit-IV is attributable to the petitioner and that the IDC and Establishment cost for the delay of two months shall be deducted for arriving at the completion cost as well as capital cost for the purpose of tariff as on COD of the generating station. We order accordingly.

Capital cost for the purpose of tariff

34. Regulation 7(1) of the 2009 Tariff Regulations, provides as follows:

> *"The expenditure incurred or projected to be incurred, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan- (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the finds deployed, by treating the excess equity as normative loan, or (i) being equal to the actual amount of loan in the event of the actual equal less than 30% of the funds deployed, up to the date of commercial operation of the project, as admitted by the Commission, after prudence check;*
>
> *Capitalized initial spares subject of the ceiling rates specified in regulation 8; and*
> *Additional capital expenditure determined under regulation 9:*
>
> *Provided that the assets forming part of the project, but not in use shall be taken out of the capital cost.*
>
> *The capital cost admitted by the Commission after prudence check shall form the basis for determination of tariff;*
>
> *Provided that in case of the thermal generating station and the transmission system, prudence check of capital cost may be carried out based on the benchmark norms to be specified by the Commission from time to time.*

35. The petitioner has claimed tariff on the following cost duly certified by the auditor:

(₹in lakh)

		11.10.2013 to 30.11.2013	**1.12.2013 to 28.2.2014**	**1.3.2014 to 31.3.2014**
		(Unit s-I & III)	(Units– I, II & III)	(All Units)
(i)	Capital expenditure as on COD	112958.12	169482.99	226734.44
(ii)	Less: Un-discharged liability as on COD	5694.32	8120.96	9165.97
(iii)	Additional capitalisation	56524.87	57251.45	145.83
(iv)	Less: Addition /Deletion in liability	2426.64	1045.01	(-) 241.85
	Capital cost	**161362.03**	**217568.47**	**217956.15**

Appraisal and Prudence of capital cost as on COD of generating station

36. As stated, the project was sanctioned by CCEA in September, 2005 for an estimated cost of ₹1724.79 crore at February, 2005 price level. The RCE on completion of the project, including the cost of some balance works is ₹2290.02 crore as against the approved cost of ₹1724.79 crore.

Thus, there is a cost overrun of ₹565.23 crore. As against the completion cost of ₹2290.02 crore including IDC & FC of ₹386.31 crore (at February, 2014 price level) as submitted to MOP, GOI, the DIA in its report has observed that the completion cost of the project is ₹2146.85 crore, after deduction of IDC for three months and has restricted the actual capital expenditure under certain heads to the normative costs as prescribed in the CEA guidelines.

37. The abstract of the RCE submitted by the petitioner to the Govt. of India for approval *vis-à-vis* the capital cost of the project recommended by the DIA, is as under:

Abstract of cost

(₹ in lakh)

Item No.	Description of Item	CCEA approved cost at February, 2005 price level	Completed cost claimed by Petitioner	Cost recommended by DIA
A-	**Civil Works**			
1	**Direct Charges**			
	I-Works			
A	Preliminary	825.28	596.00	596.00
B	Land	4902.47	8360.52	8360.52
C	Works	21235.11	18557.37	18336.20
J	Power Plant Civil Works	83627.15	59644.20	58600.56
K	Buildings	2461.67	6583.02	6583.02
O	Miscellaneous	4452.28	9119.96	6322.14
P	Maintenance During Construction	1113.06	229.00	229.00
Q	Special Tools and Plants	477.46	554.34	200.00
R	Communication	3873.75	3816.71	3816.71
X	Environment & Ecology	2419.10	3308.58	3063.03
Y	Losses on Stock	278.27	0.02	0.00
	Total - I-Works	**125665.60**	**110769.71**	**106107.18**
	II-Establishment	8752.35	22165.82	17175.70
	III-Tools and Plants	1261.35	228.80	200.00
	IV-Suspense	0.00	0.00	0.00
	V-Receipts & Recoveries (-)	(-) 560.07	(-) 1711.89	(-) 1776.85
	Total - Direct Charges	**135119.23**	**131452.44**	**121706.03**
2	**Indirect Charges**			
	I-Capitalized value of abatement of Land Revenue	93.53	93.53	93.53
	(5% of Cost of cultivable land)			
	II-Audit & Account charges (1% of I-Works)	1261.35	1946.54	1061.07
	Total - Indirect Charges	**1354.88**	**2040.07**	**1154.60**
	Total - Direct & Indirect charges	**136474.11**	**133492.51**	**122860.64**
B-ELECTRICAL WORKS				
	E&M works		49772.03	49772.03
	Establishment Charges		7106.20	6665.94
	Total	29343.80	56878.24	56437.97
	Total - Civil + Electrical (net)	**165817.91**	**190370.75**	**179298.61**
C - IDC, FC				
	Interest During Construction	6079.63	38390.00	35145.59

	Financing Charges	581.05	241.00	241.00
	TOTAL	**172478.65**	**229001.74**	**214685.20**

38. It is evident from the above that against the completion cost of ₹229001.74 lakh claimed by the petitioner, DIA has recommended the cost of ₹214685.20 lakh, thereby resulting in variation of an amount of ₹14316.54 lakh.

<u>Analysis and Decision on Capital cost vetted by DIA</u>

39. The recommendations of DIA on capital cost have been examined for arriving at the completion cost of the project and are discussed in the subsequent paragraphs.

40. It is observed from the DIA report that the main heads under which there is major increase in expenditure as compared to the original approval of CCEA are as under:

(a) Special Tools & Plants
(b) Receipt & Recoveries
(c) Establishment
(d) Miscellaneous
(e) Audit & Account Charges
(f) Tools & plants
(g) Environment & Ecology
(h) C-works & J-works
(i) Electro-Mechanical works

Special Tools & Plants

41. Against the actual expenditure of ₹554.34 lakh incurred towards "Special Tools & Plants", the DIA has recommended an expenditure of only ₹200.00 lakh. The reasons for restriction in the expenditure as furnished by the DIA in its report are as under:

> "*A provision of ₹477.46 lakh for tools and plants was kept in CCEA against which equipment worth ₹127.34 lakh has already been purchased and balance ₹427 lakh is yet to be procured for the purpose of maintaining access roads to power house, dam, surge shaft, draft tube etc. Since the works under this head are being executed through contractors, as per CEA guidelines, a provision of ₹100-200 lakh is allowed. As such this provision is restricted to ₹200 lakh for the purpose of capital cost for tariff calculations."*

42. The submission of the petitioner as regard the reduction in cost recommended by DIA under various heads based on CEA guidelines is as under:

> *"Consultant has relied upon CEA Guidelines for Formulation of Detailed Project Reports for Hydro-Electric Schemes, their acceptance and examination for concurrence", April 2012 (Revision 3.0). It is to mention here that these guidelines are for preparation of DPR and not for*

appraisal of completion cost or RCE. In RCE actual details of expenditures incurred during the course of execution of the Project are to be represented against the sanctioned costs and variations are bound to happen from sanctioned cost due to fiscal and other reasons. Same needs to be considered by consultant / appropriate authority"

43. As regard the restriction in the expenditure on "Special Tools & Plants", the petitioner while indicating that clause 16.4.9 of CEA guidelines appears to have been applied, has submitted that the restricted cost allowed is lower than the sanctioned cost at February, 2005 Price level, over which the price escalation etc., is allowable. The petitioner has also submitted that the actual expenditure incurred is for infrastructural equipment corresponding to the sanctioned requirement of the project. Clause 16.4.9 of the CEA guidelines on Formulation of Detailed Project Reports for Hydro-Electric Scheme provide as under:

> ***"16.4.9 Special T&P***
> *The provisions under this head covers the Drilling & Grounding equipments, Transport, Compaction, Electrical equipments, Construction Plant & Earth Moving equipments and other miscellaneous equipments. Since the projects are presently being executed through limited contracts packages and is the responsibility of the contractors to arrange for such equipments. A token provision of ₹1-2 crores under this head may be adequate to provide for essential equipment not covered under contract package"*

Commission's view

44. The recommendations of the DIA for restriction in the cost without considering the details of the "Special Tools and Plants" needed for the project and expenditure incurred thereon, in our view, is not appropriate as the requirement of "Special Tools and Plants" is specific to plant type and location. No details have been submitted by the petitioner. Hence, the cost of ₹477.76 lakh allowed by GOI in the sanctioned cost towards "Special Tools and Plants" with an escalation of 5.72% per annum, which works out to ₹745.06 lakh is required to be considered for arriving at the completion cost. However, the expenditure is limited to the actual expenditure of ₹554.34 lakh claimed by the petitioner and the same is considered as expenditure towards "Special Tools and Plants".

Receipts & Recoveries

45. The DIA in its recommendations had reduced the cost claimed by the petitioner under the head "Receipts & Recoveries" and has observed as under:

> "*This head is meant to account for estimated recoveries by way of resale or transfer of temporary buildings and special T&P, Miscellaneous receipts like rent charges of buildings, electricity charges etc., may also be accounted for under this head. The recoveries on account*

of temporary buildings may generally be taken at 15% of the cost unless a higher recovery is anticipated due to some special reason such as tubular construction, vicinity to city/village/town industrial undertaking etc. An amount of ₹1711.89 lakh has been reported by the generating company. However, as per CEA guidelines, 15% of cost of temporary buildings should be considered for receipt & recoveries which works out to ₹64.965 lakh (15% of ₹433.10 lakh). Total cost which has been considered by the consultant for Receipt and recoveries is (-) ₹1776.85 lakh.

46. In response, the petitioner has submitted that the based on CEA guidelines, the DIA has considered 15% of the cost of temporary buildings amounting to ₹64.965 lakh for Receipt & Recoveries. This according to the petitioner is incorrect and not acceptable. The petitioner has further submitted that whenever temporary buildings will be disposed off, the benefit of same will be reduced from the capital cost.

Commission's view

47. The petitioner in its submissions has agreed to the fact that the recoveries made on account of disposal of temporary structures are required to be adjusted from the capital cost. It is observed that the temporary building/structures are expected to be disposed of by the petitioner within the cut-off date of the generating station. As the capitalization of the projected capital expenditure has already been allowed, the expenditure of ₹64.97 lakh as suggested by DIA has been considered under the head "Receipts and Recoveries" towards the completion cost of the project. This is however, subject to revision based on truing-up exercise in terms of Regulation 6 of the 2009 Tariff Regulations.

48. The revenue earned by the petitioner by sale from infirm power amounting to ₹275.89 lakh has been adjusted in the capital cost by DIA under the head "Receipts and Recoveries".

Establishment cost for Civil and E&M Works

49. The DIA, in terms of the CEA Guidelines for Formulation of Detailed Project Reports for Hydro-Electric Schemes, has recommended the capitalization of ₹23841.64 lakh (17175.70+6665.94) under the head "Establishment" against the amount of ₹29272.02 lakh (22165.82+7106.20) considered in the Revised Cost Estimates (February, 2014). In this regard, the observations of DIA are as under:

"As per CEA guidelines, establishment cost during construction of Uri-II hydroelectric project having scattered works and gestation period of more than 6 years, is found out to be ₹23841.64 lakh against ₹29272.02 lakh as mentioned in RCE. The same has been updated in capital cost as per consultant".

50. In response, the petitioner has submitted that:

a) The percentage provision given for establishment calculation is essentially for formulation of DPRs before the start of project as the title suggests -*Guidelines for Formulation of Detailed Project Reports for Hydro-Electric Schemes, their acceptance and examination for concurrence", April 2012 (Revision 3.0).*

b) As per guidelines, expenditure up to zero date has to be considered (clause 16.5.4) which is not considered while calculating establishment. In Uri-II, establishment expenditure up to zero date is ₹2107.99 lakh & same ought to be considered by DIA. The same was considered by DIA in case of Chamera-III HEP.

c) As all other expenses are considered based on actual incurred amounts, the establishment expenditure should also have been considered on actual basis by the consultant as per existing practice in case of RCEs being considered for Govt. sanction.

d) Provision considered for establishment is corresponding to the actual deployed manpower for the work and based on govt. approved wage structures for the organization**.** Even CEA guidelines for DPR has a provision for actual manpower deployed for the execution / implementation of the Project including any increase at the time of RCE (clause 16.5.6).

e) CO and ED Office expenses have been booked as per approved accounting policy of the corporation. It is brought out that all works of Design and Engineering are done indigenously in NHPC and thus the expenditures are justified inter-alia with above CEA provisions (clause 16.5.6).

f) NHPC being a PSU, has to comply with various statutory norms and social obligations are also a part of overheads and accordingly, full establishment expenditure needs to be allowed as per actual, which is also provided in CEA Guidelines.

g) Actual expenditures are worked out after thorough auditing by various Govt authorities and are on actual basis hence needs to be allowed.

h) Under Chapter-5 of DPR (Vol II-Cost estimate & project planning) of Uri-II HEP, details of Manpower requirement of 449 persons during peak construction period has been mentioned. Actual manpower deployed at site is even less than the approved strength as per DPR. Actual establishment expenditure is on higher side due to price escalation & wage revision which are beyond the control of NHPC. DIA has overlooked the provisions under Chapter-5 of DPR (Vol-II) related to manpower deployed while preparing Cost Appraisal report.

i) DIA has allowed time overrun of 46 months for Uri-II HEP. Once there is time overrun in project on justified reasons, the actual establishment cost is bound to increase. This fact has been ignored by the DIA.

j) Total error in calculation of establishment expenditure is ₹2621.77 lakh (₹513.78 lakh + ₹2109.99 lakh). Also, establishment expenditure for C&J works amounting to ₹1264.81 lakh ought to be considered by DIA.

51. Accordingly, the petitioner has submitted that the actual establishment expenditure based on actual manpower deployed at site must be allowed under the head Establishment.

Commission's view

52. The restriction on the amount for ₹23841.64 lakh as recommended by the DIA towards the "Establishment cost for Civil works" based on CEA norms used for DPR purposes, does not in our view, seem appropriate. In our view, deviation from norms as regards the expenditure may occur based on actual site conditions, actual manpower deployed, wage revision during the construction period. In the present case, the actual annual cost indices are different from those considered and there is change in the scope of work, etc. In this regard, we notice that even the CEA guidelines indicate that any likely increase in the establishment cost during the construction period on account of wage revision, increase in DA, etc. shall be allowed at the completion stage as per actuals. Accordingly, the actual establishment cost of ₹29272.02 lakh (`22165.82 lakh for civil works & ₹7106.20 lakh for E&M works) incurred by the petitioner has been considered as part of the completion cost. However, as stated earlier, the reduction in establishment cost corresponding to the delay of two months in the COD of Unit-IV works out to ₹143.49 lakh [(29272.02*2/102)/4].

Miscellaneous

53. The DIA has recommended the capitalization of an expenditure of ₹6322.14 lakh under the head "Miscellaneous" based on the CEA guidelines (2% of I-Works) as against the total expenditure of ₹9119.96 lakh claimed by the petitioner. In this regard, the petitioner has submitted that:

a) O-Miscellaneous provisions cater to repair & maintenance charges applicable on yearly basis. Further, time overrun in project stands duly justified, extra expenses of ₹1855 lakh for longer duration due to reasons beyond the control of the generating station are thus justified.

b) The provision for construction power amounting to ₹943 lakh for remotely located project is in addition to the percentage (%) norms (2% of I-Works).

54. In this regard, the clause 16.4.7 of the CEA guidelines provide as under:

> ***"16.4.7 O-Miscellaneous***
> *The provisions under this head covers the capital cost & maintenance of Electrification, Water supply, Sewage disposal and drainage works, Recreation, Medical, Fire fighting equipments, Inspection vehicles, School bus, Pay van, Visit of Dignitaries, welfare works etc.*

The provision, however, should not exceed.

i. @3% of the cost of I-Works upto ₹1000 crore limited to ₹20 crore
ii. @2% of the cost of I-Works upto ₹2000 crore limited to ₹30 crore
iii. @1.5% of the cost of I-Works greater than ₹2000 crore limited to ₹40 crore

Commission's view

55. We are of the considered view that the expenditure on Miscellaneous activities / works / assets as listed under the CEA guidelines may vary from plant to plant based on site location. As such, the reduction in cost allowed by DIA without examining the details of the expenditure, does not appear to be correct. It is observed that the petitioner has not submitted such details in the petition. As such, for the purpose of the completion cost, the Government sanctioned cost, with an escalation of 5.72% per annum has been considered for the purpose of working out the completion cost. Accordingly, an amount of ₹7345.08 lakh has been considered under this head.

C-works & J-works

56. The DIA has not considered the cost of Work charged establishment for C-works (₹221.17 lakh) & J-Power plant civil works (₹1043.64 lakh). The petitioner has submitted that in TEC & CCEA approved cost, there is provision for cost of work charged establishment @ 2% of value of works as per CWC guidelines. It has stated that amount claimed in respect of Chamera-III HEP had been recommended by the said DIA in its report on the vetting of capital cost.

Commission's view

57. We are of the considered view that there should be uniformity and consistency in the cost considered for certain works in respect of the hydro projects and accordingly, the cost allowed for Chamera –III HEP should also be considered for the instant project of the petitioner. Thus, the provision for cost of work charged establishment @ 2% of the value of works as per CWC guidelines is allowed for C-works & J-works of this project. Accordingly, the cost of C-works & J-works has been considered as ₹18557.37 lakh and ₹59644.20 lakh respectively.

Environment & Ecology

58. The DIA has disallowed an expenditure of ₹145.55 lakh under the head 'Provision for LPG & Energy conservation measures' and has observed that the amount could have been incurred

before the commissioning of the project. In addition, an amount of ₹100 lakh has been disallowed under the head' Solid Waste Management' on the ground that no payment has been released till COD of the generating station. In this regard, the petitioner has submitted the following:

(i) It is fact that above expenditure could not be incurred till COD but it has the liberty to spend the same till the cut-off date i.e. 31.3.2017.

(ii) Against the amount of ₹245.55 lakh as deducted by DIA, even CCEA has approved ₹161.63 lakh under 'Provision for LPG & Energy conservation measures' and ₹75.43 lakh under 'Solid Waste Management'. Hence, this amount falling under the category 'works within original scope ' is planned to be spent before the cut-off date.

Commission's view

59. In our view, taking into consideration the directives of the Ministry of Environment & Forests, GOI at the time of clearance of the project, the deferred works such as 'Solid Waste Management' and 'Implementation of Energy alternative to local people (Provision of LPG)' are obligatory and the expenses on this count are required to be incurred by the petitioner as these are statutory in nature. In view of this, the cost as and when incurred on this count is admissible subject to the completion of the same within the cut-off date (31.3.2017) of the generating station. However, for the purpose of completion cost, the said amount has been considered. Accordingly, the cost under the head 'Environment & Ecology' is considered as ₹3308.58 lakh.

Audit and Accounts

60. As regards the expenditure claimed under the "Audit and Accounts", the DIA has recommended an amount of ₹1061.07 lakh based on CEA guidelines, as against the total expenditure of ₹1946.54 lakh. In this regard, the petitioner has submitted that functions of its Finance wing, compliance with financial guidelines and accounting policy requirements are increasing. It has also submitted that the petitioner's company is listed on stock exchanges. In view of this explanation, the petitioner has submitted that the expenditure incurred on Audit and Accounts is justified and should be allowed in full.

Commission's view

61. In view of the submissions/justification provided by the petitioner and considering the fact that the statutory audit requirements corresponding to the additional time overrun taken in the completion of the generating station have increased the actual expenditure on Audit and Accounts,

we allow the actual expenditure of ₹1946.54 lakh incurred under the head "Audit and Accounts", as part of the completion cost.

Tools & Plants

62. As against the actual expenditure of ₹228.80 lakh incurred on "Tools & Plants" for the works completed up to February, 2014, the DIA has recommended an expenditure of ₹200 lakh, based on CEA guidelines.

Commission's view

63. In view of the fact that the actual capital expenditure is lesser than than the sanctioned cost of ₹1261.35 lakh, we consider the actual capital expenditure of ₹228.80 lakh as part of the completion cost of the project.

Electrical & Mechanical works

64. With respect to actual expenditure on Electrical & Mechanical (E&M) works, the DIA has observed as follows:

> *"The CCEA approved cost for electrical work was for ₹29343.80 Lakhs. The contract for E&M works was awarded to M/s Alstom India Limited dated 29.12.2006 through International Competitive Bidding for Rs. 36861.77 Lakh for Uri-II HE project. Generating company have informed that the contract was awarded based on the lowest price offered by M/s Alstom. In the bidding process total 11 perspective bidders purchased the Pre Qualification document out which seven (07) no. submitted their PQ Application. After scrutiny five prospective bidders were found prequalified for participation in Techno-commercial and Price Bids. However only two bidders i.e. M/s Alstom & M/s BHEL turned up with their bids probably in apprehension that they might be reluctant to work due to deteriorated law and order situation in J&K valley and logistic problem as well as project nearer to Pakistan border. The price bids of both techno-commercially qualified bidders (i.e. M/s BHEL & Ms. Alstom) were opened. The contract was awarded at 38% higher over the CCEA approved cost. The price quoted by L-2 Bidder (i.e. M/s BHEL) was approx. Rs. 30.00 Cr. higher than the price quoted by L-1 bidder (i.e. M/s Alstom). The price offered by L-1 was found justified in view of following reasons.*
>
> *i. The Price level of CCEA clearance at Feb'2005 was updated to March'2006 Price Level.*
> *ii. Price was also considered justified in view of remoteness of the project, logistic issue and disturbance in the valley which might have been taken into account by the bidders in pricing their bid.*
>
> *The total cost under this head went up to ₹56878.24 Lakh which includes Price escalation of Rs. 7677.96 Lakh as per contract provision, Foreign exchange rate Variation of ₹ 3208 Lakhs, Statutory variation of ₹1018.52 Lakhs and Contractors claim during extended period for ₹ 855.35 Lakhs, Establishment of ₹7106.20 Lakhs and Audit & Account Charges for ₹718.90 Lakhs."*

Commission's view

65. The contract was awarded to L-1 bidder at ₹36861.77 lakh which was higher by ₹7517.97 lakh compared to the CCEA approved cost of ₹29343.80 lakh at 2005 price level. Other reasons on account of which the cost under this head has increased are Price escalation, FERV variation, Statuary variation, increase in Establishment cost and Audit & Account charges. In our considered view, the increase in cost on these counts is beyond the control of the petitioner. Thus, the total increase of ₹275.34 crore under this head is considered reasonable on account of escalation during the construction period, high contract cost due to location of the project, FERV variation, Statutory variation, etc.

Interest During Construction (IDC), Normative IDC, Financing Charges and FERV

66. The petitioner in Form 5B, duly audited has claimed IDC for the period up to COD of the generating station amounting to ₹39784.90 lakh. However, due to the disallowance of time overrun of two months, there is reduction in IDC. As per balance sheet as on 31.12.2013, IDC has been indicated as ₹38319.01 lakh. With the revised scheduled COD of the fourth unit as 1.1.2014, the same has been considered for the purpose of capital cost. This is however, subject to truing-up in terms of Regulation 6 of the 2009 Tariff Regulations.

67. The petitioner has claimed Normative IDC for the period up to COD of the generating station amounting to ₹12713.15 lakh in Form 5B, duly audited. As stated, there is reduction of IDC for the delay of two months due to time overrun. Accordingly, the Normative IDC for the period up to the revised scheduled COD for the fourth unit i.e. 1.1.2014 works out to ₹12590.40 lakh. This has been considered for the purpose of capital cost, subject to truing-up in terms of Regulation 6 of the 2009 Tariff Regulations.

68. The petitioner has claimed financing charges for the period up to COD of the generating station amounting to ₹241.00 lakh as per Form 5B, duly audited. The financing charges for the period up to the revised scheduled COD for the fourth unit (1.1.2014), as per balance sheet as on 31.12.2013 is ₹239.87 lakh and the same has been considered for the purpose of capital cost.

69. Based on the above discussions, the completion cost of the generating station is summarized under**:**

(₹ in lakh)

Item No.	Description of Item	CCEA Approved cost at Feb 2005 price level	Completion cost
1	**Direct Charges**		
	I-Works		
A	Preliminary	825.28	596.00
B	Land	4902.47	8360.52
C	Works	21235.11	18557.37
J	Power Plant Civil Works	83627.15	59644.20
K	Buildings	2461.67	6583.02
O	Miscellaneous	4452.28	7345.08
P	Maintenance During Construction	1113.06	229.00
Q	Special Tools and Plants	477.46	554.34
R	Communication	3873.75	3816.71
X	Environment & Ecology	2419.10	3308.58
Y	Losses on Stock	278.27	0.02
	Total - I-WORKS	**125665.60**	**108994.84**
	II-Establishment	8752.35	22165.82
	III-Tools and Plants	1261.35	228.80
	IV-Suspense	0.00	0.00
	V-Receipts & Recoveries (-)	(-)560.07	(-) 1776.85
	Total - Direct Charges	**135119.23**	**129612.61**
2	**Indirect Charges**		
	I-Capitalized Value of abatement of Land Revenue (5% of Cost of Cultivable Land)	93.53	93.53
	II-Audit & Account Charges (1% of I-Works)	1261.35	1946.54
	Total Indirect Charges	1354.88	**2040.07**
	Total Direct & Indirect Charges	**136474.11**	**131652.68**
	E&M works	29343.80	49772.03
	Establishment Charges		7106.20
	Total	**29343.80**	**56878.23**
	Total - Civil+ Electrical (Net)	**165817.91**	**188530.91**
	Less: Reduction in Establishment Charges to account for the delay of two months in COD of the fourth unit.		143.49
	Total Hard		188387.42
	Interest During Construction	6079.63	38319.01
	Financing Charges as per Balance Sheet as on 31.12.2013	581.05	239.87
	TOTAL	**172478.65**	**226946.30**
	Normative IDC till 31.12.2013		**12590.40**
	Total completion cost including normative IDC		**239536.70**

70. The petitioner has sought approval of the RCE of ₹2290.02 crore from MOP, GOI, which works out to ₹9.54 crore/MW. The petitioner has also submitted that contingent liabilities of ₹ 1190.19 crore as on 31.3.2014 have not been considered in RCE as the same is subjudice / under

Arbitration/ pending with statutory authorities. This works out to about 51.96% of the RCE of ₹2290.02 crore and 49.69% of the completion cost of ₹2395.37 crore, including normative IDC as arrived in para 66 above.

71. Considering these contingent liabilities, the completion cost of the generating station works out to ₹3585.56 crore i.e ₹14.94 crore/MW. The generating station is a Run of River type located in the State of J&K. The capital cost of other generating stations of the petitioner located in the State of J&K, such as Chutak (ROR) is ₹20.31 cr/MW and Nimoo Bazgo (ROR with pondage) is ₹13.73 cr/MW (after removing the dam cost). In the light of above, the completion cost of this generating station amounting to ₹2395.38 crore (₹9.98 crore/MW) including normative IDC is considered to be competitive. Thus, the capital cost of ₹3585.56 crore, including the contingent liability (₹14.94 crore/MW) appears to be reasonable. However, the capital cost of ₹2290.02 crore is yet to be approved by Competent Authority. In case, Competent Authority does approve/ approve lower amount, the tariff shall accordingly be adjusted on confirmation by the petitioner of approval by Competent Authority.

Actual Additional Capital Expenditure

72. The additional capital expenditure for ₹56524.87 lakh claimed by the petitioner for the period from 11.10.2013 to 30.11.2013 pertains to Unit-II which has achieved COD on 1.12.2013. As such, the expenditure of ₹169482.99 lakh form part of the actual expenditure as on 1.12.2013. Therefore, the same is not considered as additional capital expenditure for the period from 11.10.2013 to 30.11.2013. Similarly, the expenditure of ₹57251.45 lakh capitalized on 1.3.2014 pertains to Unit-IV. As such, this additional capital expenditure has also not been considered for the period from 1.12.2013 to 28.2.2014 as the same form part of the capital expenditure as on 1.3.2014. In our view, the corresponding additions as above, can only be considered from the date of COD of the respective units of the generating station. Accordingly, the petitioner's claim for the said expenditure as prior period additions and liabilities is not justified, in view of the fact that the interest on loan portion of these capitalized amounts (70%) form part of the IDC till 30.12.2013 and 28.2.2014 respectively. Thus, the amount of ₹145.83 lakh and the discharge of liabilities of ₹241.85 lakh during the period from 1.3.2014 to 31.3.2014, thereby totaling ₹387.68 lakh, has only

been considered as the additional capital expenditure, as the same is within the original capital cost and within cut-off date of the generating station.

73. The cost of initial spares claimed by the petitioner in Form-5C is ₹17.19 crore. As the same is within the ceiling norms of 1.5% of the original capital cost in terms of Regulation 8 of the 2009 Tariff Regulations, the said amount has been considered.

74. Based on the above discussions, the capital cost considered (upto COD of three units) for the purpose of tariff is as under:

(₹in lakh)

	11.10.2013 to 30.11.2013	**1.12.2013 to 28.2.2014**
Capital Expenditure as on COD	112958.12	169482.99
Less: Un-discharged liabilities	5694.32	8120.96
Capital cost considered for tariff	107263.80	161362.03
Additional Capitalization	-	-
Discharge of Liabilities	-	-
Closing Capital cost	**107263.80**	**161362.03**

75. Accordingly, the capital cost as on COD of the generating station (1.3.2014) is as under:

(₹in lakh)

	1.3.2014 to 31.3.2014
Hard Cost as per Form 5B	174,095.07
Less: Reduction in Establishment charges to account for the delay of two months in COD of the fourth unit	143.49
Add: IDC	38319.01
Add: Normative IDC*	12590.40
Add: Financial Charges up to Scheduled COD	239.87
Add: FERV as per Form 5B	(-) 100.40
Capital Cost considered as on COD of the generating station	**225000.46**
Less: Un-discharged Liability	9165.97
Opening Capital Cost for the purpose of tariff	**215834.49**
Additions	145.83
Discharge of Liabilities	241.85
Closing Capital Cost	**216222.17**

76. Interest on normative loan shall be treated as income in the Financial Statement i.e. Profit & Loss A/c and the Balance Sheet by the petitioner, as it form part of capital cost for the purpose of tariff.

Debt-Equity Ratio

77. Regulation 12 of the 2009 Tariff Regulations provides as under:

"(1) For a project declared under commercial operation on or after 1.4.2009, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan.

Provided that where equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff.

Provided further that the equity invested in foreign currency shall be designated in Indian rupees on the date of each investment.

Explanation.- The premium, if any, raised by the generating company or the transmission licensee, as the case may be, while issuing share capital and investment of internal resources created out of its free reserve, for the funding of the project, shall be reckoned as paid up capital for the purpose of computing return on equity, provided such premium amount and internal resources are actually utilized for meeting the capital expenditure of the generating station or the transmission system.

(2) In case of the generating station and the transmission system declared under commercial operation prior to 1.4.2009, debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2009 shall be considered.

(3) Any expenditure incurred or projected to be incurred on or after 1.4.2009 as may be admitted by the Commission as additional capital expenditure for determination of tariff, and renovation and modernization expenditure for life extension shall be serviced in the manner specified in clause (1) of this regulation."

78. In terms of the 2009 Tariff Regulations, debt equity ratio of 70:30 has been considered for the purpose of tariff.

Return on Equity

79. Regulation 15 of the 2009 Tariff Regulations provides as under:

*"15. **Return on Equity**. (1)Return on equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 12.*

(2) Return on Equity shall be computed on pre-tax basis at the base rate of 15.5% for thermal generating stations, transmission system and run of the river generating station, and 16.5% for the storage type generating stations including pumped storage hydro generating stations and run of river generating station with pondage and shall be grossed up as per clause (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-II**:*

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.

(3) The rate of return on equity shall be computed by grossing up the base rate with the Minimum Alternate/Corporate Income Tax Rate for the year 2008-09, as per the Income Tax Act, 1961, as applicable to the concerned generating company or the transmission licensee, as the case may be.

(4) 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 clause (3) of this regulation.

(5) The generating company or the transmission licensee, as the case may be, shall recover the shortfall or refund the excess Annual Fixed Charge on account of Return on Equity due to change in applicable Minimum Alternate/Corporate Income Tax Rate as per the Income Tax Act, 1961 (as amended from time to time) of the respective financial year directly without making any application before the Commission:

Provided further that Annual Fixed Charge with respect to the tax rate applicable to the generating company or the transmission licensee, as the case may be, in line with the provisions of the relevant Finance Acts of the respective year during the tariff period shall be trued up in accordance with Regulation 6 of these regulations.

Illustration.-

(i) In case of the generating company or the transmission licensee paying Minimum Alternate Tax (MAT) @ 11.33% including surcharge and cess:

Rate of return on equity = 15.50/ (1-0.1133) = 17.481%

(ii) In case of generating company or the transmission licensee paying normal corporate tax @ 33.99% including surcharge and cess:

Rate of return on equity = 15.50/ (1-0.3399) = 23.481%"

80. MAT rate for the year 2013-14 has been applied for calculation of the rate of Return on Equity as under:

	2013-14
Base Rate (ROR)	15.5%
Applicable Tax Rate	20.961%
MAT Rate	18.500%
Surcharge	10.000%
Education cess	3.000%
Rate of ROE (pre-tax)	19.610%

81. Based on the above, Return on Equity is worked out as under:

(₹in lakh)

	11.10.2013 to 30.11.2013 (Unit-I & III)	**1.12.2013 to 28.2.2014 (Unit-II)**	**1.3.2014 to 31.3.2014 (Unit-IV)**
Gross Notional Equity	32179.14	48408.61	64750.35
Addition due to Additional capital expenditure	-	-	116.30
Closing Equity	32179.14	48408.61	64866.65
Average Equity	32179.14	48408.61	64808.50
Rate of ROE (pre-tax)	19.610%	19.610%	19.610%
Return on Equity	**881.72**	**2340.72**	**1079.39**

Interest on Loan

82. Regulation 16 of the 2009 Tariff Regulations provides as under*:*

"(1) The loans arrived at in the manner indicated in regulation 12 shall be considered as gross normative loan for calculation of interest on loan.

(2) 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.

(3) The repayment for the year of the tariff period 2009-14 shall be deemed to be equal to the depreciation allowed for that year.

(4) Notwithstanding any moratorium period availed by the generating company or the transmission licensee, as the case may be 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.

(5) 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 or the transmission system, as the case may be, does not have actual loan, then the weighted average rate of interest of the generating company or the transmission licensee as a whole shall be considered.

(6) The interest on loan shall be calculated on the normative average loan of the year by applying the weighted average rate of interest.

(7) The generating company or the transmission licensee, as the case may be, 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 or the transmission licensee, as the case may be, in the ratio of 2:1.

(8) The changes to the terms and conditions of the loans shall be reflected from the date of such re-financing.

(9) In case of dispute, any of the parties may make an application in accordance with the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, as amended from time to time, including statutory re-enactment thereof for settlement of the dispute.

Provided that the beneficiary or the transmission customers shall not withhold any payment on account of the interest claimed by the generating company or the transmission licensee during the pendency of any dispute arising out of re-financing of loan."

83. Interest on loan has been computed as under:

(a) The opening gross normative loan has been worked out in terms of Regulation 16 of the 2009 Tariff Regulations.

(b) The weighted average rate of interest has been worked out on the basis of the actual loan portfolio of respective year applicable to the generating station.

(c) The repayment for the period 2009-14 has been considered equal to the depreciation allowed for that year

(d) Interest on loan has been calculated on the normative average loan of the year by applying the weighted average rate of interest.

84. Accordingly, interest on loan allowed for the purpose of tariff is as under:

(₹ in lakh)

	11.10.2013 to 30.11.2013 (Unit-I & III)	**1.12.2013 to 28.2.2014 (Unit-II)**	**1.3.2014 to 31.3.2014 (Unit-IV)**
Gross Normative Loan	75084.66	112953.42	151084.14
Cumulative Repayment	-	765.88	2798.91
Net Loan-Opening	75084.66	112187.55	148285.23

Repayment during the year	765.88	2033.03	937.34
Addition due to Additional Capitalization	-	-	271.38
Net Loan-Closing	74318.78	110154.51	147619.27
Average Loan	74701.72	111171.03	147952.25
Weighted Average Rate of Interest	9.95%	9.90%	9.93%
Interest on loan	**1038.54**	**2713.13**	**1247.87**

Depreciation

85. Regulation 17 of the 2009 Tariff Regulations provides as under:

"(1) The value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission.

(2)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.

(3) Land other than the 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 depreciable value of the asset.

(4) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-III to these regulations for the assets of the generating station and transmission system:

Provided that, the remaining depreciable value as on 31st March of the year closing after a period of 12 years from date of commercial operation shall be spread over the balance useful life of the assets.

(5) In case of the existing projects, the balance depreciable value as on 1.4.2009 shall be worked out by deducting 3[the cumulative depreciation including Advance against Depreciation as admitted by the Commission up to 31.3.2009 from the gross depreciable value of the assets.

(6) Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro rata basis."

86. The weighted average rate of depreciation of 5.11**%**, calculated in terms of the above regulation has been considered for the calculation of depreciation. Accordingly, depreciation has been calculated and allowed as under:

(₹ in lakh)

	11.10.2013 to 30.11.2013	**1.12.2013 to 28.2.2014**	**1.3.2014 to 31.3.2014**
	(Units-I & III)	**(Unit-II)**	**(Unit-IV)**
Opening Gross Block	107263.80	161362.03	215834.49
Admitted Additional capital expenditure	0.00	0.00	387.68
Closing gross block	107263.80	161362.03	216222.17
Average gross block	107263.80	161362.03	216028.33

Rate of Depreciation	5.11%	5.11%	5.11%
Depreciable value	96537.42	145225.83	194425.50
Remaining Depreciable value	96537.42	144459.95	191626.59
Depreciation	**765.88**	**2033.03**	**937.34**

O&M expenses

87. Regulation 19 (f) (v) of the 2009 Tariff Regulations provides as under:

> "*In case of hydro generating station declared under commercial operation on or after 1.4.2009, operation and maintenance expenses shall be fixed at 2% of the original project cost (excluding rehabilitation & resettlement works) and shall be subject to annual escalation of 5.72% per annum for subsequent years."*

88. The petitioner has claimed expenditure of ₹375.00 lakh as on the COD of the generating station COD (1.3.2014) on account of Rehabilitation & Resettlement works. Accordingly, after adjusting the said expenditure from the capital cost, the O & M expenses has been worked out as under:

(₹ in lakh)

	11.10.2013 to 30.11.2013	**1.12.2013 to 28.2.2014**	**1.3.2014 to 31.3.2014**
	(Unit-I & III)	**(Unit-II)**	**(Unit-IV)**
Capital Cost	107263.80	161362.03	216222.17
Less: R & R Expenses	187.50	281.25	375.00
Capital cost for the purpose of O & M	107076.30	161080.78	215847.17
O & M expenses (2% of original capital cost)	2141.53	3221.62	4316.94
O & M expenses allowed for the period	**299.23**	**794.37**	**366.64**

89. In view of the fact that the original project cost i.e project cost as on the cut-off date has not attained finality, the O&M expenditure allowed as above would be subject to revision based on the revision, if any, in the original project cost.

Interest on Working Capital

90. Regulation 18(1)(c) of the 2009 Tariff Regulations provides that the working capital for hydro based generating stations shall cover:

> *(i) Cost of coal for 1.5 months for pit-head generating stations and two months for non-pithead generating stations, for generation corresponding to the normative annual plant availability factor;*
>
> *(ii) Cost of secondary fuel oil for two months for generation corresponding to the normative annual plant availability factor, and in case of use of more than one liquid fuel oil, cost of fuel oil stock for the main secondary fuel oil;*
>
> *(iii) Maintenance spares @ 20% of operation and maintenance expenses specified in regulation 19.*

(iv) Receivables equivalent to two months of capacity charge and energy charge for sale of electricity calculated on normative plant availability factor; and

(v) O&M expenses for one month.

91. Clause (3) of Regulation 18 of the 2009 Tariff Regulations as amended on 21.6.2011 provides as under:

"Rate of interest on working capital shall be on normative basis and shall be considered as follows:

(i) SBI short-term Prime Lending Rate as on 01.04.2009 or on 1st April of the year in which the generating station or unit thereof or the transmission system, as the case may be, is declared under commercial operation, whichever is later, for the unit or station whose date of commercial operation falls on or before 30.06.2010.

(ii) SBI Base Rate plus 350 basis points as on 01.07.2010 or as on 1st April of the year in which the generating station or a unit thereof or the transmission system, as the case may be, is declared under commercial operation, whichever is later, for the units or station whose date of commercial operation lies between the period 01.07.2010 to 31.03.2014.

Provided that in cases where tariff has already been determined on the date of issue of this notification, the above provisions shall be given effect to at the time of truing up.

92. In terms of above interest on working capital has been worked out as under:

(a) **Receivables**: Receivables equivalent to two months of fixed cost considered for the purpose of tariff is worked out as under:

(₹in lakh)

11.10.2013 to 30.11.2013	**1.12.2013 to 28.2.2014**	**1.3.2014 to 31.3.2014**
(Units-I & III)	**(Unit-II)**	**(Unit-IV)**
510.32	1347.26	620.74

(b) **Maintenance Spares**: Maintenance spares @ 15% of operation and maintenance expenses considered for the purpose of tariff is worked out as under:

(₹in lakh)

11.10.2013 to 30.11.2013	**1.12.2013 to 28.2.2014**	**1.3.2014 to 31.3.2014**
(Units-I & III)	**(Unit-II)**	**(Unit-IV)**
44.88	119.16	54.88

(c) **O&M Expenses**: In terms of the provisions above regulations, Operation and maintenance expenses for one month is considered for the purpose of tariff is worked out as under:

(₹in lakh)

11.10.2013 to 30.11.2013	**1.12.2013 to 28.2.2014**	**1.3.2014 to 31.3.2014**

(Units-I & III)	(Unit-II)	(Unit-IV)
24.94	66.20	30.49

(d) Rate of interest on working capital: In accordance with clause (3) of Regulation 18 of the tariff regulations, as amended, rate of interest on working capital shall be on normative basis and shall be equal to the short-term Prime Lending Rate of State Bank of India as on 1.4.2009 or on 1st April of the year in which the generating station or a unit thereof is declared under commercial operation, whichever is later plus 350 basis points. In the instant case, SBI PLR on 1.4.2013 was 9.70%. Accordingly, rate of interest of 13.20% has been considered for the purpose of Interest on Working Capital

93. Necessary computations in support of calculation of interest on working capital are as under:

(₹ in lakh)

	11.10.2013 to 30.11.2013	1.12.2013 to 28.2.2014	1.3.2014 to 31.3.2014
	(Units-I & III)	(Unit-II)	(Unit-IV)
Receivables	510.32	1347.26	620.74
Maintenance Spares	44.88	119.16	54.88
O & M expenses	24.94	66.20	30.49
Total	580.14	1532.61	706.30
Interest on Working Capital @13.20%	**76.58**	**202.30**	**93.23**

Annual Fixed Charges

94. The annual fixed charges allowed for the purpose of tariff for 2013-14 is as under:

(₹ in lakh)

	11.10.2013 to 30.11.2013	1.12.2013 to 28.2.2014	1.3.2014 to 31.3.2014
	(Units-I & III)	(Unit-II)	(Unit-IV)
Return on Equity	881.72	2340.72	1079.39
Interest on Loan	1038.54	2713.13	1247.87
Depreciation	765.88	2033.03	937.34
Interest on Working Capital	76.58	202.30	93.23
O & M Expenses	299.23	794.37	366.64
Total	**3061.93**	**8083.56**	**3724.47**

Normative Annual Plant Availability Factor (NAPAF)

95. As regards NAPAF, the Commission based on the submissions of the parties has held in its order dated 14.2.2014 as under:

"33. The petitioner has claimed NAPAF of 55.10%, based on 10 daily design energy approved by CEA and corresponding MW continuous power. Further, the petitioner has claimed

relaxation in NAPAF based on sedimentation study on the silt data collected during the period from 1991 to 2010. As regards high silt content likely to be encountered during the operation of the generating station, the petitioner has submitted as under:

> *"The petro graphic analysis of the river water sample shows the presence of quartz having irregular and distorted faces (30%), calcite having nail head crystal (27%), feldspar of angular to sub-rounded shape (15%) along with other constituents, restriction in sediment flushing due to Indus Water Treaty and recommendations of ALSTOM the OEM for limiting the satisfactory operation of machines beyond 500 ppm."*

34. In the above circumstances, the petitioner has prayed that the generating station may be allowed 5% allowance in NAPAF for high silt operating conditions. The respondents have objected to the prayer of the petition for relaxation of NAPAF.

35. The matter has been examined. Regulation 27(i)(2) of the 2009 Tariff Regulations provides that:

> *"A further allowance may be made by the Commission in NAPAF determination under special circumstances, e.g. abnormal silt problem or other operating conditions, and known plant limitations."*

36. On scrutiny, it is noticed that the petitioner has not submitted any justification to establish through data, the detail of the number of days/hours in a year during which the operation of the generating station would be affected due to the high silt conditions as envisaged by the OEM. Under these circumstances, we are not inclined to allow the prayer of the petitioner for 5% allowance in NAPAF of the generating station due to high silt operating conditions. However, the petitioner is at liberty to approach the Commission with the prayer for relaxation in NAPAF due to high silt conditions and the same would be considered in accordance with law, subject to production of documents containing the details of the number of days/hours in the first year of operation (after declaration of commercial operation) during which the generating station was affected due to high silt conditions and its impact on recovery of annual fixed charges. In view of this, the payer of the petitioner has not been considered in this order. Accordingly, NAPAF of 55% has been allowed for the generating station for the year 2013-14."

96. Despite liberty being granted to the petitioner in Commission's order dated 14.2.2014, the petitioner has not furnished any additional document/information containing details of the number of days/hours in the first year of operation (after COD) during which the generating station was affected due to high silt conditions and its impact on recovery of annual fixed charges. In view of this, the NAPAF of 55% allowed in the said order dated 14.2.2014 has been allowed in this order.

Design Energy

97. The month-wise design energy approved by CEA corresponding to 90% dependable year is considered as under:

Month		**Design Energy (Million Units)**
April	I	54.72
	II	54.72
	III	54.72
May	I	54.72

	II	54.72
	III	60.19
June	I	33.92
	II	30.65
	III	39.96
July	I	30.51
	II	27.77
	III	34.32
August	I	40.77
	II	30.88
	III	30.98
September	I	21.25
	II	20.72
	III	20.88
October	I	14.92
	II	13.43
	III	13.26
November	I	23.00
	II	17.58
	III	14.94
December	I	12.87
	II	13.48
	III	14.77
January	I	11.57
	II	20.67
	III	21.24
February	I	17.13
	II	23.65
	III	38.94
March	I	41.02
	II	54.71
	III	60.19
Total		**1123.77**

Water usage charges & License fee

98. The petitioner vide affidavit dated 13.8.2014 of the amended petition has submitted that it is entitled to recover the expenditure incurred for payment of water usage for generation of electricity and license fee for using water under the Jammu & Kashmir Water Resources (Regulation and Management) Act, 2010.

99. Regulation 22 (7) (a) of the 2009 Tariff Regulations amended on 31.12.2012 provides as under:

> *"7a. In case of the hydro generating stations of NHPC Ltd., located in the State of Jammu & Kashmir, any expenditure incurred for payment of water usage charges to the State Water Resources Development Authority under Jammu & Kashmir Water Resources (Regulations and Management) Act, 2010 shall be payable by the beneficiaries as additional energy charge in proportion of the supply of power from the generating station on month to month basis.*

Provided that the provisions of this clause shall be subject to the decision of the Hon'ble High Court of Jammu & Kashmir in OWP No. 604/2011 and shall stand modified to the extent of inconsistency with the decision of the High Court."

100. In terms of the above regulations, the Commission in its order 7.10.2013 had permitted the recovery of the actual expenditure incurred on account of water usage charges and License fees from the respondent. The same is considered in the present case and the prayer of the petitioner is accordingly disposed of in terms of the above.

Application fee and the publication expenses

101. In terms of our decision contained in order dated 11.1.2010 in Petition No.109/2009, the expenses towards filing of tariff application and the expenses incurred on publication of notices are to be reimbursed. Accordingly, the expenses incurred by the petitioner towards petition filing fees in connection with the present petition and the publication expenses for ₹58978/- incurred shall be directly recovered from the beneficiaries, on *pro rata* basis. The excess filing fee if any paid, shall be adjusted against any other appropriate application to be filed in respect of the generating station.

102. The difference between the tariff determined by this order and the tariff already recovered from the respondents in terms of interim order dated 14.2.2014 shall be adjusted in accordance with the proviso to Regulation 5(3) of the 2009 Tariff Regulations.

103. The fixed charges approved as above is subject to truing-up in terms of Regulation 6 of the 2009 Tariff Regulations

104. Petition No. 156/GT/2013 is disposed of in terms of the above.

Sd/-	*Sd/-*	*Sd/-*
(A.S. Bakshi)	**(A.K.Singhal)**	**(Gireesh B. Pradhan)**
Member	**Member**	**Chairperson**