# BEFORE THE UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION LUCKNOW

Petition No. 550/2008

**IN THE MATTER OF:** Tariff for sale of power generated at Vishnuprayag Hydro

Electric Project (4 X 100 MW) under the final power purchase agreement (PPA) dated 16.01.2007 entered into between the petitioner and UP Power Corporation

Limited (Respondent)

AND

**IN THE MATTER OF:** Jaiprakash Power Ventures Limited, (the Company)

Regd. Office,

113, Rajpur Road, Dehradun, 248001.

Head Office:

Sector-128, Noida-201304

Distt. Gautam Budha Nagar (U.P),

: Petitioner

AND

- 1. U.P. Power Corporation Ltd., 7th Floor, Shakti Bhawan, 14,Ashok Marg, Lucknow. 226 001
- Government of UP, Through its Principal Secretary (Energy) Lucknow.
- 3. Government of Uttrakhand, Through its Principal Secretary (Energy) Uttrakhand.

:Respondents

The following were present:

- 1. Sri. Suresh Kumar, Executive Chairman Jaiprakash Power Ventures Limited.
- 2. SriR.K.Porwal, General Manager (F&A) Jaiprakash Power Ventures Ltd.,
- 3. Sri. M.A. Siddqui, Advisor, Jaiprakash Power Ventures Ltd..
- 4. Sri. Anil Sethi, ZVNL Technologies Pvt. Ltd. Consultant of Petitioner M/s Jaiprakash Power Ventures Ltd.,
- 5. Sri. S.N. Dubey, Chief Engineer (PPA), UPPCL.
- 6. Sri. S.P Pandey, EE(PPA), UPPCL

#### ORDER

(Date of hearing 03.09.2008)

1. (a)The Petitioner states in the petition that the Commission had approved the capital cost of Rs.1682.72 Cr. as on 13.10.06, the COD of the project, for the

purpose of tariff and allowed the petitioner company, by Order dt.5.4.07, to incur additional capital expenditure up to 30.6.08. It is stated that the Company initially focused on essential components of the project necessary for commencing generation. All the four units of the project were commissioned by 13.10.06, about six months ahead of the schedule, however other capital works were continued and completed by 30.6.08. The additional expenditure from COD of the project to 31.3.08 is Rs.33.17 Cr. and Rs.3.94 Cr. for period from 1.4.08 to 30.6.08 thus totaling to Rs.37.11 Cr. from COD till 30.6.08. As per the details available in Exhibit-2 to the petition, the additional expenditure up to 31.3.08 has been indicated as below:

- (i) Rs.7.27 on construction of buildings for residential accommodations and related facility for staff.
- (ii) Rs.6.29 Cr. civil/ on plants and equipment for mechanical/electrical works such as excavator, dozers, loaders, tippers, water tankers, bending machines, drill machines, survey instruments, trailers, cranes, diesel tankers; and hydro mechanical equipment & ropeway trolleys for automatic operation of barrage gates and silt management; and buses, ambulances and light vehicles for movement of staff and workmen; and transformers; pumps; DG sets and office equipments for camp and officers and PLCC modem and splitters for communication with Modipuram Sub-Station.
- (iii) Rs.13.84 Cr. on 3 additional spare runners, over and above one envisaged earlier, in view of excessive damage of runners being experienced in operation due to high head and angular silt and time required for repairs of runners extends from 9-12 months. It is estimated that runner may be discarded or replaced by new runners after every 3-4 years of operation. Additional spares like needle tips, nozzle tips, etc have also been included in the above cost.
- (iv) Rs.3.99 Cr. towards custom duty.
- (v) Rs.1.78 Cr. as interest during construction.

- (b) The petitioner states, since the Commission had put a ceiling on expenditure to the extent of Rs.1715.58 Cr., the Petitioner is seeking capitalization of Rs.32.86 Cr. up to 31.03.2008 so that the total capital cost of the project does not exceed the said ceiling.
- (c) The petitioner is also seeking determination of tariff based on capital cost of Rs.1715.58 Cr. for year 2008-09 based on provisions made in the power purchase agreement dt.16.1.07 for determination of tariff. Direction for the Respondent to make payment in accordance with the provisions of PPA without approaching the Commission is also being sought.
- (d) Direction for the Respondents is also sought for admitting provisional and final tariff for 2009-10 on wards without approaching the Commission.
- 2. UPPCL has filed reply to the petition stating that additional capitalization of expenditure incurred up to 30.6.08 is against the terms agreed in the power purchase agreement with specific reference to the provisions made in clause 3.4 of Article-3 "Company tariff for Sale/Purchase of Energy", Clause 6.9 of Article-6 "Payments" and provisions of Article 14 'Force Majeure'. In the background of said provisions of PPA, the Respondent is also seeking review of Order dt.5.4.07 which permits the Petitioner capitalization of additional expenditure incurred up to 30.06.2008. The Respondent also states that the Petitioner has not sought prior approval of additional capital expenditure as directed by UPERC in Order dt.5.4.07. Respondent has following objections to the additional capital expenditures -
  - (i) Additional expenditure of Rs.7.27 Cr. on buildings is approximately 26.5% of the original approved cost and the Petitioner has not submitted detailed or descriptions of such buildings.
  - (ii) Rs.6.29 Cr. expenditure on main plant equipments has been shown without any justification.
  - (iii) The total expenditure on initial spares is approximately 5.11% of plants and equipments including hydro mechanical equipments, more than 5% limit specified in PPA.

The Respondent is also objecting to 'provisional tariff' for year 2008-09 quoting the Commission's Order dt.2.6.08 which states that the provisional tariff

for 2008-09 will be based on capital cost of Rs.1682.72 Cr. till final determination of tariff. It is also stated that there is no provision of provisional tariff in Section-62 of EA,03 and the Commission can revise tariff only once.

The Respondent has not made any objection to the computation of the tariff except tariff determination on capital cost of Rs.1715.58 Cr. and concept of tariff determination by the parties without the approval of the Commission is not agreeable.

- 3. (a) Sri. Suresh Kumar, Executive Chairman, Jaiprakash Power Ventures Limited averred that Commission had approved the provisional capital cost of Rs.1682.72 Cr. as on 13.10.2006 and allowed additional capitalization up to 30.06.2008 provided that the capital cost did not exceed Rs.1715.58 Cr., vide order dated 05.04.2007 and 12.04.2007. The Petitioner had made expenditure of Rs.33.17 Cr. up to 31.03.2008 and Rs.37.11 Cr up to 30.06.2008 and in order to restrict the total expenditure within ceiling of Rs.1715.58 Cr, it was seeking approval of additional capitalization of Rs.32.86 Cr.( from the COD of the project i.e. 13.10.2006 till 31.03.2008). He prayed for approval of capital cost of Rs.1715.58 Cr. as on 31.03.2008 for the computation of tariff for the tariff year 2008-09 and onwards and other payments in accordance with the provisions of PPA.
  - (b) Shri S.P.Pandey, Executive Engineer (PPA), UPPCL opposed the additional capitalization and submitted that the capital additions are limited only to provisions made under Clause-6.9 of Article-6 "Change in Law" or Article-14 "Force Majeure" of PPA. He further stated that the Petitioner had not honoured the Commission's order dated 05.04.2007 by not obtaining prior approval of the additional capital expenditure of Rs.33.17 Cr. Shri S.P. Pandey further added that the additional capital expenditure claimed by the petitioner deserved to be rejected in view of the fact that the Petitioner had abruptly shown an increase of Rs. 7.27 Cr. against construction of buildings, which was approximately 26.5% of the original approved cost of building. Sri. Pandey also declined to accept the claim of Rs. 6.29 Cr. against additional main plant and equipment in absence of justification provided by the Petitioner. Sri. Pandey further informed that Rs.

- 27.76 Cr expenditure on initial spares is approximately 5.11% of the plants and equipments, including Hydro Mechanical Equipment, beyond threshold of 5% mentioned in the Power Purchase Agreement.
- (c) Shri Suresh Kumar submitted in reply that the petitioner was directed to make effort for commissioning of the project ahead of schedule, vide Order dt.16.2.06 passed in Pet.no.139/03,for meeting the demand and therefore in an effort of early commissioning, the petitioner had to defer the construction activities of major part of houses and offices which later resulted in increase in cost. It was clarified that construction of buildings for housing the staff and the office was necessary for effective maintenance and operation of the plant. He also recalled the proposal of the Commission of allowing incentive for early commissioning which did not materialize. Shri Kumar further added that the additional expenditure of Rs. 33.17 Cr. (made during 13.10.2006 to 31.03.2008) had not been claimed in tariff for 2007-08 and capitalization was being sought for 2008-09 and onwards.
- (d) Shri Suresh Kumar further informed that the Vishnu Prayag Hydro Electric Project was 915 meter high head generating station with excessive angularshaped highly corrosive quartz particles, a unique hydro generating station in the world, and because of that peculiarity, the requirements of maintenance spares had increased particularly due to requirement of additional runners. He clarified that although the Commission directed earlier in Order dt.5.4.07 the Petitioner to submit industrial practices,under similar conditions, for requirement of additional maintenance spares and desirability of additional O&M expenditures but the Petitioner had not been able to find out any such existing practice in the world and that the Petitioner's plant was the first case in itself. Sri. Kumar clarified that all expenditures had duly been audited by the statutory auditors.

The petitioner made a presentation on Multi Year Tariff (MYT) as directed in Order dated 02.06.2008 passed in Petition no 532/2008.

4. (a) We will first deal with the question of admissibility of additional capital expenditure incurred after commissioning of the plant i.e. 13.10.2006 till 30.6.08.

The parties to this petition have agreed to various provisions as to the capital cost and the terms and conditions of determination of tariff. Clause 3.4 of PPA dt.16.1.07 deals with the capital cost to be determined by the Commission. It includes any revision thereof comprising, the debt, leased amount and equity, IDC, financing cost and projected cost escalations. This provision states that the capital cost of the project shall be lower of total expenditure actually incurred or the cost as approved by the Commission. In computation of the capital cost, due consideration shall be given to the established prevailing industry practice for hydro electric project, force maejure events, change in law and non fulfillment of obligations by UPPCL/Govt. However increase in cost caused by non-fulfillment of obligations by the company is not admissible. The scope of expenditure has been defined in second para of sub-clause (ii) of this clause. It states that the total expenditure actually incurred by the company in setting up and constructing the project, on acquisition and development of land, on consultancy, design, supply, transport, construction, erection, testing, buildings including staff quarters, plant equipment, material, work on facilities required to enable the project to deliver rated output in accordance with the estimate or revised estimate with due regard to efficiency and economy shall, inter alia, include the cost of spares procured along with the equipment subject to the limitation that such cost shall not exceed 5% of the cost of the equipment.

(b) Clause 6.9 deals with change in law and defines 'Law', 'Change in Law', 'Delays', 'Additional Expenditure', and among other things, the change in tariff due to Change in Law. The provision on 'Additional Expenditure' is in respect to impact of 'Change in Law' coming into force prior to commercial operation of Unit-IV and the same shall be added to the capital cost subject to the approval of Hon'ble Commission.

Article 14 deals with force maejure conditions.

- (c) It may be seen from the provisions made under Clause 3.4 that buildings including staff quarters, plants, equipments, material, work or facilities required to enable the project to deliver rated output with due regard to efficiency and economy and requirement of initial spares are covered within the scope of project cost. The additional expenditure due to Change in Law, as covered under clause 6.9 of PPA, does not preclude the petitioner to incur those expenditures which are allowed under clause 3.4 of PPA while in fact the effect of clause 6.9 of PPA is that it allows additional cost which arises specifically on the occurrence of an event due to Change in Law taking place prior to commissioning of last unit. Article 14 of PPA applies to force maejure conditions. There is no additional expenditure being sought for capitalization under this petition which has been attributed to force maejure conditions, or change in law. In light of above provisions of PPA, we are convinced that original scope of work defined under clause 3.4 of PPA is in no way influenced or barred by either clause 6.9 or article 14 of PPA as such the Petitioner could legitimately incur expenditure or additional expenditure covered under the original scope of work defined under clause 3.4 of PPA and also make expenditures which are necessary to enable it to deliver rated power with due regard to efficiency and economy.
- (d) The Respondent has also made reliance on Regulation 34(1) 'Additional capitalisation' of UPERC (Terms & Conditions of Generation Tariff) Regulations, 2004 (in short Generation Regulations) which states as below:
  - " (1) The following capital expenditure within the original scope of work actually incurred after the date of commercial operation and up to the cut off date may be admitted by the Commission subject to prudence check.
    - (i) Deferred liabilities,
    - (ii) Works deferred for execution,
    - (iii) Procurement of initial capital spares in the original scope of works subject to ceiling specified in regulation 33,
    - (iv) Liabilities to meet award of arbitration or in compliance of the order or decree of a court, and
    - (iv) On account of change in law.

Provided that original scope of works along with estimates of expenditure shall be submitted along 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 the date of commercial operation of generating station."

- (e) The cut off date is defined under Regulation 31(viii) meaning "the date of first financial year closing after one year of the date of commercial operation of the generating station."
- (f) The above mentioned Regulation intend to allow the generating company to continue the works which have already commenced under original scope even after commercial operation of the generating station until the date of first financial year closing after one year of the date of commercial operation of the generating station. The expenditures so incurred may be on account of deferred liabilities or work deferred for execution or procurement of initial spares or on account of Change in Law or the liabilities arising out of arbitration or in compliance of order or decree of the Court. The generating company is required to submit the original scope of work with the application of provisional tariff and a list of deferred liabilities.
- (g) The Petitioner submitted the original scope of work in Form-5B to the Petition no. 443/07 disposed of by the Commission by an Order dt.5.4.07. In the proceeding of this petition, the UPPCL submitted that additional expenditure which is likely to be incurred after the COD might be allowed in the year in which it was actually spent and the petitioner should furnish proof of expenditure for that year and necessary adjustment in the tariff might be made and prayed for fixing a ceiling on the total capital cost of the project in view of TEC by CEA vide Order dt.5.4.07. After hearing the parties, the Commission had observed that "the Petitioner is likely to close the additional expenditure if any by 30th June,08, 9 months later than the month of scheduled commissioning as per the implementation agreement, as such the Commission has no objection for capitalization subject to prudence check by the Commission. After the requirement of additional capitalization is established, the total capital cost of the project shall not exceed Rs.1715.58 *Cr.*" The above observation is also in line with the mandate of the Regulation 34(1) read with Regulation 31(viii) and the scope of work defined under clause 3.4 of the PPA.

- (h) It would not be out of place to mention that there has been practice in the industry to continue expenditure after commissioning of the project of the works covered in the original scope and those which could not be completed by the date of commercial operation. Such costs are included in the actual capital cost of the project for determination of tariff, however, if any work falls beyond the scope of work or undertaken after the cut off date, prior approval of the appropriate authority was must.
- (i) The total additional capital expenditure brought in this petition is the expenditure made up to the cut off date specified by the Commission in Order dt.5.4.07 and no further approval of works was required from the Commission as per Regulation 34(1)because the Commission had permitted the Petitioner to incur the additional capital expenditure beyond COD upto 30.06.2008 in the order dated 05.04.2007. Therefore it is held that the Petitioner could incur additional capital cost within overall ceiling of Rs. 1715.58 Cr. on the capital cost upto 30.06.200 as per order in petition No. 443/2007.
- 5. The parties to the petition have relied on Regulation-34 of the Generation Regulation which calls for prudence check, by the Commission, of any capital expenditure incurred after the date of commercial operation.
  - (a) The additional expenditure has been made in this petition on buildings, main plant and equipment and spares which are allowed within the original scope of work as per clause 3.4 of PPA. The Petitioner has stated that the expenditures have been certified by the statutory auditor.
  - (b) The Petitioner has stated that work on the buildings was deferred for early commissioning of the project as directed by the Commission. The Commission has come across with the price rise in input material used in civil works in Petition no.539/2008, M/s Alaknanda Hydro Power Company Ltd. Vs. UPPCL disposed of on 23.6.2006, in which it was averred by the Petitioner that the prices of steel and cement have gone up by more than 50% over and above the costs taken in Petition no.327/2006. The Petition no. 327/2008 was disposed off on 07.06.2006. Keeping the above facts of price rise and deferment of work in mind , we are of the opinion that the price on

- building could escalate due to time over run and increase in cost of material and as such the petitioner is entitled to additional expenditure incurred on building as claimed.
- (c) Additional plant and equipments worth Rs.6.29 Cr. have been claimed necessary for operation, maintenance, repairs, loading, unloading and movement of plants and equipments, operation of barrage gates and silt management, movement of staff and work men and communication with the sub control at Modipuram Sub-Station. The Commission considers these additional plants and equipments necessary for operation and maintenance of the generating station and as such the same are allowed.
- (d) We shall now consider additional capital expenditure on initial spares. As per the provisions of clause 3.4(7) of PPA, the cost of spares is subject to ceiling of 5% of the cost of the equipment.
- (e) The Petitioner has raised the requirement of additional runners from one envisaged earlier to four due to excessive damages to runners due to high head and angular silt. It is informed that repair of the runner would take 9-12 months, time, and no technical or commercial prudence would allow the loss of generation for want of runner spending huge time in repairs. The Respondent's objections might be aiming at arresting the rise in tariff due to capitalization of this additional cost but it has to be kept in mind that generation loss for want of runner shall entail huge cost to the Respondent on account of overdrawal or purchases of power at higher prices from other sources in absence of the generation from the generating station of the petitioner. We can not allow this situation and therefore decide to allow purchase of additional three runners and other minor spares.
- (f) It is generally the industry practice that the purchaser of the equipments makes an attempt for reduction of equipment cost with the supplier and such supplier tries to load the cost on spares and thus we should evaluate the initial spares on the following consideration:-
  - (i). The total capital cost is within the total approved capital cost and if so whether the total cost of equipments including initial spares are within the total approved capital cost of equipments including initial spares.

- (ii). The requirement of initial spares which are necessary to enable it to deliver the rated power with due regard to efficiency and economy.
- (g) In the CEA approved capital cost of Rs. 1715.58 Cr., the cost of Electrical and Mechanical Plant and Equipment indicated was Rs. 538.67 Cr. Civil works cost also included Hydro Mechanical Equipment to the tune of Rs. 25.53 Cr. Thus the total estimated capital cost of E&M and Hydro Mechanical Equipment is Rs. 564.20 Cr. as against the actual expenditure of Rs. 528.22 Cr. on equipment which includes initial spares.
- (h) On the date of commercial operation, the approved cost of E&M works was Rs.478.57 Cr. and the cost of hydro mechanical equipment was Rs.25.53 Cr., both totaling to Rs.504.10 Cr. The Commission is allowing an additional expenditure of Rs.6.29 Cr. on plants and equipments in this order. Thus the total cost of E&M works, hydro mechanical equipment and additional plants & equipments comes out to Rs.510.39 Cr. Hence the allowable cost of initial spares at 5% shall be Rs.25.52 Cr.
- (i) The additional capitalization to the extent of Rs.32.86 Cr. can be allowed in view of ceiling of Rs. 1715.58 Cr. on capital cost. The actual total additional cost on account of civil works (Rs.7.27 Cr.), plants and equipments (Rs.6.29 Cr.), custom duty (Rs.3.99 Cr.), initial spares (Rs.13.84 Cr.) and IDC (Rs.1.78 Cr.) comes out to Rs.33.17 Cr. i.e. Rs.0.31 Cr. higher than allowable additional capital expenditure of Rs.32.86 Cr. In light of the above, the cost of additional initial spares to the tune of Rs. 13.53 Cr. is allowed after reducing actual expenditure of Rs.13.84 Cr by Rs.0.31 Cr. Hence, the total cost of initial spare shall be a sum of Rs.11.92 Cr.(up to 13.10.06) and Rs.13.53 Cr.(from 13.10.06 to 31.3.08) totaling to Rs.25.45 Cr. which is within the limit of ceiling value of Rs.25.52 Cr.
- (j) Custom duty of Rs.3.99 Cr. and IDC of Rs.1.78 Cr. are indirect costs to the said additional capital expenditures as natural consequence which can not be avoided. Therefore the Commission allows the same.
- (k) In consideration of aforesaid decisions, the Commission approves additional capital expenditure as below:

S.no.	Expenditure head	Additional expenditure (Rs.
		Cr.)
1	Building	7.27
2	Additional plant & equipments	6.29
3	Spares	13.53
4	Tax & duties	3.99
5	IDC	1.78
	Total	32.86

- 6. The Commission had approved Rs. 1682.72 Cr. as actual capital expenditure as on COD of the project in it's order dated 05.04.2007 passed in Petition no. 443/07 and additional capital expenditure of Rs. 32.86 Cr. in this order and as such the capital cost as on 31.03.2008 shall be Rs. 1715.58 Cr. for the purpose of determination of tariff for the FY 2008-09 and onwards.
- 7. Based on the aforesaid cost the Petitioner has proposed the following provisional tariff for FY 2008-09 and requests the Commission to direct UPPCL to make payment subject to adjustment in the final tariff.

SI.No	Particulars	Rs. In Cr.
A-1	Capacity Charges	
	Depreciation/advance against depreciation	122.7771
	Interest on loan and other finance charges	110.8906
	Leasing charges	0.472
	Total Capacity charges	234.1419
A-2	Installed capacity (MW)	400
A-3	Capacity charges/ MW /month	Rs. 4.878 lacs
B-1	Energy charges	
	Return on equity	82.3478
	Interest on working capital	10.3032
	O&M charges	34.4806
	Tax on income	20.3999
	Total energy charges	147.5315

B-2	Saleable design energy	1545.880 MU
B-3	Energy tariff (Rs./kwh)	0.9544
С	Total capacity energy charges	381.6734

#### 7. (A). Annual Capacity Charges:

As per Article 3.5 of PPA the annual capacity charges shall include the following:

- i. Interest and financing cost on outstanding loan capital.
- ii. Depreciation/advance against depreciation.
- iii. Leasing charges.

The petitioner has considered the following for tariff calculation:

- (a) The weighted average rate of interest on debt has been taken @ 10.83% as on 01.04.2008 which shall be subject to adjustment as may be necessary due to change in interest rates during the tariff year 2008-09.
- (b) The rate of depreciation has been taken as 3.92% as for the PPA.
- (c) The leasing charges are Rs. 47.42 lacs.
- (d) Accordingly the capacity charge works out to Rs. 234.1419 Cr. or Rs. 4.878 lacs/MW/Month.

The Petitioner has calculated the weighted average rate of interest on loan, as on 1.4.08. at 10.83% duly certified by the Chartered Accountant in Annexure-1 to the Enclosure-2 of the petition. The Commission accepts the interest rate calculated by the petitioner. The total loan of the petitioner is Rs.1200.906 Cr. which is 70% of the capital cost of Rs.1715.58 Cr. Interest free loan to be paid to GoUP is Rs.25 Cr. As such net interest bearing loan is Rs.1175.906 Cr. arrived at after deducting the loan to be paid to GoUP from the total loan. The Petitioner has already considered Repayment of loan to the tune of Rs.86.4678 Cr. in year 07-08. After taking aforesaid repayment into consideration, the interest bearing loan as on the beginning of year 2008-09 is Rs.1089.4382 Cr. The interest on loan taking into account quarterly repayments has been calculated to Rs.110.5165 Cr. The PPA allows the financing cost also which is Rs.0.3741 Cr. Therefore,

the interest and financing cost for year 2008-09 is Rs.110.8906 Cr. and the Commission approves the same.

Depreciation has been claimed at 3.92% as per PPA. Amount of depreciation for year 08-09 is Rs.67.2507 Cr. and advance against depreciation according to the terms of PPA is Rs. 55.5264 Cr. Thus the total amount of depreciation and 'advance against depreciation' is Rs.122.7771 Cr. and the Commission approves the same.

The lease amount of Rs. 0.4742 Cr. has been claimed and the Commission approves the same.

Based on above components of annual capacity charges, the Commission approves total capacity charge of Rs.234.1419 Cr. for 2008-09.

### 7. (B) Energy Charges

As per Article 3.6 of energy charges shall include the following:

- i. Operation & Maintenance Expenses.
- ii. Tax on Income.
- iii. Return on Equity @ 16% on paid up capital.
- iv. Interest on working capital.
- v. Other miscellaneous charges.
- vi. working capital to include -
  - (a) O&M expenses for a month
  - (b) Maintenance spares at actuals, but not exceeding one year requirements, less value of 1/5<sup>th</sup> of initial spares already capitalized for the first five years.
  - (c) Receivables equivalent to two months average billing under this agreement.

The petitioner has considered the following in its submission:

a. The project cost was approved by CEA in June, 97 based on the completion up to Dec, 02. As per Annexure-iv of PPA for calculation of O&M charges, initial whole sale and consumer price indices of Dec, 02 have been taken. The figures of whole sale price index and consumer price index for the computation of tariff for year 2008-09 to one month prior to the date of revision. Since the date of revision

of the tariff is 1.4.08, the relevant period (one month prior to date of revision) becomes March,08 as such the Petitioner has taken the values of indices for the month of March,08. On the basis of the said indices, the escalation factor for O&M is 1.3399 for 2008-09. The base figure of O&M charges calculated at 1.5% of Rs.1715.58 Cr. comes to Rs.25.7337 Cr. Accordingly, O&M for year 2008-09 is Rs.34.4806 Cr.. the product of the base O&M multiplied by the said escalation factor.

b. The total income for the purpose of income tax has been assessed as Rs.370.9234 Cr. which comprises of capacity and energy charge less advance against depreciation amounting to Rs.326.1470 Cr., incentive on plant availability Rs.30.3658 Cr. and payment for secondary energy Rs.14.4106 Cr.

Total expenses of Rs.190.8712 Cr. are comprising of O&M expense (Rs.34.4806 Cr.) interest on term loans and other finance charges (Rs.110.8906 Cr.) and depreciation (Rs.45.5000 Cr.).

On the basis of above income and expenses, the net profit before tax has been worked out to Rs.180.0522 Cr. The Petitioner is claiming Minimum Alternate Tax (MAT) at the rate of 11.33% (@ of 10% + surcharge 10% on 10% + 3% cess on 11%) on the net profit. The MAT which works out to Rs.20.3999 Cr..

- c. The RoE has been calculated as Rs.82.3478 Cr. @ 16% on equity, calculated as 30% of capital cost of Rs.1715.58 Cr.
- d. Interest on working capital is being claimed at 12.25% (effective from 1.4.08) duly supported by certificate of State Bank of India dt.29.4.08.
- e. The working capital has been claimed at Rs.84.1081 Cr. taking into account the maintinance spares of Rs.25.7562 Cr, one month O&M Rs.2.8734 Cr., ,two months receivables of Rs.71.0750 Cr and the interest on working capital at 12.25% is Rs.10.3032 Cr.
- f. The petitioner has not charged any miscellaneous charges.

g. The total energy charges have been calculated as Rs.147.5315 Cr. which yields energy charge @ Rs.0.9544/KWh considering saleable design energy of 1545.88 MU.

The calculation of O&M expense, tax on income, return on equity and interest on working capital are found in order and the same are approved.

Based on the cost of aforesaid components of the energy charge, the total energy charges for year 2008-09 shall be Rs.147.5438 Cr. and the same is approved.

8. In consideration of the decisions taken by the Commission in foregoing paragraphs, the charges approved for year 2008-09 are as below:

S.no	Particulars	Amount
1	Annual Capacity Charge (Rs. Cr.)	234.1419
2	Installed capacity (MW)	400
3	Capacity charges/ MW /month (Rs. lacs)	4.878
4	Energy charges (Rs. Cr.)	147.5438
5	Saleable design energy (MU)	1545.880
6	Energy tariff (Rs./kwh)	0.9544

9. UPPCL in it's Counter Affidavit mentioned that the provisional tariff for the year 2008-09 can not be revised since the Commission in it's order dated 02.06.2008 at Para-15 (d) has stated that the Provisional Tariff for 2008-09 will be based on Capital Cost of Rs. 1682.72 Cr. till the final determination of Tariff and, as such, there is no scope of any further determination of Provisional Tariff in view of section-62 sub clause (4 of Electricity Act- 2003, the Tariff Determined by the Commission can be revised only once. Shri Suresh Kumar in reply submitted that Provisional Tariff for payment submitted to UPPCL was based on Capital Cost of Rs. 1682.72 Cr. and payments are being made by UPPCL on that basis. He further submitted that the Petitioner has filed the present petition for revision of Capital Cost on account of additional expenditure from COD till 31.03.2008 as per Commission's order dated 05.04.2007 and the Tariff Computation will change as an when revised Capital Cost is approved by

the Hon'ble Commission. He further submitted that Section-62 sub clause(4) of Electricity Act- 2003, is general and does not prohibit revision of tariff in specific circumstances. In the present circumstances, the Tariff Calculation is required to be revised due to revision of the Capital Cost.

The Commission considered the matter and felt that as per section 62 of sub clause (4) of the Electricity Act- 2003, "No Tariff or part of any Tariff may ordinarily be amended, more frequently then once in any financial year, accept in respect of any charges expressly permitted under the terms of any fuel surcharge formula as may be specified" However, in the present case the provisional tariff is required to be changed due to approval of increase Capital Cost and such revision is not prohibited under the aforesaid act. Therefore, the revision of the provisional Tariff is allowed.

- 10. (a) The Petitioner vide Petition No. 532 dated 15.04.2008 for the Tariff Year 2007-08 had requested the Commission to direct UPPCL to admit bills for the Tariff Year 2008-09 onwards as may be raised by the Petitioner, in accordance with the provisions of the PPA, without approaching the Commission. The Commission vide its order dated 02.06.2008 in the said petition No. 532/2008 had directed the Petitioner to submit a presentation regarding Multi Year Tariff for the Tariff Year 2008-09 and onwards.
  - (b).The Petitioner developed, through a specialized agency M/s Zven Technologies Pvt. Ltd., Noida, (U.P)., a software for MYT (Payment calculated covering the terms of the Final Power Purchase Agreement dated 16.10.2007 and Commission's orders for computation of payments for sale of energy from Vishnu Prayag Hydro Electric Project (400 MW) to UPPCL. The Petitioner submitted that this software can generate the following reports for each Tariff Year Separately from Tariff Year 2008-09 onwards up to Tariff Year 2035-36.
    - (i) Company Tariff Computation as required under Article 3.7 and 3.13 of the PPA for payment of monthly invoices.
    - (ii) Monthly Invoice
    - (iii) Annual Adjustment bill

Calculating the adjustment considering the final payments to be made by UPPCL.

(iv) Modification Report

In case any modification/changes are required to be made in any report.

- (c) The Petitioner submitted that it has made a presentation of the said Software (Payment Calculator) to UPPCL and established that the result of the Software were same as the results of the manual calculation. UPPCL confirmed that they have checked the Software and found it correct.
- (d) A presentation of the said Sofware was also given by the Petitioner before the Commission on the date of hearing i.e. 03.09.2008.
- (e) In their counter affidavit, the UPPCL said that the concept of Multi Year Tariff is in consonance with Section 61 (f) of the Electricity Act, 2003. UPPCL further mentioned that theoretically UPPCL is not opposed to MYT in principle, however, the same has to be worked out within the parameters of the PPA approved by the Commission. UPPCL further mentioned that he concept of working out a formula whereby the Tariff will be determined by the Parties without approval of the Commission is perse faulty.
- (f) The Petitioner submitted that for determination of Tariff, the relevant principles have been decided by the Commission in its various orders and the final PPA is in place. Once the additional capitalization is approved by the Commission, the payments admissible to the Petitioner for various Tariff Years is purely and arithmetical exercise for which there is no requirement of approaching the Commission. The Petitioner has submitted a list of all possible Variable Inputs for calculation of payments from UPPCL and requested the Commission to give direction regarding supporting documents to the considered for these Variable Inputs.
- (g) It was observed by the Commission that the software has been fed with relevant datas and figures and with the feeding of variable inputs as and when required, the software can generate the details of the payments which shall be admissible to the Petitioner based on the final PPA and the

- orders of the Commission. The representatives of UPPCL also confirmed that they have verified and were satisfied with the computation by the software.
- (h) Under the Electricity Act- 2003, the Commission has to specify the terms and conditions for determination of Tariff/ has to determine the Tariff for supply of electricity by Generating Company. The Commission has already approved the terms and conditions for determination of Tariff and accordingly the final PPA dated 16.01.2007 between the Generating Company (The Petitioner) and the Beneficiary (UPPCL) is already in place. The Commission has also approved the various other relevant aspects for determination of Tariff, vide its Orders in the Petitions filed by the Petitioner. The Commission is of the view that calculation of the payments required to be made by UPPCL to the Petitioner under the Terms of final PPA and the Commission's order for various Tariff Years is an arithmetical exercise for which the Petitioner has already prepared and submitted the software (Payment Calculator), which has also been checked and found correct by UPPCL. In view of the above, the Commission directs that the payments for sale of power from the project by the Petitioner to UPPCL, be made by UPPCL to the Petitioner as may be determined by manual Computation or through the Software (Payment Calculator) on the basis of Variable Inputs with supporting documents as specified hereinafter, without the reference of the Commission for the Tariff Year 2008-09, and onwards:

1- For Company Tariff

SNo.	Particulars	Unit	Supporting Documents			
1	Capital cost	Rs. in	Order of UPERC (Presently, Rs			
		lacs	1715.58 Cr. for the tariff year			
			2008-09 on wards)			
2	Leasing charges	Rs. In	Certified by Statutory Auditors			
		lacs				
3	Plant Availability	%	As verified by UPPCL			
			representative			
4	W-1	Number	Whole sale price index Nos.			
			announced by the Government			
			of India as per RBI Bulletin and			
			certified by Statutory Auditors.			

5	L-1	Number	Consumer price index Nos. announced by the Government of India as per RBI Bulletin and certified by Statutory Auditors.
6	Operation & Maintenance	%	1.5% of Capital Cost
7	Maintenance Spares Escalation	%	4%
8	Working Capital Interest	%	State Bank of India Certificate.
9	MAT	%	Certificate of Statutory Auditors
10	Depreciation (P/L A/C)	Rs. In lacs	Certificate of Statutory Auditors
11	Revenue on account of exchange rate variation.	Rs. in lacs	Certificate of Statutory Auditors
12	Finance charges (Fees)		
	a. Lenders Engineers	Rs. in lacs	Certificate of Statutory Auditors
	b. Facility agent	Rs. in lacs	Certificate of Statutory Auditors
	c. Security and Debenture Trustee	Rs. in lacs	Certificate of Statutory Auditors
	d. Others	Rs. in lacs	Certificate of Statutory Auditors
13	Value of spares to be reduced for Working Capital Interest	Rs. in lacs	Certificate of Statutory Auditors
14	Rate of Interest on Rupee Term Loan of Lenders	%	Certificate of Statutory Auditors
15	Rate of interest on Foreign Currency Loan of Lenders.	%	Certificate of Statutory Auditors

## 2- For Monthly Invoices

SI.	Particulars	Unit	Supporting
No.			Documents
1	Cumulative Availability	%	As verified by UPPCL representative.
2	Delivered Energy	kWh	As verified by UPPCL

20

			representative.
3	Import Energy	kWh	As verified by UPPCL representative.
4	Deemed Energy	kWh	As verified by UPPCL representative.

3- For Annual Adjustment Bill

	Allitual Aujustinetit biii	11.14	
SI.	Particulars	Unit	Supporting
No.			Documents
	Energy Billed	kWh in	As verified by the
1		lacs	UPPCL
			representative.
2	Deemed Energy	kWh in	As verified by the
		lacs	UPPCL
			representative.
3	Exchange rates of US Dollar		
	a. as on 14 <sup>th</sup> April	Rs.	Certificate of
			Statutory Auditors
	b. as on 14 <sup>th</sup> July	Rs.	Certificate of
			Statutory Auditors
	c. as on 14 <sup>th</sup> October	Rs.	Certificate of
			Statutory Auditors
	d. as on 14 <sup>th</sup> January	Rs.	Certificate of
	•		Statutory Auditors
	e. as on 31 <sup>st</sup> March	Rs.	Certificate of
			Statutory Auditors
4	Amount of Income Tax already	Rs. in lacs	Certificate of
	claimed		Statutory Auditors
5	Liability of income tax	Rs. in lacs	Certificate of
	•		Statutory Auditors

- 11. The fee for the this Petition and earlier Petitions to be paid by the Petitioner shall be intimated separately.
- 12. The Petition is disposed of.

(R.D. Gupta) (P.N Pathak) (Vijoy Kumar)
Member Member Chairman

Lucknow; Dated: 07.10. 2008