



## **NHDC LIMITED**

(A JV OF NHPC & GOMP)

### **RE-DETERMINATION OF GENERATION TARIFF (PERIOD 2008-09)**

**FOR**

### **INDIRA SAGAR POWER STATION (8 X 125 MW)**

U/C 79(1) OF THE CERC (CONDUCT OF BUSINESS),  
REGULATIONS 1999 &  
SECTION 79(1)(A) OF ELECTRICITY ACT, 2003

**PETITION NO.:** \_\_\_\_\_

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NHDC LTD., NHDC PARISAR, SHYAMLAK HILLS, BHOPAL – 462013 (MP)

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NHDC Ltd.

Through



Name : S. SANYAL  
Designation : CHIEF ENGINEER

Place: BHOPAL  
Date: 15-07-2010



मध्य प्रदेश MADHYA PRADESH

L 549920

BEFORE

THE HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION, NEW DELHI

FILING NO. \_\_\_\_\_  
CASE NO. \_\_\_\_\_/2010

IN THE MATTER OF

RE-DETERMINATION OF GENERATION TARIFF FOR THE PERIOD FROM 01-04-2008 TO 31-03-2009 AFTER CONSIDERING THE IMPACT OF ADDITIONAL CAPITALIZATION AS ON 31-03-2009 FOR INDIRA SAGAR POWER STATION (8 X 125 MW) U/C 79 (1) OF THE CERC (CONDUCT OF BUSINESS), REGULATIONS 1999 AND SECTION 79 (1) (A) OF THE ELECTRICITY ACT, 2003.

AND IN THE MATTER OF

NHDC LIMITED  
(A JV OF NHPC & GoMP),  
NHDC PARISAR,  
SHYAMLA HILLS,  
BHOPAL - 462 013.

  
PETITIONER

RESPONDENTS

1. MADHYA PRADESH POWER TRADING COMPANY LTD.  
(MPTradeco)  
(THROUGH THE MANAGING DIRECTOR)  
SHAKTI BHAWAN, VIDYUT NAGAR,  
JABALPUR (M.P.) - 482 008.

NARMADA VALLEY DEVELOPMENT DEPARTMENT  
(THROUGH ADDL. CHIEF SECRETARY)  
GOVT. OF MADHYA PRADESH  
MANTRALAYA, VALLABH BHAWAN,  
BHOPAL (M.P.) - 462 004.

Indira Sagar Power Station

- 2 -

Tariff Petition (2008-09)







**AFFIDAVIT VERIFYING THE PETITION**

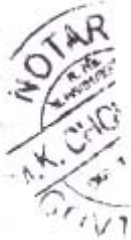
Subhash Sanyal S/o Late Shri. B. N. Sanyal aged 49 years working as CHIEF ENGINEER in NHDC LIMITED, the applicant in the above matter do solemnly affirm and state as follows that:

1. I am working as CHIEF ENGINEER (PM&C) in NHDC LIMITED, and I am well acquainted with the facts of the above matter.
2. The statements made in the petition herein are true to my knowledge and belief and are based on documents/ records available and/or management's approval.

Solemnly affirmed at BHOPAL on the 15<sup>th</sup> day of July '2010 that the contents of the above affidavit are true to my knowledge, no part of it is false and nothing material has been concealed there from.

  
DEPONENT

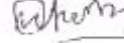
IDENTIFIED BEFORE ME



*Identified By Me*

\_\_\_\_\_

**ATTESTED**



M. K. CHOUDHARY  
NOTARY, BHOPAL  
(M.P.) INDIA

15 JUL 2010



BEFORE THE  
HON'BLE CENTRAL ELECTRICITY REGULATORY COMMISSION, NEW DELHI

FILING NO.: \_\_\_\_\_  
CASE NO.: \_\_\_\_\_/2010

IN THE MATTER OF

RE-DETERMINATION OF GENERATION TARIFF FOR THE PERIOD FROM 01-04-2008 TO 31-03-2009 AFTER CONSIDERING THE IMPACT OF ADDITIONAL CAPITALIZATION AS ON 31-03-2009 FOR INDIRA SAGAR POWER STATION (8 X 125 MW) U/C 79 (1) OF THE CERC (CONDUCT OF BUSINESS), REGULATIONS 1999 AND SECTION 79 (1) (A) OF THE ELECTRICITY ACT, 2003.

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(Through THE MANAGING DIRECTOR)  
SHAKTI BHAWAN, VIDYUT NAGAR,  
JABALPUR (M.P.) – 482 008.
2. **NARMADA VALLEY DEVELOPMENT DEPARTMENT (NVDD)**  
(Through ADDL. CHIEF SECRETARY)  
GOVT. OF MADHYA PRADESH  
MANTRALAYA, VALLABH BHAWAN,  
BHOPAL (M.P.) – 462 004.

It is respectfully submitted by the Petitioner that:

- 1) The petitioner company i.e. NHDC Ltd. (formerly known as Narmada Hydroelectric Development Corporation Ltd.) is a Joint Venture Company



of NHPC Ltd. & Govt. of Madhya Pradesh and was established on 01-08-2000 with main objective of development of hydro power potential in Narmada Basin of Madhya Pradesh. Its formation was formally sanctioned by Govt. of India vide MOP's Letter No. 22/3/2000 – DO (NHPC) dated 28-03-2002 (Page No. 32 to 37). The Company has subsequently diversified w.e.f. 22-05-2009 (Page No. 138 to 183) and foray into the fields of development of power through all conventional and non-conventional sources of energy in India. Further, the name of the Company also stands changed from *Narmada Hydroelectric Development Corporation Ltd.* to *NHDC Ltd.* w.e.f. 24-06-2009 (Page No. 139). The Company has recently undertaken the work of preparation of DPRs of 2 x 660 MW 'Reva Thermal Power Project' in District Khandwa of MP and 100 MW potential 'Wind Power Project' in District Betul of MP. MPTradeco/GoMP has also offered another 2 x 660 MW Shahpura Thermal Power Project in District Jabalpur (M P ) to NHDC.

- 2) During the 10<sup>th</sup> Five Year Plan (2002-2007), the company has successfully executed Power Component of two major Multipurpose Projects in the Narmada Basin in Madhya Pradesh namely 1000 MW Indira Sagar Power Station (ISPS) and 520 MW Omkareshwar Project (OSP) which were entrusted by GoMP on ownership basis at the time of formation of Joint Venture Company in year 2000. Presently, these two Projects are under Operation & Maintenance stage and 100% power generated is being supplied to the state of Madhya Pradesh. ISPS and OSP, since their commissioning, have supplied 13455 MU and 2620 MU, respectively to the beneficiary i.e. MPTradeco upto 30-06-2010.
- 3) Hon'ble CERC vide order dated 06-02-2007 (Page 107 to 137) in Petition No. 119/2005 had fixed the final tariff of Indira Sagar Power Station (ISPS) based on cost capitalized on Project COD as admitted on 25-08-2005. The Cut-Off date of ISPS was admitted by CERC as 31-03-2007, in accordance with CERC Regulation '2004 (Para 15 of Order dated 20-10-2009 in Petition No. 33/2009).
- 4) Subsequently, a Petition vide No. 33/2009 was filed by NHDC Ltd. for re-determination of tariff for the period from 25-08-2005 to 31-03-2009, after considering the impact of Additional Capitalization on 31-03-2006, 31-03-2007 and 31-03-2008, respectively. Accordingly, Hon'ble CERC vide Order dated 20-10-2009 (Page 83 to 106) in Petition No. 33/2009 had admitted the cost capitalized upto 31-03-2008 and had re-determined the tariff for the period from 25-08-2005 to 31-03-2009. New CERC Regulations '2009 for the tariff period 2009-14 has been implemented w.e.f 01-04-2009 and in accordance with the provisions made under its



Regulation 5 (3), the Petitioner Company NHDC is raising Bills based on Tariff as applicable on 31-03-2009, as per Order dated 20-10-2009 in Petition No. 33/2009, for the period from 01-04-2009 onwards and the dues are being recovered.

- 5) Hon'ble CERC in Petition No. 33/2009 has already admitted the cost Capitalized upto 31-03-2008. The Petitioner has incurred additional capital expenditure during FY 2008-09, mainly on balance R&R Works which are under progress as per decree of Hon'ble Courts, besides expenditure on meeting deferred liabilities of deferred works executed before cut-off date and also on new works which have become necessary for efficient and successful operation of Power Station. The Capital Expenditure on the Project is continuing even beyond March 2009 mainly on balance R&R Works as final verdict of Court in the matter is still awaited and also on some new works which have to be executed for successful operation of Power House.

Accordingly, the Petitioner had originally filed the Petition (Ref. No. 154 /2010) on 10-05-2010 vide letter No. NHDC/1/Comm./44/10/1067 dated 07-05-2010 in two parts for the following:

- i) Re-determination of tariff as per CERC Regulation '2004 for the period from 01-04-2008 to 31-03-2009, after considering the impact of Additional Capitalization as on 31-03-2009.
  - ii) Fixation of tariff for the period 01-04-2009 to 31-03-2014 as per CERC Regulation '2009, based on cost as Capitalized upto 31-03-2009 (duly certified by the Auditors) and estimated Additional Capital Expenditure for the respective years of the tariff period 2009-14, in accordance with Regulation 5(2) of CERC Regulation '2009.
- 6) In the matter, it has now been advised to the Petitioner Company vide Hon'ble CERC letter dated 10-06-2010 (Page No. 82) that as determination of tariff for the period 2004-09 and 2009-14 respectively, is governed by two different set of Regulations and as such, claims for Additional Capitalization for 2008-09 may be filed through a separate application with appropriate fees and the tariff petition as filed by NHDC (Ref. No. 154/2010) may accordingly be modified and resubmitted for consideration of the Hon'ble CERC.

Accordingly, the instant petition is being filed separately along-with appropriate fees for the kind consideration of Hon'ble CERC for '*Re-determination of Generation Tariff for the period from 01-04-2008 to 31-*

03-2009 after considering the impact of Additional Capitalization as on 31-03-2009 for Indira Sagar Power Station (8 X 125 MW):

- 7) Indira Sagar Project (8 x 125 MW) is a multi purpose project, which is facilitating power generation and provide water for irrigation, industrial & domestic purposes. The various structures of the project have been defined as under:
- a) Dam and appurtenant works are meant for power generation and irrigation purpose and have been defined as Unit – I (Dam) of the project.
  - b) Irrigation system of canals and distributaries have been defined as Unit - II (Canal) of the project.
  - c) Power house and water conductor system along with allied works are for power generation and have been defined as Unit - III (Power House) of the project.

The Units – I & III are meant mainly for power generation and named as 'Power Component' and Unit - II is meant for irrigation system and named as 'Irrigation Component' of this multi-purpose project. Since Unit - I i.e. Dam and appurtenant works contributes for power generation as well as for irrigation purpose, its cost has been apportioned for power generation and irrigation system depending upon the proportion of water utilization for two systems. Secondly, Indira Sagar being the mother reservoir for downstream projects also contributes to Sardar Sarovar Project (SSP) by its regulated water releases. Accordingly, an apportioned cost towards SSP is credited to Indira Sagar Project as sub-vention. Only the balance cost is accounted towards cost of the *Power Component*.

The Sardar Sarovar Component is apportioned @ 17.63% of cost of Unit - I and Irrigation Component is apportioned @ 16.75% of balance cost of Unit-I after deducting Sardar Sarovar Component. These percentages of apportionment are as per NWDT award and water usages as approved by the CWC and as approved by Gol, as per revised cost estimate of the project. Hon'ble CERC has admitted this cost apportionment of Unit-I (Dam) in petition No. 119/2005 and 33/2009.

- 8) GoMP is executing Unit-II (Canal) of this Multipurpose Project. Depending upon the development of Canal Network and the Irrigation Command, the three stages of the Power Generation for 90% dependable year have been defined in the Techno-economic clearance of CEA for ISP (Page 207). Accordingly, Hon'ble CERC in Petition No. 119/2005 has admitted



Design Energy of ISPS as **1980 MU** in a 90% dependable year, with Firm Power of 226 MW during **Stage –I** of the Project.

- 9) The *Power Component* of the project i.e. Unit - I & III (Dam & Powerhouse including allied works) was sanctioned by CCEA (Govt. of India) for its execution by NHDC at a cost of Rs. 4355.57 Crores (at Sept'00 Price Level) including IDC of Rs. 488.37 Crores and conveyed vide Ministry of Power (Gol) letter No. 22/3/2000-DO (NHPC) dated 28-03-2002 (Page 32 to 37). This total cost of the project will be apportioned between *Power Component* & Irrigation Component of Indira Sagar Project and SSP Component as subvention.
- 10) As per the apportionment sanctioned by CCEA (Gol), the net cost of Power Component of the project works out to Rs. 3527.54 Crs. (Including IDC) as detailed hereunder:

Table –1

| S. No | Description   | Amount in Crores   |
|-------|---|--------------------|
| 1     | Cost of works<br>(i) Unit-I (Dam & appurtenant works)<br>(ii) Unit-III (Power House & Water conductor System) | 2634.77<br>1232.43 |
| 2     | Total cost of works   | 3867.20            |
| 3     | Sardar Sarovar Project Component  | 464.51             |
| 4     | Irrigation component  | 363.52             |
| 5     | Net Cost of POWER COMPONENT   | 3039.17            |
| 6     | Interest During Construction  | 488.37             |
| 7     | Total cost of project (POWER COMPONENT)   | 3527.54            |

- 11) Govt. of Madhya Pradesh vide their letter No. 4/33/27/2/2002/1108 dated 01-10-2003 (Page 23 to 24) has accorded approval to forego supply of 12% free power to Home state.
- 12) As per CCEA (Gol) Sanction, 100% Power generated from ISPS is being supplied to the State of Madhya Pradesh against the Tripartite PPA executed on 27-04-2007 (Page No. 184 to 192) wherein, MPTradeco is the 'Bulk Power Customer' for power generated from ISPS and GoMP is to act a 'Guarantor' in case of defaults in payments by MPTradeco.

- 13) Hon'ble CERC in Petition No. 33/2009 has admitted the Cumulative Capitalized Cost of Rs. 4208.35 Cr. up to 31-03-2008, which includes an amount of Rs. 4206.24 Cr. (i/c IDC) towards original scope of work.

During FY 2008-09, the Petitioner has additionally Capitalized an amount of Rs. 70.92 Cr. and accordingly, the Cumulative Capitalized Cost up to 31-03-2009 works out to Rs. 4279.26 Cr., which includes an amount of Rs. 4275.22 Cr. towards original scope of work.

- 14) The Interest During Construction (IDC) and Financing Charges (FC) of Rs. 82.93 Cr. has already been freed on 30-03-2005 (Refer Clause 11 of Final Tariff Order dated 06-02-2007).
- 15) It is respectfully submitted that the existing permission of filling of Indira Sagar Reservoir is still up to EL 260.0 M against the FRL of EL 262.13 M. In this context, the submission of Petitioner in Para 11 of Petition No. 33/2009 be referred wherein it was brought to the kind notice of Hon'ble CERC that the matter of R&R is still sub-judice and depending on the final verdict of Hon'ble Courts, the anticipated completion cost of R&R may increase in future. Accordingly, the completion cost of original scope of work would be known only after final verdict of Court, in respect of R&R Works, is pronounced and the closure of accounts thereafter. The Sanction for revised cost of Project, if any, as per requirement shall be obtained from the Competent Authority.
- 16) As mentioned in Para 15 above, the permission of filling of Reservoir upto FRL i.e. EL 262.13 m, is still awaited. In this context, the relevant Para 110 (x) of Hon'ble MP High Courts Order dated 08-09-2006 (WP No. 3022/2005 of MP High Court) (Page No. 193 to 198) is being reproduced as below wherein pondage of Indira Sagar Reservoir has been allowed upto EL 260.0 m:

*" The pondage of the dam should be raised upto 260.0 m in praesenti. Be it clarified, we do not say in regard of the height of the dam or the capacity of the reservoir. The capacity of the reservoir is 262.13 m, but in praesenti we permit this much as certain rehabilitation package are yet to be carried out. The same shall be carried out by the respondents No. 1 and 2 in quite promptitude with utmost objectivity in consultation with Grievance Redressal Authority and suggestions given by the Central Water Commission. We may further add the Central Water Commission, Grievance Redressal Authority and the Respondent No. 1 and 2 should evaluate the effect of the pondage on the backwater level and thereafter*

*proceed pari passu with regard to raising of height of water and rehabilitation programme."*

In compliance to the above direction of the Court, the NVDD, GoMP has however issued an order vide No. F-31-4/27-1/09 dated 02-02-2009 (Page 199) allowing pondage of dam upto FRL 262.13 M during Monsoon '2009, but subsequently Hon'ble High Court of MP in its Interim Order dated 02-09-2009 (Page 200 to 205) in Contempt Petition No. 558/2008 has maintained the permitted level of filling of ISP Reservoir as EL 260 M. The concluding Para of this Interim Order dated 02-09-2009 of MP High Court, is reproduced as below:

"....."

We find that the Division Bench in its judgment and order dated 08-09-2006 in Writ Petition No. 3022/2005 has directed in Paragraph 110 (x) as follows:

*" The pondage of the dam should be raised upto 260.0 m in praesenti. Be it clarified, we do not say in regard of the height of the dam or the capacity of the reservoir. The capacity of the reservoir is 262.13 m, but in praesenti we permit this much as certain rehabilitation package are yet to be carried out."*

*It is thus, clear that the Division Bench has permitted pondage of dam only upto 260 metres though it has taken note of the fact that capacity of the reservoir is 262.13 meters. In case the pondage of the dam is raised above 260 meters, it will be open for the petitioner to move this Court for contempt.*

....."

Against the above interim order dated 02-09-2009 of Hon'ble High Court of MP in CP 558/2008, Special Leave Petition for appeal have been filed by GoMP as well as NHDC vide SLP No. 175053 / 2009 & 18840 / 2009, respectively (Page 206) and the same have been admitted by the Apex Court. As such, the matter regarding filling of Indira Sagar Reservoir upto FRL is still subjudice and present permission remains upto EL 260 M and the completion cost of R&R Works is anticipated to increase further.

- 17) The anticipated completion cost of R&R Works of ISPS was intimated as (+) Rs.1723 Cr. in Petition No. 33/2009. This is more by an amount of Rs. 563 Cr. as compared to the CCEA cap of Rs. 1160 Cr. An expenditure

