

**MADHYA PRADESH ELECTRICITY REGULATORY
COMMISSION**

"Metro Plaza", Bittan Market , Bhopal - 462 016



Petition No. 3 of 2007

PRESENT:

Dr. J. L. Bose, Chairman

D. Roy Bardhan, Member

R. Natarajan, Member

IN THE MATTER OF:

**Approval of Generation Tariff (Provisional) of MP's 57%
Share of Power in Sardar Sarovar Project (6x200+5x50MW)
Under Section 62 of the Electricity Act 2003 and Clause 31
of MPERC (Conduct of Business) Regulation 2004.**

NVDA (Petitioner) represented among others by –

- 1. Shri S. K. Khiani (S. E.)**
- 2. Shri Neeraj Vyas (E. E.)**

ORDER

Petition No. 03 of 2007

(Passed on this 18th Day of January, 2008)

- 1 The Madhya Pradesh Electricity Regulatory Commission (hereinafter called “the Commission” or “MPERC”) having gone through the petitions submitted by the Narmada Valley Development Authority (hereinafter called “the Petitioner” or “NVDA”) for determination of provisional tariff and having had the formal interactions with the officers of the Petitioner and having considered the documents available on record and orders issued by the Government of India and Government of Madhya Pradesh (Energy Department) on various occasions hereby accepts the applications with modifications, conditions and directions as herewith attached.
- 2 The Commission has made modification to the estimates as filed by the petitioner in respect of MP’s share of power in Sardar Sarovar Hydel Power Project and has made alternative estimates thereof based on the efficient and reasonable operating parameters and expenditure and has accordingly made modifications to the proposal submitted by the Narmada Valley Development Authority for approval of the provisional generation tariff as per detailed order attached to this order.
- 3 The Commission, in exercise of the powers vested in it under Section 64 of the Electricity Act, 2003, determined the provisional generation tariff by this order that will be deemed effective w.e.f. August 2004 i.e. the date when the project started its commercial operation and started feeding the electricity into the MP system. The petitioner must take steps to implement the Order after giving seven (7) days’ public notice in accordance with clause 1.30 of MPERC (Details to be furnished and fee payable by licensee or generating company for determination of tariff and manner of making application) Regulations, 2004 and raise its bills for energy supplied to the MP Power Trading Company Limited accordingly.

Ordered as above read with attached detailed reasons and grounds,

(R. Natarajan)
Member (Economics)

(D. Roy Bardhan)
Member (Engineering.)

(Dr. J. L. Bose)
Chairman

Date: January 18, 2008
Place: Bhopal

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CHAPTER 1

Background of the Order, Procedural History & Hearing

- 1.1 This order relates to the petition bearing number 03/2007 filed by the Narmada Valley Development Authority (NVDA) for provisional approval of the generation tariff of MP's 57% share of power in Sardar Sarovar Project.
- 1.2 The Narmada Valley Development Authority filed the subject petition before the Commission on January 24, 2007. The petitioner indicated in the petition that Government of MP, Narmada Valley Development Department (NVDD) approved the draft of the petition and authorised the petitioner for filing of the subject petition with the Commission, vide NVDD, GoMP letter bearing number F 18-8/06/27-1/4651 dated 24/11/2006. The petitioner, in the said petition, requested the Commission to approve:
 - 1.2.1 Provisional Tariff @ Rs. 2.00/- per unit, as agreed by the Government of MP, Energy Department, with effect from 16/08/2004 payable by MPSEB/MPPTC to GoMP NVDA/NVDD for supply of 57% share of energy from Sardar Sarovar Project till the final tariff is approved.
 - 1.2.2 NVDD / NVDA may also be suitably compensated towards the interest loss on account of delay in receiving payment for the power sold since 16/08/2004 till the date of payment by MPSEB/MPPTC, and
 - 1.2.3 Pending the decision on this petition, GoMP, NVDD/NVDA requested for immediate relief by directing MPSEB/MPPTC to make for the energy supplied at the rate as may be reasonably decided by the MPERC, to minimise the future balance financial liabilities on MPSEB/MPPTC.
- 1.3 Immediately after filing of the subject petition the Commission enquired from the petitioner to clarify as to who was the buyer of MP's share of the power from the Sardar Sarovar Project – MP Power Trading Company Limited (MPPTC or Tradeco) or MP State Electricity Board (MPSEB or Board) or the Distribution Companies of the State (the Discoms). The Commission had also stated that in accordance with the provisions of the Electricity Act 2003, the Commission is required to determine the generation tariff for those stations which are exclusively selling the power to the Distribution Licensees of the State.

- 1.4 The petitioner, vide its written submission of March 07, 2007 submitted that the MPSEB had been buying the said power w.e.f. August 2004. By referring to the MPSEB's communication with the petitioner, the petitioner had further submitted that the GoMP notified the "Transfer Scheme Rules 2006" through Extraordinary Gazette Notification No. 3474/FRS/17/XIII/2002 dated 3rd June 2006. Through this notification the GoMP transferred and vested the functions, properties, interests, rights, and obligations of MPSEB relating to Bulk Purchase and Bulk Supply of Electricity along with the related agreements and arrangements, in the State Government and re-transferred and re-vested thereof by the State Government in MP Power Trading Company Limited.
- 1.5 The Commission also noted that the Govt. of MP through its notification of 18th October 2006 allocated the entire existing generation capacity among the three Distribution Companies of the State. The generation from Sardar Sarovar Project has also been included in the said allocation of 18/10/2006. The Govt. of MP had revised the allocation of the entire generating capacity through its notification of 14th March 2007. At present this allocation is applicable.
- 1.6 The Commission held the hearing on April 05, 2007. The Commission stated that in accordance to section 62(1)(a) of the Electricity Act 2003, the Commission may determine the tariff of a generating station when the energy is supplied to the Distribution Company of the State. The Commission further stated that Commission had considered a rate of Paise 95.4 per unit for FY 2006-07 and after escalating this rate by Paise 7.6 i.e. Rs. 1.03 per unit for FY 2007-08 on provisional basis for sale of energy from Sardar Sarovar Project. The Commission observed that the subject petition was required to be examined in detail.
- 1.7 In order to determine the tariff, the Commission held the next hearing on May 17, 2007 and directed the petitioner to submit, within a period of 3 months, the audited balance sheets of Sardar Sarovar Narmada Nigam Limited (SSNNL) for FY 04, FY 05, FY 06 and FY 07, clearly showing the amounts chargeable to construction and O&M of the said project. The petitioner was also directed to produce the documents with regard to the Government of Gujarat (GoG) / SSNNL raising the claims to GoMP/NVDA along with the status of payments made by the GoMP/NVDA.
- 1.8 The petitioner filed the information with regard to the capital cost (MP share), the cost paid / disputed by GoMP and the balance to be paid by GoMP for its share of the project cost. The petitioner had also submitted that Gujarat Electricity Regulatory Commission had approved the provisional tariff of Rs.2.05 per unit. The petitioner had also filed 3 scenarios indicating three different provisional tariffs viz. Rs. 2.60 per unit, Rs. 1.58 per unit and Rs. 3.55 per unit. On the basis of these three different scenarios the petitioner had proposed the provisional tariff of Rs. 2.00 per unit from the date of commissioning of the units / project, subject to adjustment of final determination of tariff.

- 1.9 The Commission, vide its letter of 01/09/2007, directed the petitioner to publish the notice for inviting the comments / objections / suggestions on the subject petition from the stakeholders. The Commission also directed the petitioner to upload the petition on the petitioner's website. The petitioner was directed to provide one month's time for filing of the comments / objections / suggestions. After receiving the responses from the stakeholders, the petitioner was to file the objections / comments / suggestions along with its reply to the Commission for further proceedings.
- 1.10 The Commission observed that the petitioner had taken extraordinarily long time of about one and half months for publication of the public notice and hence, in order to get the latest status, issued a notice to the petitioner to appear before the Commission with all relevant facts in the hearing on 30/10/2007. The Commission noted that the petitioner neither attended the hearing in person nor made any communication with the office of the Commission, for the reasons best known to petitioner only. However, the Commission considered it appropriate to give one last chance to the petitioner to complete the formalities as directed by the Commission and report the compliance to the Commission latest by 15/11/2007. The next date of the hearing was fixed on 20/11/2007.
- 1.11 In response to the Commission's order sheet of 30/10/2007 in the subject matter petition, the petitioner filed and got approved from the Commission the draft of the public notice. The petitioner, in the hearing on 20/11/2007, informed the Commission that the public notice had been sent to the newspapers for publication. The public notice appeared in the newspapers on 22/11/2007 and the last date for filing the objections / comments / suggestions by the stakeholders was 22/12/2007.
- 1.12 The petitioner, vide its letter of 28/12/2007 informed the Commission that the petitioner had not received any comments / objections / suggestions from any of the stakeholders within the stipulated time. Hence, the Commission decided not to hold the public hearing on the subject petition. Instead, the Commission decided to hold the hearing on 03/01/2008. The petitioner and the respondents were issued the notices accordingly.
- 1.13 During the course of the hearing on 03/01/2008, the respondent MP Power Trading Company submitted that it had already filed its comments when the Commission had held the hearing prior to the issue of the public notice. The respondent further requested the Commission to consider those comments before determining the provisional tariff for the energy made available from the Sardar Sarovar Project (SSP) to MP. The Commission accepted the request.

State Advisory Committee

- 1.14 The Commission held the meeting of the State Advisory Committee on December 28, 2007. The subject petition was included in the agenda of the meetings for discussion. The members made their observations on the petition and gave valuable suggestions, which have been considered while finalising this order.

CHAPTER 2

Brief Description of the Project:

- 2.1 Narmada Valley Development Authority (NVDA) was constituted vide GoMP resolution No. 500-2-NVD-XXVII-83 of July 16, 1985. The petitioner is an organization of the GoMP associated with planning of water resource development in Narmada River Basin with the main objectives as given below:
- (a) To prepare a detailed plan for exploitation of the water resources of the Narmada River and its tributaries and to under take all necessary engineering works for harnessing of the potential available on the Narmada & its tributaries in the Narmada Basin for the purpose of irrigation, power, navigation and other development.
 - (b) To undertake power generation and sale of bulk power to MPSEB.
- 2.2 The Narmada is an Inter-State river flowing through the states of Madhya Pradesh, Gujarat and Maharashtra. The question of sharing of waters of Narmada was examined by the Narmada Water Disputes Tribunal (NWDT) which was constituted in October 1969. The NWDT gave its award in December 1979.
- 2.3 As per the NWDT Award, the capital cost of the power portion of the Sardar Sarovar head-works comprises the followings:-
- a) Full cost of Unit-III electrical works and control works pertaining thereto upto and including the switchyard.
 - b) Full cost of transmission lines in Gujarat State constructed for supplying power to Madhya Pradesh and Maharashtra.
 - c) 56.1 percent of the net cost of common facilities such as Dam and Appurtenant works i.e. Unit-I of SSP, after allowing for credits, if any.
 - d) 56.1 percent of the credit given to Madhya Pradesh for the downstream benefits derived from Narmada (Indira) Sagar Dam.
- 2.4 As per the NWDT award, the project cost chargeable to power component and benefit of power generated by River Bed Power House (RBPH) and Canal Head Power House (CHPH) at Sardar Sarovar Project (SSP) has been shared by M.P., Maharashtra and Gujarat in the ratio of 57:27:16. The power generated at SSP has been integrated in the common switchyard. MP and Maharashtra have been entitled to get 57% and 27% respectively of the power available at bus bar in the switchyard after allowing for station auxiliaries. The above entitlement applies both to availability of machine capacity for peak loads and to the total energy produced in any day.

- 2.5 As per the NWDT award, the amount towards 57 % of the capital cost of the power portion of the Sardar Sarovar head-works have to be paid by Madhya Pradesh to Gujarat in annual instalments until the capital works are completed. Each instalment has been worked out on the basis of the budgeted figures of the concerned works at the commencement of each financial year and shall be set off and adjusted against actual figures at the end of the financial year. In addition to the payments above, Madhya Pradesh has also been required to pay to Gujarat 57 % of the operation and maintenance cost of the SSP Complex each year. These payments are also to be based on budgeted figures at the commencement of each financial year and adjusted against actual cost at the end of the year.
- 2.6 To implement the SSP, the State of Gujarat promoted the company under the Companies Act, 1956 namely Sardar Sarovar Narmada Nigam Ltd (SSNNL). The SSNNL constructed the Dam up to it's Minimum Draw Down Level (MDDL) – 110.64 M in June – 2004. After getting the permission from Narmada Control Authority (NCA) in March 2006 to raise the Dam up to 121.92 M, the SSNNL had constructed the Dam up to 119 M in June –2006. All the 5 Units of 50 MW each of Canal Head Power House (CHPH) were commissioned during Aug. 2004 to Dec.2004, after completion of continuous 72 hours successful running. The unit wise commercial operation dates as communicated by SSNNL/NCA were 16.08.2004, 01.09.2004, 03.09.2004, 04.10.2004 and 15.12.2004. All the 6 Units of 200 MW each of River Bed Power House (RBPH) were commissioned during Feb.2005 to Nov.2006. The unit wise commercial operation dates were 01.02.2005, 30.04.2005, 30.08.2005, 28.10.2005, 20.06.2006 and 12.11.2006. Power is being generated with effect from 16/08/2004 by available Units of CHPH and RBPH as per available releases from upstream Indira Sagar Project.
- 2.7 The power generated by RBPH and CHPH of SSP has been injected into the 400 kV Grid of Western Region through 400 kV switchyard of SSP. The shares of power as per entitlement have been drawn continuously from Western Region Grid by MPSEB (on behalf of GoMP), MSEB and GEB. Monthly statement in this regard, w.e.f. Aug. 2004 has been issued by Western Regional Electricity Board (WREB) to NCA for onward transmission to MPSEB, MSEB and GEB. The MPSEB has been receiving the GoMP's 57% share of power generated at SSP w.e.f. Aug.04.
- 2.8 The Operation & Maintenance of SSP Power Complex is to be done by Gujarat Electricity Board (GEB). For this purpose the SSNNL has entered into an agreement with GEB on September 17, 2004. As per provision of O&M agreement, GoMP has to make an advance payment on quarterly basis towards 57% of O&M cost of Sardar Sarovar Power Complex.
- 2.9 The petitioner in the petition informed that the GoMP has been selling its share of 57% power from SSP to MPSEB or its successor entity MPPTC as per GoMP's Notification of 3rd June 2006.

Brief Description of the Petition:

2.10 With regard to the filing of the petition, it is informed by the petitioner that in compliance of duties assigned in NWDT Award, NCA had approached CERC for tariff determination and submitted all the required documents and associated information, as and when requested by CERC. CERC vide letter dated 29.08.2003 conveyed its views as follows:

"The power generated from SSP is allocated among the States of Madhya Pradesh, Maharashtra and Gujarat in the ratio of 57:27:16 in the same ratio in which the cost of power component of the project has been shared by these three States. It therefore, does not involve sale of power from SSP to any State as such. In view of the above, the question of fixation of tariff of power generated by SSP does not arise".

2.11 It is submitted by the petitioner that in accordance with the Commission's regulations on determination of the generation tariff, for preparation of Tariff Application, the details of revised estimated capital cost, audited expenditure capitalized on various actual Commercial Operation Dates of generating units CHPH & RBPH of SSP were sought from NCA / SSNNL. Further, precise figures pertaining to break up of firm power generation, primary energy generation and secondary energy generation for individual units of CHPH and RBPH of SSP are also not available. In view of this, due to non availability of desired precise information the tariff petition could not be prepared for consideration of the Commission. The petitioner informed in the petition that it has been in the process for collection of all the desired information so that final tariff petition may be filled.

2.12 The estimated cost of power component of the project at June 2002 price level, as tentatively projected by GoG in Dec. 2002, is as detailed below :-

- Estimated Cost of Civil & Electro-Mech. works of Unit-III-Power Rs 2748 Crore
- Share Cost 56.1% of Unit-I- Dam Chargeable to Unit III Rs 2754 Crore
- Total cost of Unit –III –Power Rs 5502 Crore
- Share Cost (57 % of 3) Payable by GOMP Rs 3136 Crore

As per the filing of the petitioner it is indicated that as per available information, there is a dispute on expenditures incurred toward (i) R&R works as Rs. 659.82 Crore, (ii) 25% of Dykes and link channels of Rs. 86.45 Crore and (iii) interest on Market borrowings/Debt as Rs. 1154.18 Crore i.e. with total amount works out to Rs. 1835.61 Crore up to March 2005. GoMP's 57% share on disputed expenditure would be Rs. 1046.2977 Crore. Hence, the revised 57% share of GoMP with disputed cost works out to be about Rs. 4182.2977 Crore. Additional liability of Rs. 1108 Crore toward R&R works to be carried out by GoMP for which payment would be made by GoG and confirmation about sharing by beneficiary States is pending.

2.13 The petitioner further filed that pending finalization of final Project Cost, provisional calculations of Annual Fixed Cost (AFC) and provisional tariff i.e. unit cost of energy at bus bar, with respect to firm power i.e. Primary (Design) Energy for SSP, has been done on the estimated Project cost (excluding the share of disputed cost) as Rs. 3136 Crore and (including the share of disputed cost) as Rs. 4182.2977 Crore, as indicated in above paragraph, with two different scenarios:

- i. Considering interest on loan capital @ Rs. 9.25 % per annum and interest on working capital @ Rs. 11.50 % per annum as taken by Government of India, Ministry of Power for Omkareshwar Project, while providing approval on cost estimates and execution of the Project and
- ii. Considering interest on loan capital @ Rs. 7.6742 % per annum.

The Depreciation @ 2.24 %, Interest on working capital @ Rs. 10.25% per annum, with the initial reduction to 85% in the tariff (due to the provisional tariff) thereof and further reduction in the ratio equal to the capacity already installed with total installed capacity of the Project are considered by CERC for Indira Sagar Project (ISP). This calculation on both the scenarios was forwarded by NVDD & NVDA vide letter No.4/33/27/2/2002 Bhopal dtd. 16.09.05 to Energy Deptt. & MPSEB for consideration, and to arrive at a mutually agreed rate. As per the calculation for said different scenarios, it was also requested that acceptance of Energy Deptt./MPSEB may be communicated considering a flat rate of Rs. 2.00/- per unit provisionally for the cost of energy to be paid to GoMP (NVDD) for drawl of GoMP's 57% share of power from SSP, by MPSEB subject to final adjustment after approval of tariff by Competent Authority.

2.14 In response to NVDD/NVDA's request, GoMP Energy Dept. vide letter No. 7701/13/2005 dated 30.11.2005 had conveyed their acceptance of flat rate tariff at the rate of Rs. 2.00/- per unit payable by MPSEB inclusive of all charges subject to the final adjustment after approval of tariff by Competent Authority.

2.15 As per the details given by the WRLDC/WRPC and forwarded by NCA, 255.288 MU and 1897.949 MU of energy was generated at SSP in the Year 2004-05 (w.e.f. Aug.04), and Year 2005-06 (upto 31st March 2006) respectively. The GoMP NVDD has supplied and MPSEB has received the GoMP's 57% Share thereof as 145.514 MU and 1081.831 MU in the Year 2004-05 (w.e.f. Aug.04) and Year 2005-06 (up to 31st March 2006) respectively.

2.16 Accordingly, the NVDA had issued provisional bills to MPSEB on the basis of provisional tariff (Rs. 2.00/kWh) as agreed by Energy Deptt. amounting to (a) Rs. 29,10,28,510/- for supply of 14,55,14,255 Units in the year 2004-05 and (b) Rs. 2,16,33,61,860/- towards supply of 1,08,18,30,930 Units in the year 2005-06 for payment.

- 2.17 In response, MPSEB, Jabalpur vide its letter of 9.04.2006 communicated that the MPERC while deciding the distribution tariff for retail supply for FY 2006-07, vide its order dated 31.03.2006, allowed the expenses for power purchased from Sardar Sarovar Project at the rate of Paise 95.40 per unit on provisional basis. It is, therefore, not possible for the Board to pay more than the rate allowed by the MPERC. Accordingly the bills, on the basis of provisional tariff (Rs. 0.954/kWh) allowed by the MPERC, amounting to Rs. 124,49,42,608/- for supply of 130,49,71,287 Units by MPSEB in the year 2006-07 (up to October 2006) had also been issued by NVDA to MPSEB.
- 2.18 The petitioner in the petition further submitted that the Govt. of Gujarat (GoG) approved the draft PPA between GEB & SSNNL for purchase of power from power generated in SSNNL Power Project (i.e. SSP) for the allocation of 232 MW (GoG's 16 % share out of total installed capacity of 1450 MW) with tariff of Rs. 2.05 per kWh or tariff rate as per GERC norms, subject to the recovery of income tax and foreign exchange variation as per actuals in accordance with the GERC/CERC norms.
- 2.19 The petitioner also submitted that GoMP's 57 % share of energy generated at SSP has been supplied in the western region of the State having maximum power demand as a substitute of equivalent power being purchased by MPSEB at existing higher market rate of about more than Rs.2.50/ kWh as per prevailing conditions of frequency and transmission losses thereof.
- 2.20 The petitioner also submitted that as per the details given by WRLDC/WRPC and forwarded by NCA, up to October 2006 total 2290.422 MU electricity was generated at SSP during year 2006-07. GoMP NVDD supplied and MPSEB/MPPTC as received the GoMP's 57% Share thereof as 1304.97 MU in this Year 2006-07 (upto October 2006).

CHAPTER-3

Analysis of Petitions

- 3.1 The petitioner in the subject petition had submitted the Commission to provisionally approve the generation tariff for the MP's share of power i.e. 57% of the total generation of SSP at the rate of Rs. 2.00 per unit. In support of their submission the petitioner had submitted three scenarios considering three different input parameters. The petitioner had considered the capital cost of the project as was on March 2002 level in the three scenarios. The three scenarios are reproduced below:

Sl. No.	Parameters	Generation Tariff (Rs. / Unit)
1.	Without Disputed Cost Return on Equity – 14% Interest on Loan – 9.25% Interest on Working Capital – 11.5% Depreciation Charges – 1.85% Free Power to Home State – 0%	Rs. 2.60
2.	Without Disputed Cost Return on Equity – 14% Interest on Loan – 7.6742% Interest on Working Capital – 10.5% Depreciation Charges – 2.24% Free Power to Home State – 0%	Rs. 1.58
3	Including the Disputed Cost Return on Equity – 14% Interest on Loan – 9.25% Interest on Working Capital – 11.5% Depreciation Charges – 1.85% Free Power to Home State – 0%	Rs. 3.55

- 3.2 The Commission during the hearing of 17/05/2007 directed the petitioner to file the details of the cost as filed by the petitioner and the latest status of the expenditure as available in the audited statement of accounts. The Commission had also directed the petitioner to file the details of the claims raised by the GoG / SSNNL towards the cost of construction of the SSP and O&M of SSP along with the status of payments of the claims by GoMP / NVDA.
- 3.3 The petitioner vide its letter of 26/07/2007 filed the information with regard to the audited statement of accounts for FY 2004-05 and FY 2005-06 of the SSNNL, the un-audited statement of expenditure for FY 2006-07, year wise amount due vis-à-vis amount paid by GoMP, the details of disputed expenditure and the copy of the order passed by the Gujarat Electricity Regulatory Commission giving approval to the PPA executed between GEB and SSNNL (cost of SSP power for Gujarat is Rs. 2.05 per unit).

3.4 The provisional cost details as filed by the petitioner as on 31/03/2007 are as under:

Capital share cost (Payable by MP)	Rs. 3497.28 Crore
O&M cost (Payable by MP)	Rs. 6.70 Crore
Total share cost (Payable by MP)	Rs. 3503.98 Crore
Share cost paid by MP	Rs. 1939.84 Crore
Balance share cost to be paid by MP	Rs. 1564.14 Crore
Disputed Expenditure	Rs. 1438.91 Crore
Balance Undisputed share cost to be paid by MP	Rs. 125.23 Crore
Amount payable by GoG for ISP and R&R	(-) Rs. 116.13 Crore
Balance to be paid by GoMP	Rs. 9.10 Crore
Additional share of ISP	Rs. 1.22 Crore
Balance share cost payable by GoMP	Rs. 10.32 Crore

3.5 The petitioner had also submitted that after the reconciliation of the expenditure as shown above with the demand raised by the GoG / SSNNL for GoMP share for SSP, the balance amount excluding the disputed amount has been paid by GoMP to GoG / SSNNL regularly. For settlement of the disputed amount the Ministry of Water Resources, Government of India, constituted Sardar Sarovar Construction Advisory Committee (SSCAC). The disputed commercial and technical matters have regularly been discussed in the SSCAC.

3.6 The Commission studied the data and information filed by the petitioner. The capacity of the project is 1450 MW comprising 6 units of 200 MW each in the river bed power house (6x200=1200 MW) and 5 units of 50 MW each in the canal based power house (5x50=250 MW). The share of MP is 57% i.e. 826.50 MW. The design energy of the project as indicated in the petition is 3848 MUs and 57% as MP share is 2193.36 MUs. The petitioner had also considered that the auxiliary consumption is 0.5% and the transformation losses are also 0.5% in the petition. Accordingly, the net energy available, as indicated in the petition, from the project for MP after deducting total 1% as auxiliary consumption and transformation losses is 2171.43 MUs.

3.7 The Commission had specified the norms for auxiliary energy consumption in its regulation namely MPERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2005. The Commission had specified different percentages of auxiliary energy consumption for different types of generating machines. In absence of the data in this regard the Commission had decided to consider the auxiliary energy consumption as 0.5% of energy generated for the purpose of determination of the provisional tariff. The Commission directs the petitioner to file specific details of each generating machine as per the requirement of the regulations for determination of final tariff.

- 3.8 The Commission observed that in the provisional figures as on 31/03/2007, out of total liability of GoMP / NVDA in the SSP project of the order of Rs. 3503.98 Crore, the GoMP made a payment of Rs. 1939.84 Crore. Out of the balance amount of Rs. 1564.14 Crore, an amount of Rs. 1438.91 Crore had been under dispute for the reasons indicated in the paragraph 2.12 and the amount of Rs. 125.23 Crore remained to be paid by GoMP. The respondent MP Power Trading Company Limited in its submission of 06/05/2007 requested the Commission to consider the undisputed amount as the share of MP in the project cost for calculation of the provisional tariff. Since the amount of Rs 1438.84 Crore has been under dispute and SSCAC has been holding the discussions to settle the issues, therefore, till the final decision has been taken by the SSCAC and also the finalisation of financial statements with regard to the project cost, the Commission decided to work out the provisional tariff based on the un-disputed cost only. Accordingly, the Commission considered the capital cost of the project as Rs. 2065.07 Crore (1939.84 Crore + 125.23 Crore) for calculation of the provisional tariff. The Commission directs the petitioner to file the actual cost of the project duly audited and also clearly indicating the MP share with disputed and undisputed portions separately for the determination of the final tariff.
- 3.9 The Commission had further noted that in the subject petition the petitioner had not indicated any thing about the loan availed by the GoMP / NVDA to pay the capital cost to the GoG / SSNNL and also about the equity employed in the project. In this situation, in accordance with “MPERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2005”, the Commission considered the normative debt-equity ratio of 70:30 for the project. Hence, the capital cost of Rs. 2065.07 Crore (i.e. un-disputed portion only) had been considered to be met from debt of Rs.1445.55 Crore and from equity of Rs. 619.52 Crore. The Commission directs the petitioner to file the details of actual equity employed and the loans availed for the determination of the final tariff.
- 3.10 The petitioner in the subject petition had not indicated any rate of the interest for the loans availed. However, the petitioner in the three scenarios filed in the petition considered the interest rate on the loan as 9.25% and 7.6742%. The CERC, while determining the provisional tariff for Indira Sagar Project had considered the interest as 7.6725% on the loan. The respondent in its submission of 06/05/2007 submitted that the interest rates considered by the petitioner in the scenarios filed in the petition had been for Indira Sagar and Omkareshwar projects as considered by the CERC and for the purpose of the present petition different rate of interest to be adopted. However, the respondent had not suggested any rate. In view of the fact that the petitioner and respondent had not indicated any rate on interest, the Commission decides to apply the rate of the interest as 7.6742% on the normative debt of Rs. 1445.55 Crore for the purpose of the determination of the provisional tariff for MP’s share of SSP power. The Commission directs the petitioner to file the details of the loan availed and interest and principal amount repayment for the determination of the final tariff.

- 3.11 The Commission's regulation on determination of the generation tariff stipulates 14% rate of return on the equity employed in the project. The Commission decides to apply the same rate of return i.e. 14% on the normative equity of Rs. 619.52 Crore employed in the project.
- 3.12 With regard to the O&M expenditure the petitioner indicated in the petition that the GoMP / NVDA are required to make an advance payment on quarterly basis towards 57% of O&M cost of Sardar Sarovar Power Complex to GoG / SSNNL. The provisional cost details filed by the petitioner pointed out that up to 31/03/2007 the GoMP had paid Rs. 6.70 Crore only as O&M cost. The details of amount raised by GoG / SSNNL had not been filed by the petitioner. The Commission, in its regulations on determination of generation tariff had specified the O&M expenses as 1.5% of the actual capital cost as admitted by the Commission. In the three scenarios filed by the petitioner the O&M cost had been taken as 1.50% of the capital cost which worked out to Rs. 30.98 Crore for the un-disputed portion of the provisional project cost. The CERC while determining the provisional tariff for Indira Sagar Project considered 1.5% per annum of the capital cost as the O&M cost. The Commission in the present case considers 1.5% of the un-disputed project cost per annum to work out the provisional tariff. The Commission directs that the petitioner to file the actual O&M expenses as required to pay to GoG / SSNNL along with the amount actually paid with the filing for determination of the final tariff.
- 3.13 The petitioner had indicated the rates of the depreciation in the three scenarios discussed in the subject petition as 1.85% and 2.24%. The CERC in the provisional tariff order for Indira Sagar had considered the rate of depreciation as 2.24%. The petitioner had not given any justification in the petition for considering any of the depreciation rates. The respondent had requested in its submission of 06/05/2007 to work out the depreciation @ 1.85% but without any justification. In this situation the Commission decides to follow its regulations namely MPERC (Terms and Conditions for Determination of the Generation Tariff) Regulations, 2005. In accordance with these regulations the average depreciation rate for Rajghat and Birsingpur Hydel projects worked out to 2.57%. For determination of the provisional tariff for Bansagar –IV and Madhikheda Hydel projects the Commission considered the depreciation rate as 2.57%. Hence, for the subject case for determination of the provisional tariff the Commission decides to adopt the rate of the depreciation as 2.57% per annum. The Commission directs the petitioner to file the detailed asset register clearly indicating the cost and commissioning of each asset along with the yearly and commutative depreciation while filing for determination of the final generation tariff.
- 3.14 The normative working capital is worked out by taking into account O&M expenses for one month, spares as 1% of the capital cost and the receivable for two months. The Commission considers the same principle for the calculation of the working capital requirement. The Interest on working capital is taken as SBI PLR + 1%. The SBI PLR was 10.25 % up to FY 2006-07. Hence the interest on working capital has been considered as 11.25% for the provisional tariff for the share of MP in SSP power.

Generation Tariff Order for Sardar Sarovar Project

- 3.15 On the basis of the discussion in the above paragraphs, the provisional generation tariff for the MP's share of power from Sardar Sarovar Project has been worked. The details are given in the table below:

Computation of Provisional Annual Capacity (Fixed) Charges for Generation of SSP Power (MP's Share)				
Sl. No.	Particulars (MP Share Only)			Unit
1	Installed Capacity	57% of 1450 MW	826.50	MW
2	Energy Generation (Firm Power)	Design Energy	2193.36	MUs
3	Capital Cost	Undisputed	2065.07	Rs. Crore
4	Normative Loan	70%	1445.55	Rs. Crore
5	Normative Equity	30%	619.52	Rs. Crore
6	Auxiliary Consumption	0.50%	10.97	MUs
7	Transformation Losses	0.50%	10.97	MUs
8	Energy Available		2171.43	MUs
9	Working Capital			
i.	O&M	One Month	2.58	Rs. Crore
ii.	Receivable	2 Months	48.29	Rs. Crore
iii.	Spares	1%	20.65	Rs. Crore
	Working Capital requirement		71.53	Rs. Crore
10	Cost Computation			
i	Interest on Loan	7.6742%	110.93	Rs. Crore
ii	Depreciation	2.57%	53.07	Rs. Crore
iii.	O&M	1.50%	30.98	Rs. Crore
iv.	Return On Equity	14%	86.73	Rs. Crore
v.	Interest on Working Capital	11.25%	8.05	Rs. Crore
11	Annual Capacity Fixed Charges		289.76	Rs. Crore

- 3.16 The Provisional Annual Capacity (Fixed) charges as determined by the Commission are of the amount of Rs. 289.76 Crore. The Commission allows the recovery to the extent of 95% of full provisional annual capacity charges.
- 3.17 The normative capacity indices of the project for recovery of the capacity charges as allowed by the Commission in paragraph 3.16 shall be as defined in MPERC (Terms and Conditions for determination of the Generation Tariff) Regulations, 2005. The recovery of the capacity charges, primary and secondary energy charges and incentive will be done in accordance with the relevant sections of the Commission's regulations. These charges shall be payable by the beneficiaries.

- 3.18 The respondent in its submission of 06/05/2007, had submitted to the Commission that the petitioner had requested the Commission to make effective the provisional tariff w.e.f. August 2004. The respondent further submitted that the Commission had allowed the expenditure on SSP power in the Distribution Companies' ARR of 2006-07 @ Paise 95.4 / unit and Paise 1.03 / unit for 2007-08. In case the provisional tariff as proposed by the petitioner is approved the Distribution Licensees may be directed to revise their ARR for the corresponding year. The respondent requested that in view of its submission as indicated above the Commission may consider the revision in the provisional generation tariff for the MP share of SSP power at a prospective date. The Compensation for the period prior to the FY 2006-07 may not be accepted.
- 3.19 The Commission had noted from the filings of the petitioner and the respondent that for the year 2004-05 and 2005-06, there was no rate for the SSP power. The Commission allowed Rs. 0.954 and Rs.1.03 as provisional power purchase cost for the SSP power in the Distribution tariff orders of FY 2006-07 and FY 2007-08 respectively. The petitioner confirmed that it has not received any payment for the MP's share of SSP power. The respondent had informed that the past dues of the SSP power would be adjusted against the arrears of electricity bills of Government Departments. The petitioner informed that the final orders in this regard have not been issued till date.
- 3.20 The Commission noted that the unit wise break up of the capital cost as on the date of commercial operation of individual units has not been filed by the petitioner and the different units have been commissioned between 16/08/2004 to 12/11/2006. In view of this it is not possible for the Commission to determine the generation tariff at different intervals on the basis of the commissioning of the units. As the project has achieved its full capacity from 12/11/2006, the provisional generation tariff as determined by the Commission above shall be applicable from 12/11/2006 onwards. The provisional annual capacity charges shall be prorated accordingly for FY 2006-07. Any power, if generated and sent to grid prior to 12/11/2006 shall be provisionally treated as infirm power till the petitioner files the petition for determination of final tariff. The energy corresponding to the infirm power will be charged at the primary energy rate as defined in the Commission's regulations, i.e. at the lowest variable charges of the central sector thermal power generating station in the Western Region at that time.
- 3.21 The ED on the auxiliary consumption and the other taxes including cess etc., if any, shall be recoverable as per actuals.
- 3.22 The Commission has determined the provisional tariff which shall be applicable during the present control period i.e. up to 31st March 2009. The petitioner is directed to file appropriate petition(s), based on the actual audited accounts, for approval of final tariff in accordance with the terms and conditions notified by the Commissions from time to time.
