

**MADHYA PRADESH ELECTRICITY REGULATORY COMMISSION**  
**5<sup>th</sup> Floor, "Metro Plaza", Bittan Market, Bhopal - 462 016**



**Petition No.18 of 2013**

**PRESENT:**

**Rakesh Sahni, Chairman**

**A.B. Bajpai, Member**

**Alok Gupta, Member**

**IN THE MATTER OF:**

**Provisional approval of Generation tariff of MP's 57% share of power in Sardar Sarovar Project (6x200+5x50 MW) for the control period FY 2013-14 to FY2015-16 under Section 62 of the Electricity Act, 2003 and Clause 31 of MPERC (Conduct of Business) Regulations, 2004.**

**M/s Narmada Valley Development Authority, Bhopal**

**PETITIONER**

**Vs.**

**M.P. Power Management Company Limited, Jabalpur**

**RESPONDENT**

**Order**  
**(Passed on this day of 6<sup>th</sup> August, 2013 )**

1. This petition has been filed by Narmada Valley Development Authority (hereinafter called "the petitioner" or "NVDA") on 26<sup>th</sup> March, 2013 for provisional approval of generation tariff for the control period of FY 2013-14 to FY2015-16 in respect of MP's 57% share of power in Sardar Sarovar Project (6x200+5x50 MW) based on the Madhya Pradesh Electricity Regulatory Commission (Terms and Conditions for determination of Generation Tariff) Regulations, 2012. The Commission notified MPERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2012 on 28<sup>th</sup> December'2012 for the control period of FY 2013-14 to FY 2015-16.
2. The petition has been filed in the following backdrop:
  - (i) Vide order dated 7<sup>th</sup> February, 2011, in Petition No. 12 of 2010, the Commission provisionally determined the generation tariff of MP's 57% share of power in Sardar Sarovar Project for the control period of FY 2009-10 to FY 2011-12. The Commission allowed recovery to the extent of 95% of the provisional annual capacity charges subject to retrospective adjustment on determination of final tariff based on audited accounts. In para 9 of the aforesaid order, the Commission directed the petitioner to expedite updation of their records and annual accounts and ensure filing of petition for final tariff at the earliest with full justification for the time over run and consequential cost over run.
  - (ii) Thereafter, vide Commission's order dated 13<sup>th</sup> June 2012 ( in Petition No. 42/12), the petitioner was allowed to claim charges in FY 2012-13 as per the provisional generation tariff determined by the Commission for FY 2011-12 in its MYT order dated 7<sup>th</sup> February, 2011 till disposal of the petition to be filed by NVDA for FY 2012-13. The charges billed, as aforesaid, were subject to adjustment as per tariff to be determined retrospectively.
  - (iii) Pursuant to the directives of the Commission in its aforesaid Order, the petitioner filed the petition (No.55 of 2012) for determination of provisional generation tariff for the extended control period i.e. FY 2012-13 of the MYT Regulations. The Commission issued order on 18<sup>th</sup> October, 2012 on the aforesaid petition and allowed annual capacity (fixed) charges of Rs. 332.50 Cr. for FY2012-13 with the recovery up to extent of 95% of the total Annual Fixed Cost allowed by the Commission.
3. The petitioner broadly submitted the following in the instant petition:
  - (i) *"Narmada Valley Development Authority hereinafter referred to as "NVDA" has been constituted vide GoMP resolution No.500-2-NVD-XXVII-83 dtd. 16<sup>th</sup>*

July, 1985. The petitioner is an organization of the GoMP associated with planning of water resources development in Narmada Basin. The main objects being persuaded are as follows:-

- (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 the 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 MPPMCL.
- (ii) 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.
- (iii) As per NWDT Award, the capital cost of the power portion of the Sardar Sarovar head-works shall comprise 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.
- (iv) As per NWDT award, Project cost chargeable to power component and benefit of power generated by River Bed Power House (RBPH) & Canal Head Power House (CHPH) at Sardar Sarovar Project (SSP) will be shared by M.P., Maharashtra and Gujarat in the ratio of 57:27:16. The power generated at SSP will be integrated in common switchyard. MP, Maharashtra and Gujarat will be entitled to get 57%, 27% and 16% 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.
- (v) As per NWDT award, the amount towards 57 % of the capital cost of the power portion of the Sardar Sarovar head-works shall be paid by Madhya Pradesh to Gujarat in annual installments until the capital works are completed. Each installment will be 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 shall also 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 year and adjusted against actual cost at the end of the year.

- (vi) To implement the SSP, the state of Gujarat promoted the company under the Company Act, 1956 namely Sardar Sarovar Narmada Nigam Ltd (SSNNL).
- (vii) SSNNL has constructed the Dam upto it's MDDL-110.64 mtr. in June 2004. After getting the permission from Narmada Control Authority in March 2006 to raise the Dam upto 121.92 Mtr, SSNNL has constructed the Dam upto 119 mtr in Jun-2006 and up to 121.92 mtr in Dec. 2006. All the 5 Units of CHPH were commissioned during Aug. 2004 to Dec. 2004, after completion of successful continuously 72 hours running, their unit wise commercial operation dates as communicated by SSNNL/NCA were 4.10.2004, 16.08.2004, 01.09.2004, 03.09.2004 and 15.12.2004 and all the 6 Units of RBPH were commissioned during Feb 2005 to June 2006, similarly their unit wise commercial operation dates were 14.02.2005, 14.06.2005, 06.09.2005, 30.10.2005, 12.11.2006 and 27.06.2006 Power is being generated with effect from 16.08.2004 by available Units as per available releases from upstream Indira Sagar Project.
- (viii) Power generated by RBPH and CHPH of SSP is injected into the 400 KV Grid of Western Regional Electricity Board (WREB) through 400 KV Switchyard of SSP. Respective shares of power as per entitlement are drawn continuously from Grid of WREB by MPSEB (on behalf of GoMP), MSEB and GEB respectively. Monthly statement in this regard, w.e.f. Aug. 2004 is issued by the WREB in the first week of the each month to NCA for onward transmission to MPSEB, MSEB and GEB. MPSEB is receiving the GoMP's 57% Share of power generated at SSP w.e.f. Aug.04.
- (ix) Operation & Maintenance of SSP Power Complex is to be done by Gujarat Electricity Board). For this purpose M/s SSNNL has entered into an agreement with GEB on dtd. 17.09.2004. 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 Project.
- (x) GoMP shall sale its share of 57% power from SSP to MPSEB or it's successor entity MP Management Co. as per GoMP's Notification Dtd.3rd June 2006. For sale of this power, Power Purchase Agreement (PPA) is to be executed between NVDD GoMP & MPPMC. Finalised PPA is under process at Govt. Level for concurrence & it will be placed before M.P. Electricity Regulatory Commission (MPERC) by MPPMCL for approval.
- (xi) In this Project, Narmada Control Authority (NCA) is following the provisions of NWDT Award /guide lines of CERC and it's Sardar Sarovar Reservoir Regulating Committee (SSRRC) provides the allocation of water releases for power generation by River Bed Power House, on ten daily basis to SSNNL, after

*considering the requirement for irrigation by Gujarat and Rajasthan States (which is utilized for power generation by Canal Head Power House). NCA after taking the desired information from SSNNL is submitting the Declared Capacity to the WRLDC. SSNNL, as per Schedule approved by WRLDC, is operating the Generating Units of River Bed Power House and Canal Head Power House of Sardar Sarovar Project, under the supervision of Energy Management Center of NCA and M.P. Tradeco, on behalf of GoMP is drawing the full 57 % share of approved Declared Capacity, in co-ordination with MPSLDC, as per schedule through WRLDC Network in the M.P. Grid.*

- (xii) *The final tariff petition shall be filed after completion of Dam height at FRL 138.68 mtr. At present height of Dam is 121.92 mtr. The construction of the Dam of project is still not completed because Narmada Control Authority is in process for following due procedure as stipulated by the court order. The detail note on non completion of Dam height at FRL 138.68mtr is enclosed at Annexure-'A' “.*

4. With the above contention, the petitioner requested the following:
- a. *To approve the provisional Annual Fixed Charges (AFC) / Tariff rates for the FY 13-14, FY 14-15 & FY 15-16 as per Para 24, payable by MP Management Co. Ltd. to GoMP NVDD/ NVDA, for supply of its 57% share of energy from SSP.*
  - b. *To allow to raise the bills to respondent as per order issued by Hon'ble MPERC vide dtd. 19.10.2012 till issue of order on subject petition.*
  - c. *To permit additional recovery on actual payment basis, on account of fees and charges of WRLDC, Levies, Taxes, duties, SLDC/RLDC Charges, Water charges, filling fees, publication expenses etc., as and when paid.*
  - d. *To permit additional recovery on actual payment basis, in case due to any change in the government policy or otherwise if any tax liability arises during the year.*
5. Motion hearing in the matter was held on 27<sup>th</sup> April, 2013. Vide Commission's daily order dated 27<sup>th</sup> April, 2013, the petition was admitted and the petitioner was directed to serve copy of the petition on all respondents in the matter. The petitioner was also directed to submit additional information on several issues along with all supporting data/documents by 30<sup>th</sup> May, 2013 for further scrutiny of the petition.
6. On preliminary scrutiny of the petition, the Commission observed several discrepancies and information gaps in the petition. Vide Commission's daily order dated 27<sup>th</sup> April, 2013, the petitioner was asked to submit additional information on several issues along with all supporting data/documents by 30<sup>th</sup> May, 2013 for further scrutiny of the petition.

7. In response, vide letter dated 28<sup>th</sup> May, 2013 the petitioner has filed its response on the each issue raised by the Commission. The issue-wise response filed by NVDA is as given below:

**Issue:-** The petitioner has considered weighted average rate of interest @ 9.16% while calculating the interest on loan. The basis of considering the aforesaid rate of interest is required to be informed.

**NVDA Response:-**

*The rate of interest on loan component @ 9.16% is taken as considered by CERC for Indira Sagar Project for FY2012-13.*

**Issue:-** Detailed calculations for arriving at 4.50% weighted average rate of depreciation duly supported by the year wise asset-cum-depreciation register since CoD as per applicable Regulations.

**NVDA Response:-**

*The final capital cost of the project is not finalized. The asset-cum-depreciation register shall be prepared and submit after the finalization of capital cost.*

**Issue:** - Whether the water charges are paid by the petitioner? If so, the supporting documents/notification for applicable rate of water charges be filed.

**NVDA Response:-**

*The water charges are not paid by the petitioner.*

**Issue:** - Details of actual annual Plant Availability Factor and the gross generation of SSP during FY2012-13.

**NVDA Response:-**

*The details of actual Annual Plant Availability Factor and the Gross Generation of Sardar Sarovar Project during FY2012-13 is enclosed at annexure – 'A'.*

**Issue:** - Details of the actual annual fixed charges including other charges and incentive if any, recovered last year.

**NVDA Response:-**

*Actual annual fixed charges recovered in FY 2012-13 is Rs. 316.38 Cr.*

8. Vide Commission's letter dated 4<sup>th</sup> June, 2013, the petitioner was directed to publish the gist of the petition in newspapers in Hindi and English version inviting



comments/suggestions from various stake holders. The public notice was published by the petitioner in the following news papers on 13<sup>th</sup> June, 2013:

(a)	Rojgar Aur Nirman, Bhopal	(i)	Patrika, Bhopal
(b)	Dainik Bhaskar, Bhopal	(j)	Patrika, Gwalior
(c)	Dainik Bhaskar, Indore	(k)	Danik Jagran, Rewa
(d)	Dainik Bhaskar, Jabalpur	(l)	Hindustan (Hindi), Delhi
(e)	Dainik Bhaskar, Satna	(m)	Indian Express, Delhi
(f)	Nai Duniya, Indore	(n)	Indian Express, Mumbai
(g)	Nai Duniya, Gwalior	(o)	New Indian Express, Chennai
(h)	Nai Duniya, Jabalpur		

9. The last date for offering comments/suggestions was 4<sup>th</sup> July, 2013. No comment received from any stake holder during this period in the office of the Commission. Vide letter dated 6<sup>th</sup> July, 2013, the petitioner also confirmed that no objection/comment/suggestion received by it till date. The public hearing in the matter was conducted on 9<sup>th</sup> July, 2013 in the office of the Commission. During the public hearing, the representative of the respondent, M.P. Power Management Company Ltd., Jabalpur, filed its written comments on the petition.
10. M.P. Power Management Company Ltd., Jabalpur submitted the following comments on the petition.
- (i) *"The petitioner has claimed O&M expenses on the full capacity of GoMP share of 826.50 MW (57% of 1450 MW). Due to pendency of Court cases and reduction in Dam height to 121.92 meter as against FRL of 138.68 meter, the capacity of the power station has reduced to Approx.1000 MW as against full capacity of 1450 MW. Therefore, reduction in O&M expenses is also required to be proportionately reduced with respect to reduced dam height/ generation capacity."*
- (ii) *"Hon'ble Central Electricity Regulatory Commission has initiated a Suo-Motu petition No. 267/SM/2012 vide order dated 20.12.2012 on the vesting of jurisdiction of CERC regarding determination of tariff of Sardar Sarovar Project which is still pending. (Copy of order is filed as Annexure 1). This may please be considered while determining the tariff of Sardar Sarovar Project."*
11. The above comments have been examined as under while passing this provisional order:
- (i) The O&M norms in Rs. Lacs/MW are prescribed for the installed capacity

of the generating station as defined in regulation 4.1(v) of MPERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2012. Therefore, the contention of the respondent regarding reduction of O&M expenses in proportion to the reduced Dam height, is beyond the scope of MPERC (Terms and Conditions for determination of Generation Tariff) Regulations, 2012.

- (ii) The issue regarding jurisdiction had been already examined by MPERC and discussed in para 2.10 of Commission's first Order dated 18<sup>th</sup> January' 2008 (in Petition 3 of 2007) for determination of generation tariff Order for Sardar Sarovar Project. However, while going through the details regarding Suo-Motto petition initiated by CERC filed by the respondent during the course of public hearing, it is observed by the Commission that the issue in aforesaid Suo-Motu Petition is yet to be decided by the Central Commission.

### **Analysis of the petition**

#### **Capital Cost**

#### **Provisions in Regulation:**

12. Regulation 17 of MPERC (Terms and Conditions for determination of generation tariff) Regulation, 2012, provides as follows:

*"Capital cost for a Project shall include:*

- (a) *the Expenditure Incurred or Projected to be incurred on original scope of work, including interest during construction and financing charges, any gain or loss on account of foreign exchange risk variation during construction on the loan - (i) being equal to 70% of the funds deployed, in the event of the actual equity in excess of 30% of the funds deployed, by treating the excess equity as normative loan, or (ii) being equal to the actual amount of loan in the event of the actual equity less than 30% of the funds deployed, - up to the Date of Commercial operation of the Project, as admitted by the Commission, after prudent check shall form the basis for determination of Tariff.*
- (b) *capitalized initial spares subject to the ceiling norms as specified below:*
- (i) *Coal-based/lignite-fired thermal generating stations - 2.5% of original Project Cost.*
- (ii) *Hydro generating stations - 1.5% of original Project Cost.*

*Provided that where the benchmark norms for initial spares have been published as part of the benchmark norms for capital cost under first proviso to 17.2, such norms shall apply to the exclusion of the norms specified herein.*



(c) *Additional capital expenditure determined under Regulation 20.*

*Subject to prudent check, the capital cost admitted by the Commission shall form the basis for determination of Tariff:*

*Provided that, prudent check of capital cost may be carried out based on the benchmark norms specified by the Central Commission from time to time :*

*Provided further that in cases where benchmark norms have not been specified by the Central Commission, prudent check may include scrutiny of the reasonableness of the capital expenditure, financing plan, interest during construction, use of efficient technology, cost over-run and time over-run, and such other matters as may be considered appropriate by the Commission for determination of Tariff :*

*Provided also that the Commission has issued guidelines for vetting of capital cost of hydro-electric Projects by independent agency or expert and the capital cost as vetted by such agency or expert shall be considered by the Commission while determining the Tariff for the new hydro generating station:*

*Provided also that in case the site of a Hydro generating station is awarded to a developer (not being a State controlled or owned Company), by a State Government by following a two stage transparent process of bidding, any Expenditure Incurred or committed to be incurred by the Project developer for getting the Project site allotted shall not be included in the capital cost :*

*Provided also that the capital cost in case of such hydro generating station shall include:*

- (a) cost of approved rehabilitation and resettlement (R&R) plan of the Project in conformity with National R&R Policy and R&R package as approved; and*
- (b) cost of the developer's 10% contribution towards Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) Project in the affected area :*

*Provided also that where the power purchase agreement entered into between the Generating Company and the Beneficiaries or the implementation agreement provide for ceiling of actual expenditure, the capital expenditure admitted by the Commission shall take into consideration such ceiling for determination of Tariff :*

*Provided also that in case of the existing Projects, the capital cost admitted by the Commission prior to 1.4.2013 duly trued up by excluding un-discharged liability, if any, as on 1.4.2013 and the additional capital expenditure projected to be incurred for the respective Year of the Tariff period during 2013-16, as may be admitted by the Commission, shall form the basis for determination of Tariff."*

**Commission's Analysis:**

13. The Commission in its order dated 18<sup>th</sup> January, 2008 for Sardar Sarovar Project (in petition No.3 of 2007), had considered Rs.2065.07 crores as undisputed capital

cost of the project upto CoD for determination of provisional tariff. Further, the Commission in MYT order dated 7<sup>th</sup> February, 2011 considered the same capital cost of the project upto CoD. The same capital cost was considered by the Commission in its last tariff order for FY2012-13 issued on 18<sup>th</sup> October, 2012.

In the subject petition also, the petitioner has claimed same capital cost of Rs.2065.07 crores as on CoD as admitted by the Commission in earlier tariff orders. The petitioner has not filed any additional capitalization after 31<sup>st</sup> March, 2007. Therefore, the same capital cost of Rs. 2065.07 Cr. is considered in this order.

14. The break-up of the undisputed capital cost as on CoD for GoMP share (as considered in the last tariff order dated 18<sup>th</sup> October, 2012) is as given below:

<b>Capital Cost as on CoD considered in this order</b>			
<b>Sr. No.</b>	<b>Particular</b>	<b>Unit</b>	<b>Amount as on 31<sup>st</sup> March, 2007</b>
1	Cost of Civil work chargeable to power	Rs.Cr.	826.05
2	Cost of E&M works chargeable to power	Rs.Cr.	1239.02
3	Total undisputed capital cost	Rs.Cr.	2065.07
4	<b>Total Project cost up to CoD</b>	<b>Rs.Cr.</b>	<b>2065.07</b>
5	Loan component up to CoD	Rs.Cr.	1445.55
6	Equity component up to CoD	Rs.Cr.	619.52

### **Debt-equity ratio:**

### **Provisions in Regulation**

15. Regulation 21 of MPERC (Terms and Conditions for determination of generation tariff) Regulation, 2012, provides as follows:

*“In case of the generating station declared under commercial operation prior to 1.4.2013, debt-equity ratio allowed by the Commission for determination of Tariff for the period ending 31.3.2013 shall be considered. For the purpose of determination of Tariff of new generating station Commissioned or capacity expanded on or after 01.04.2013, debt-equity ratio as on the Date of Commercial operation shall be 70:30. The debt-equity amount arrived in accordance with this clause shall be used for calculation of interest on loan,*

*return on equity and foreign exchange rate variation.*

*Where equity actually employed is in excess of 30%, the amount of equity for the purpose of Tariff shall be limited to 30% and the balance amount shall be considered as loan. The interest rate applicable on the equity in excess of 30% treated as loan has been specified in Regulation 23. The normative repayment shall also be considered on the equity in excess of 30% treated as loan. Where actual equity employed is less than 30%, the actual equity shall be considered."*

16. As per the aforesaid Regulation, for existing generating station, the debt-equity ratio allowed by the Commission for determination of tariff for the period ending 31.3.2013 shall be considered. In the earlier provisional tariff order for FY 2012-13 dated 18<sup>th</sup> October, 2013, the Commission worked out Rs.949.68 crores as on 31<sup>st</sup> March, 2013 as closing balance of loan by applying repayment equal to depreciation for the year. Similarly, the equity of Rs. 619.52 Cr. as on 31<sup>st</sup> March, 2013 was considered in the aforesaid tariff order dated 18<sup>th</sup> October, 2013. The same opening balances of loan and equity amount are considered in this order.

**Annual Capacity (Fixed) Charges:**

17. The tariff for supply of electricity from a hydro power generating station shall comprise of capacity charge and energy charge to be derived in the manner specified in the Regulation 53 of "Madhya Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Generation Tariff) Regulations, 2012. {RG-26 (II) of 2012}." The annual Capacity (fixed) Charges of hydro power station consists of :
- (a) Return on Equity;
  - (b) Interest and Financing Charges on Loan Capital;
  - (c) Depreciation;
  - (d) Operation and Maintenance Expenses;
  - (e) Interest Charges on Working Capital;
18. While calculating the Annual Capacity (fixed) Charges for FY2013-14 to FY2015-16, the following is considered in this order:
- (a) Capital Cost as on CoD of the project as provisionally admitted by the Commission is Rs.2065.07 crores. The same capital cost as on 1<sup>st</sup> April, 2013 is considered as opening gross fixed assets in this order. The petitioner has also filed the same capital cost in the petition.

- (b) Closing loan balance of Rs. 949.68 crores as on 31<sup>st</sup> March, 2013 admitted in the earlier tariff order dated 18<sup>th</sup> October, 2012 for FY2012-13, is considered as opening loan balance as on 1<sup>st</sup> April, 2013 in this order.
- (c) There is no actual loan drawn by the petitioner for the project. Therefore, following the consistent approach as adopted in all previous Orders, the rate of interest on loan component @ 9.153% (as considered by CERC for Indira Sagar Project for FY 2013-14) is considered in this order also. The petitioner has also filed the same rate of interest in the petition.
- (d) As per Regulations, 2012, repayment of loan equivalent to depreciation is considered in this order for FY 2013-14 to FY2015-16. The cumulative depreciation is worked out by considering the cumulative depreciation as on 31<sup>st</sup> March, 2013 admitted in tariff order dated 18<sup>th</sup> October, 2012.
- (e) The equity of Rs. 619.52 crores as on CoD has been admitted by the Commission in the earlier tariff orders. There is no equity infusion in the project after CoD. Therefore, the same equity amount of Rs. 619.52 crores is considered in this order. The rate of return on equity @ 15.5% as per MPERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2012, is considered in this order. The petitioner has also filed the same equity amount and rate of return on equity in its petition.
- (f) The rate of depreciation on gross fixed assets is considered 4.50% as considered in earlier tariff order dated 18<sup>th</sup> October, 2012. The petitioner has also filed same rate of depreciation in the subject petition.
- (g) Normative Operation and Maintenance expenses are considered as per provisions under second amendment to MPERC (Terms and Conditions for determination of Generation tariff) Regulations, 2012.
- (h) Interest on working capital is worked out as per provisions under Regulations, 2012. The interest on working capital @ 13.20% (9.70% + 3.50%) is worked out as on 1<sup>st</sup> April, 2013.
- (i) There is no change in design energy of 2193 MUs as considered in the earlier tariff orders. Therefore, the same design energy for GoMP share is considered in this order also.
- (j) Based on the above, the annual capacity (fixed) charges for Sardar Sarovar Project for the control period FY2013-14 to FY2015-16 is worked out as given below:

**(a) Return on equity:**

Sr. No.	Particular	Unit	Return on equity		
			FY14-15	FY15-16	FY16-17
1	Opening Equity	Rs. Cr.	619.52	619.52	619.52
2	Equity addition during the year	Rs. Cr.	0.00	0.00	0.00
3	Closing equity	Rs. Cr.	619.52	619.52	619.52
4	Average equity	Rs. Cr.	619.52	619.52	619.52
5	Base rate of Return on Equity	%	15.50	15.50	15.50
6	Rate of return on equity	%	15.50	15.50	15.50
7	<b>Return on equity</b>	Rs. Cr.	<b>96.03</b>	<b>96.03</b>	<b>96.03</b>

**(b) Interest charges on loan:**

Sr. No.	Particular	Unit	Interest on Loan		
			FY14-15	FY15-16	FY16-17
1	Opening Loan	Rs. Cr.	949.68	856.67	763.66
4	Loan addition during the year	Rs. Cr.	0.00	0.00	0.00
5	Repayment during the year	Rs. Cr.	93.01	93.01	93.01
6	Closing Loan	Rs. Cr.	856.67	763.66	670.65
7	Average Loan	Rs. Cr.	903.17	810.16	717.15
8	Weighted average rate of interest	%	9.15	9.15	9.15
9	Interest amount	Rs. Cr.	<b>82.67</b>	<b>74.16</b>	<b>65.64</b>

**(c) Depreciation:**

Sr. No.	Particular	Unit	Depreciation		
			FY14-15	FY15-16	FY16-17
1	Opening Gross Block	Rs. Cr.	2065.07	2065.07	2065.07
2	Gross Block addition during the year	Rs. Cr.	0.00	0.00	0.00
3	Closing Gross Block	Rs. Cr.	2065.07	2065.07	2065.07
4	Average Gross Block	Rs. Cr.	2065.07	2065.07	2065.07
5	Weighted average rate of depreciation	%	4.50	4.50	4.50
6	Depreciation amount	Rs. Cr.	<b>93.01</b>	<b>93.01</b>	<b>93.01</b>
7	Cumulative depreciation	Rs. Cr.	588.88	681.89	774.90

**(d) Operation & Maintenance expenses:**

Sr. No.	Particular	Unit	O & M Expenses		
			FY14-15	FY15-16	FY16-17
1	Installed Capacity (GoMP share)	MW	826.50	826.50	826.50
2	Per MW O&M expenses	Rs. L/MW	11.23	12.12	13.09
3	Total O&M expenses	Rs. Cr.	<b>92.82</b>	<b>100.17</b>	<b>108.19</b>

**(e) Interest on working capital:**

Sr. No.	Particular	Unit	Interest on working capital		
			FY14-15	FY15-16	FY16-17
1	O&M Charges for one month	Rs. Cr.	7.73	8.35	9.02
2	Maint. Spares 15% of the O&M charges	Rs. Cr.	13.92	15.03	16.23
3	Receivables for two months	Rs. Cr.	62.60	62.45	62.40
4	Total working capital	Rs. Cr.	84.26	85.82	87.65
5	Applicable rate of interest	%	13.20	13.20	13.20
6	<b>Interest on working capital</b>	<b>Rs. Cr.</b>	<b>11.12</b>	<b>11.33</b>	<b>11.57</b>

19. The summary of Annual capacity (fixed) charges filed by the petitioner vis-a-vis the Annual Capacity charges determined by the Commission in this Order for FY 2013-14 to FY 2015-16 is as given below:

**(a) As filed in the petition:**

Sr. No.	Particular	Unit	FY 13-14	FY 14-15	FY 15-16
1	Return on equity	Rs. Cr.	96.03	96.03	96.03
2	Depreciation	Rs. Cr.	93.01	93.01	93.01
3	Interest & Finance charges on loan	Rs. Cr.	82.69	74.16	65.65
4	Operation & Maintenance expenses	Rs. Cr.	92.82	100.18	108.19
5	Interest on working capital	Rs. Cr.	10.98	11.82	12.07
6	<b>Annual capacity (fixed) charges</b>	<b>Rs. Cr.</b>	<b>375.53</b>	<b>375.2</b>	<b>374.95</b>
7	<b>95% of the annual capacity charges</b>	<b>Rs. Cr.</b>	<b>356.75</b>	<b>356.44</b>	<b>356.2</b>



**(b) The summary of Annual capacity (fixed) charges provisionally allowed in this order for FY 2013-14 to FY 2015-16:**

<b>Annual capacity (fixed) charges:</b>					
<b>Sr. No.</b>	<b>Particular</b>	<b>Unit</b>	<b>Annual Capacity Charges</b>		
			<b>FY14-15</b>	<b>FY15-16</b>	<b>FY16-17</b>
1	Return on equity	Rs Cr.	96.03	96.03	96.03
2	Interest charges on loan	Rs. Cr.	82.67	74.16	65.64
3	Depreciation	Rs. Cr.	93.01	93.01	93.01
4	Operation & Maintenance expenses	Rs. Cr.	92.82	100.17	108.19
5	Interest on working capital	Rs. Cr.	11.12	11.33	11.57
6	Annual capacity (fixed) charges	Rs. Cr.	<b>375.64</b>	<b>374.69</b>	<b>374.44</b>
7	95% of the Annual Capacity Charges	Rs. Cr.	<b>356.86</b>	<b>355.96</b>	<b>355.72</b>

20. Normative Annual Plant Availability Factor for recovery of annual capacity charges shall be considered as per MPERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2012
21. The petitioner is allowed to recover above charges on the basis of 95% of the annual fixed cost determined in this order on provisional basis subject to retrospective adjustment on determination of final tariff. The recovery of annual fixed cost in terms of Capacity Charges and Energy Charges shall be made by the petitioner in accordance with Clause 53 of the MPERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2012.
22. The petitioner is allowed to recover the fee paid by the petitioner to MPERC for determination of generation tariff, water charges on usages of water for hydro power station and E.D. and cess if any, levied by the Statutory Authorities from the beneficiaries on pro-rata basis in accordance with the provisions of MPERC (Terms and Conditions for Determination of Generation Tariff) Regulations, 2012.
23. In exercise of the powers vested in it under Section 64 of the Electricity Act, 2003, the Commission directs that the tariff provisionally determined by this order shall be applicable from 1<sup>st</sup> April, 2013 and will continue to be operative till 31<sup>st</sup> March, 2016 under multi year tariff principles. In view of the fact that the tariff determination got delayed on account of delay in filing the tariff proposal by NVDA and submission of the requisite data, no interest on unbilled amount of FY 2013-14 is being allowed. The petitioner must take steps to implement the Order after giving public notice in accordance with clause 1.30 of MPERC (Details to be furnished and fee payable by licensee or generating company for determination of tariff and manner of making application) Regulations, 2004 and its amendments

and must also provide information to the Commission in support of having complied with this order.

24. The petitioner is directed to expedite updation of their records and annual accounts and ensure filing of petition for final tariff at the earliest with full justification for the time over run and consequential cost over run.

Ordered accordingly.

sd/-  
**(Alok Gupta)**  
**Member**

sd/-  
**(A. B. Bajpai)**  
**Member**

sd/-  
**(Rakesh Sahni)**  
**Chairman**

Date: 6<sup>th</sup> August, 2013  
Place: Bhopal