

**ORAL HEARING ON THE PROPOSED  
DRAFT REGULATION ON TERMS &  
CONDITIONS OF TARIFF FOR  
THE TARIFF PERIOD 2009-14**



**PRESENTATION OF VIEWS ON BEHALF OF  
NARMADA HYDROELECTRIC DEVELOPMENT CORPORATION LTD.  
NHDC PARISAR, SHYAMLAKHILLS, BHOPAL**

# Regulation No. 10: Additional Capitalization

Additional Capitalization on account of 'Deferred Liabilities' & 'Any work/service not included in the original capital cost but become necessary for efficient and successful operation of plant' have been disallowed after 'cut-off date' in proposed Regulation.

Hon'ble Commission has evolved a concept of Special Allowance on normative basis in terms of Rs. Lakhs per MW per year *for thermal power generating station* to cater the need of minor items and asset brought after 'Cut-off date'.(Ref. Explanatory Note at Sl. No. 5.14 and at Sl. No. 5.15)

For hydropower generating station, similar Special Allowance will be allowed only on merits on case-to-case basis where certain parts have to be replaced due to erosion caused by high silt content in water.

## Submission:

- ❖ The provisions of existing Regulation allowing Additional Capitalization on the 'Deferred Liabilities' after cut-off date relating to works / services within the original scope of works may be continued.
- ❖ *The need of minor assets like Hospitals, Schools, Roads etc. may not be ignored for hydro power stations. As such like thermal power stations, the concept of Special Allowance on normative basis may also be made applicable for hydropower stations, irrespective of case to case basis.*

# Regulation No. 15: Return on Equity (ROE)

The Hon'ble Commission had specified a post Tax ROE @ 16% for the tariff period 2001-2004 and @14% for the tariff period 2004-2009. In the Draft Regulation, 2008, to be applicable for the tariff period 2009-2014, the ROE @ 14% has been proposed to be continued.

## Submission

- Looking to the exorbitant inflation recorded during the last six months and volatility in Financial Markets, the fixed RoE @ 14% may no longer be relevant.
- In order to maintain the inclination of investors for promoting the power sector, it is utmost necessary that they are rest assured of getting reasonable return on their investment over and above the market rates prevailing in cash/debt market.
- It would therefore be reasonable to allow variable RoE linked with the PLR of SBI viz. *premium of at least 4% over and above applicable PLR of SBI as on 1<sup>st</sup> April of every Year, subject to minimum of 14% per annum.*

# Regulation No. 17: Depreciation

The Regulation 17(3) states that, “*Land shall not be a depreciable Asset and its cost shall be excluded from the Capital Cost while computing 90% of the Capital cost of the Asset.*”

Existing concept of allowing AAD has been discontinued. Recovery of 70% Debt has been proposed in initial fifteen years by allowing depreciation @ 4.67%, considering that loans are generally available with repayment period of 15 years.

## Submission

- Land which is acquired for formation of Reservoir becomes the built-in part of Dam Cost. As such, Hon'ble Commission may consider modifying the Regulation 17(3) as below:  
“*Land other than that acquired for formation of Reservoir, shall not be a depreciable Asset and its cost shall be excluded from the Capital Cost while computing 90% of the Capital cost of the Asset.*”
- In existing provisions AAD is allowed with a ceiling of 1/10<sup>th</sup> of Loan Amount. As such average loan repayment period may be considered as 10 years and recovery of 70% Debt may be allowed in initial 10 years by allowing Depreciation @ 7%. The balance recovery be allowed by straight line method at a uniform rate for remaining life of the asset i.e. @ 0.8% per annum [20% / 25 years] in case of Hydro Power Station.

## Regulation No. 18 (c): Interest on Working Capital

In case of Hydro Generating Station, it has been proposed to allow the Interest on Working Capital on (i) Receivables equivalent to 45 days of fixed and energy charges for sale of electricity calculated on target availability and (ii) maintenance spares @ 15% of O&M expenses specified in regulation 19.

### Submission

The provisions of existing Regulation, 2004 regarding Interest of Working Capital with 60 days receivable may be continued.

**Or**

Late payment surcharge @ 1.25% per month may be allowed after 45 days from the date of billing if, proposed Regulation 18(c) is implemented.

**Regulation No. 19(f)(iv):**  
**O&M Expenses of Hydro Generating Station**

For hydro generating stations, which are yet to complete five years of commercial operation as on 01-04-2009, the O&M Expenses on Normative Basis @ 1.5% of Capital Cost upto 'Cut-off date' (excluding Cost of R&R) with escalation @ 5.17% per annum has been proposed.

Escalation factor @ 5.17% has been arrived by average escalation during the last five years considering 60% weightage for WPI and 40 % for CPI

---

---

## Submission

The hydropower station with big storage like ISPS, has a R&R component more than 50% of the Capital Cost (power component) and is a built-in cost of dam.

The actual O&M expenses of Indira Sagar Project is coming even more than that allowed in the tariff based on normative @ 1.5% of capital cost (including R&R cost).

Thus, the O&M expenses on normative basis @ 1.5% of Capital Cost (including R&R Cost) may be allowed.

Or

The normative rate of O&M expenses be kept atleast 3% per annum with reasonable escalation, if the proposed Regulation 19(f)(iv) is implemented.

**The proposed escalation factor @ 5.17% per annum may not be sufficient to neutralize the increase in cost of inputs, looking to inflation rate which has jumped exorbitantly from nearly less than 5% to more than 10% during last six months. Thus, escalation factor may either be fixed on :**

- (a) Projected WPI and CPI in next five years; or**
- (b) Linked directly with inflation rate at the beginning of each financial year; or**
- (c) On normative basis with reasonable escalation but not less than 8% per annum.**



**Fitment benefit @ 45 % may also be allowed for Power Stations which are yet to complete five years of operation as on 01-04-2009 to have *at par* treatment for all generating stations.**

**For multipurpose Project like Indira Sagar Project and Omkareshwar Project where the responsibility of maintaining the complete Dam is vested with the generator, O&M expenses on normative basis may also be made applicable and allowed on other associated components of Dam like cost of Irrigation component, SSP Component etc. which is excluded while computing the power component.**

## Regulation No.21: Recovery of Fixed Charges

The Regulation Provides formula for PAFM (% Plant Availability Factor during the Month) or PAFY (% Plant Availability Factor during the Year) as below in which Installed Capacity (IC) has been considered:

$$\text{PAFM or PAFY} = 10000 \times \sum_{i=1}^N \text{DC}_i / \{N \times \text{IC} \times (100 - \text{AUX}_n)\}\%$$

## Submission:

For hydro power generating stations with big reservoirs like Indira Sagar, the variation in available head at different levels is quite large from 65 m to 46 m. Consequently, the Machine Rating varies from 125 MW (Plate Rating) at FRL to 85 MW at MDDL.

Hon'ble Commission has admitted the variation in monthly peaking capabilities of Indira Sagar Project while fixing Final Tariff against Petition No. 119/2005 based on TEC of Project. Accordingly, peaking capabilities of Project is as low as 765 MW in the Month of June against installed capacity of 1000 MW.

Keeping above facts into consideration, the formula devised by the Hon'ble Commission needs to be reviewed and to make it more rational the same may be modified by considering Peaking Capabilities (PC) instead of Installed Capacity (IC), as below :

$$\text{PAFM or PAFY} = 10000 \times \sum_{i=1}^N \text{DC}_i / \{ N \times \text{PC}_i \times (100 - \text{AUX}_n) \} \%$$

# Regulation No. 27(1)(i) :

## Norms of operation for hydro generating station

Project-wise Normative Annual Plant Availability Factor (NAPF) and Capacity Charge Apportioning Factor (CCAF) have been provided. For NHDC's Project they are as follows:

S. No.	Project Name	Type of Plant	NAPF	CCAF
1	ISP (1000 MW)	Storage	85%	50%
2	OSP (520 MW)	Storage	90%	50%

## Submission

As per prevailing practice of recovering full AFC from the beneficiary, it consists of approximately  $\pm 75\%$  as Capacity Charges and the remaining  $\pm 25\%$  as Primary Energy Charges for NHDC's Projects. It would therefore be reasonable to fix CCAF for NHDC's Projects as 75% instead of 50% as proposed.

**The CCAF & NAPF may be “Type Specific” instead of “Project Specific”.**

As per prevailing norms of CERC, 100% risk of hydrological failure is being borne by the beneficiary. Thereby, they enjoy the privilege of getting Secondary Energy at a cheap rate (ranging around Paise 55-65 per kWh) during good monsoon years.

The spirit behind introducing CCAF, is to shift the risk of hydrological failure on hydropower generator. It would thus be rational that the sale of energy beyond design energy during good monsoon year may be allowed at Composite Energy Rate.

Omkareshwar Project has been classified as Storage Type Plant and its NAPF has been considered as 90%. Since this is the first down stream cascading project to the mother reservoir Indira Sagar and would have sufficient pondage for diurnal usage at FRL. As such its NAPF may be as 85% instead 90% as proposed by CERC.

# **Regulation No. 39 : Tax on Income**

The tax on income stream of generating company from its core business excluding net UI Income and incentive shall be recovered from beneficiary.

## **Submission**

Incentive and UI are the mechanism to encourage generators for efficient performance of power station and grid. They may not be treated other than the 'core –business' of Generator.

The provisions of existing Regulation allowing recovery of tax on income from core business may be continued without any amendment.



2007/07/10



**THANK YOU**