

# Welcome

**Tehri Hydro Development Corpn.Ltd.**

(A joint venture of Govt.of India & Govt.of U.P.)

**Rishikesh**

Suggestions  
on  
CERC's draft Regulations  
on  
Terms & Conditions of  
Tariff for  
tariff period 2009-14.

# Deemed Generation :

**Provision of Deemed Generation need to be reinstated.**

**In case of reduced generation due to the reasons beyond the control of generating company, resulting in spillage of water, the energy charges on account of such spillage should be payable to the generating company. Energy charges on the above account shall not be admissible if the energy generated during the year is equal to or more than the Design Energy.**

**This is required to take care of situations where the transmission line is not available and reservoir is full. In such a scenario, water shall be spilled for no fault of the generator.**

# Tariff determination :

In case of reservoir type generating station, if the generation is possible to be started from the first unit only after the construction of the complete dam, spillways and other civil structures and also after the complete installation of several common hydro mechanical and electromechanical systems & equipment, then the cost of all such facilities and assets should be capitalized alongwith the first unit.

# Additional Capitalisation:

## **As per draft Regulations :**

The capital expenditure of the following nature actually incurred after the cut-off date may, in its discretion, be admitted by the Commission, subject to prudence check:

- (i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court;
- (ii) On account of change in law; and
- (iii) Deferred works relating to ash pond or ash handling system in the original scope of work.

**As Proposed :** The relevant provision in the prevailing Regulations 2004-2009 , as under, should be retained:

The capital expenditure of the following nature actually incurred after the cut-off date may be admitted by the Commission, subject to prudence check:

- (i) Liabilities to meet award of arbitration or for compliance of the order or decree of a court;
- (ii) On account of change in law; and
- (iii) Deferred liabilities relating to works/services within the original scope of work.
- (iv) Any additional works/ service which has become necessary for efficient and successful operation of plant but not included in the original capital cost.

# Debt-Equity Ratio :

## As per draft Regulations:

### **Debt-Equity Ratio (1) :**

For a project, if the equity actually deployed is more than 30% of the capital cost, equity in excess of 30% shall be treated as normative loan:

Provided that where Equity actually deployed is less than 30% of the capital cost, the actual equity shall be considered for determination of tariff.

## As Proposed :

The para, as mentioned below, as existing in the prevailing Regulations 2004-09, should be incorporated after second para of the relevant draft Regulations:

“Provided that the Commission may in appropriate cases consider equity higher than 30% for the purpose of determination of tariff, where the generating company is able to establish to the satisfaction of the Commission that deployment of equity more than 30% was in the interest of general public.”

The following is proposed to be incorporated :

“Provided further that the projects which were sanctioned by the competent Government prior to the issuance of Govt. of India’s Tariff Policy dtd.6<sup>th</sup> January 2006, the debt- equity ratio, as sanctioned by the Government in the investment approval, shall be applicable.”

# Return on Equity :

**As per draft Regulations:** Return on Equity shall be computed in rupee terms, on the equity base determined in accordance with regulation 13 @ 14% per annum.

**As Proposed** : For hydro power projects, Return on Equity should be considered @ 18% per annum as hydro projects take much longer time in their construction and commissioning. The hydro projects are situated in the far flung interior areas. The working in hilly terrain is comparatively much more difficult than thermal and other generating stations.

Secondly, the Return on Equity should be admissible in the hydro sector in the normative way @ 12% even during the construction period considering its long gestation period, based on the prevailing average interest rate in the Capital market . Moreover, hydro projects face far more uncertainties in the form of geological surprises and other forces of nature, including environmental protests.

Therefore, for attracting investments in this sector it would be prudent to keep atleast 18% Return on Equity and further Return on Equity @ 12% should also be admissible during the construction/ gestation period.

# Depreciation :

**As per draft Regulations:** 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.

## **As proposed :**

**Rehabilitation and Resettlement Land:** It should be clarified that expenditure incurred on Rehabilitation and Resettlement of the oustees and submerged land shall be depreciable.

**Treatment of Lease Hold Land :** Further in the case of lease hold land, the lease charges on annual basis should be allowed to be “pass through” similar on the lines of depreciation over and above the O&M expenses. This provision may kindly be incorporated for clarity.



## Depreciation cont....

### As per draft Regulations :

The useful life of the Hydro Projects is taken as 35 years and depreciation is proposed to be calculated annually @ 4.67% for first 15 years and @ 1% for the remaining period.

### As Proposed :

The normative period of repayment should be considered as 10 years for normally available loans in the prevailing market. It is more so relevant in the case of Hydro generating station where the period of repayment (after COD) is relatively shorter as most of the tenure of loan is consumed by the longer gestation period. Therefore, 10 years repayment period should be considered in case of hydro projects. Accordingly, separate table for hydro generating stations should be incorporated as under:

| Sl. No. | Description of Asset     | Useful life (in years) | Rate for first 10 years (%) | Rate for remaining life (%) |
|---------|--------------------------|------------------------|-----------------------------|-----------------------------|
| 3.      | Hydro Generating Station | 35                     | 7                           | 0.8                         |

# Depreciation cont....

## As per draft Regulations :

provided that in case of the existing projects already in operation prior to 01.04.2009, depreciation shall be recovered in the following manner, namely-

- (a) For generating station and transmission system which are in operation for less than 15 yrs., the difference between the cumulative depreciation recovered and the cumulative depreciation arrived at by applying the depreciation rates specified in this regulation corresponding to 15 yrs., shall be spread over the period up to 15 yrs., and thereafter the depreciation shall be recovered at the rates specified for the remaining useful life after 15 yrs. **This may kindly be elaborated with suitable illustrations.**

As Proposed : Further the text of Regulation 17(4) should read as under :

Provided that in case of the existing projects already in operation prior to 01.04.2009, depreciation shall be recovered in the following manner, namely

- (a) For hydro generating station which are in operation for less than 10 yrs., the difference between the cumulative depreciation recovered and the cumulative depreciation arrived at by applying the depreciation rates specified in this regulation corresponding to 10 years, shall be spread over the period up to 10 yrs., and thereafter the depreciation shall be recovered at the rates specified for the remaining useful life after 10 yrs.

## Depreciation cont....

### As per draft Regulations :

- (b) For the project in operation for more than 15 years, the balance depreciation to be recovered shall be spread over the remaining useful life.

### As Proposed :

- (b) For the project in operation for more than 10 years, the balance depreciation to be recovered shall be spread over the remaining useful life.

Alternatively : Recycling of loan should be allowed till such time the entire principal amount is offset by the accumulated depreciation. In other words, if the annual repayment amount exceeds the amount resulting from the Commission's proposed depreciation, then the difference of amount should be treated as normative loan, as a separate component of Interest on Working Capital.

# Interest on Working Capital :

As per Draft Regulations, in case of hydro generating station and transmission system:

- (i) Receivables equivalent to forty five days of fixed and energy charges for sale of electricity calculated on target availability.
- (ii) Maintenance spares @ 15% of O&M expenses specified in regulation 19.

In case of Hydro generating station the prevailing provision should be retained as per the existing regulations 2004-09 as follows:

Working Capital shall cover:

- (i) Operation and Maintenance expenses for one month.
- (ii) Maintenance spares @ 1% of the historical cost escalated @ 6% per annum from the date of commercial operation; and
- (iii) Receivables equivalent to two months of fixed charges for sale of electricity, calculated on normative capacity index.

## Interest on Working Capital cont....

**EXPLANATION:** O & M expenses for one month are required for running of project for one month as the bills are raised on monthly basis. Therefore, the Interest on Working Capital should be kept undisturbed otherwise it will seriously hamper the working of the plant adversely.

Maintenance spares should be correlated with historical cost @1% of the project, as in the Regulations 2004-09 and minimum 6% escalation be allowed thereon, as the current inflation is already plus 12%.

The realization of revenue against the supply of electricity is practically having a cycle of 55 days to 85 days. Therefore, taking average, it works out to 70 days, which is more than even 2 months. Hence, receivables for 2 months must not be disturbed and retained as provided in the Regulations 2004-09.

Further, it is pertinent to mention here that the late payment surcharge continues to be applicable, as per the proposed Regulations after 60 days from the date of billing. Therefore, receivables are all the more justified to be kept at least 60 days for the purpose of Interest on Working Capital.

# Operation & Maintenance Expenses:

**As per draft Regulations** : In case of the hydro generating stations, which have not been in commercial operation for a period of five years as on 1.4.2009, operation and maintenance expenses shall be fixed at 1.5% of the capital cost up to cut-off date (excluding cost of rehabilitation & resettlement works) as admitted by the Commission and shall be escalated at the rate of 5.17% per annum from the subsequent year to arrive at operation and maintenance expenses for the base year 2008-09.

Provided that the base operation and maintenance expenses shall be further escalated at the rate of 5.17% per annum to arrive at permissible operation and maintenance expenses for the relevant years

**As Proposed** : The following is proposed in place of the relevant draft Regulation.

In case of the hydro generating stations, which have not been in commercial operation for a period of five years as on 1.4.2009, operation and maintenance expenses shall be fixed at 2.0% of the capital cost up to cut-off date (including the cost of rehabilitation & re-settlement works) as admitted by the Commission and shall be escalated at the rate of 5.17% per annum from the subsequent year to arrive at operation and maintenance expenses for the base year 2008-09.

Provided that the base operation and maintenance expenses shall be further escalated at the rate of 5.17% per annum to arrive at permissible operation and maintenance expenses for the relevant years.

## Operation & Maintenance Expenses cont.....

### Explanation :

Operation and Maintenance expenses @ 2.0% of the capital cost up to cut-off date (including the cost of rehabilitation & re-settlement works) is proposed to be considered due to escalated O&M expenses and wage revision etc. Therefore, in the present scenario further reduction in O&M expenses by excluding the cost of rehabilitation & re-settlement works does not seem to be justified.

It is also to mention that O&M expenses on the storage type projects are more, as these projects require more expenditure on maintenance of reservoir as compared to Run-of-the-River projects. So, O&M expenses for these projects should be 0.5% higher as compared to Run-of-the-River projects.

Moreover, the older projects are proposed to be paid on actual of their average expenditures plus the rationalisation for 45% increase in employee cost on account of pay revision etc. where as new projects have been proposed to be paid normatively at the rate of 1.5% of the capital cost (excluding R&R works cost). This would be insufficient to meet out the expenditures and hence the proposed provision as above may be considered.

# Normative Annual Plant Availability Factor (NAPAF) :

**As per draft Regulations** : Station-wise NAPAF and CCAF shall be as follows :

| Station          | Type of Plant | Plant Capacity (MW) | NAPAF | CCAF |
|------------------|---------------|---------------------|-------|------|
| THDC Tehri Stg-I | Storage       | 1000                | 77%   | 70%  |

**As Proposed** : Respective data (NAPAF) is proposed to be modified as under :

| Station          | Type of Plant | Plant Capacity (MW) | NAPAF | CCAF |
|------------------|---------------|---------------------|-------|------|
| THDC Tehri Stg-I | Storage       | 1000                | 60%   | 70%  |

**EXPLANATION** : During 2007-08, which proved to be a good hydrological year, Tehri Stage-I exceeded the generation target for the year. Despite this, Tehri Stage-I achieved only 65 % PAF against normative value of 77 % as proposed in the draft Regulations.

In such a good situation also, Tehri Stage-I would not recover the Capacity Charges as per the proposed normative value of NAPAF as 77%. Therefore, it is proposed that NAPAF for Tehri Stage-I must not be taken as 77%. At the maximum it can be considered as 60% only considering the available data for the year 2007-08 and the hydrological uncertainties.



# Rebate:

## As per draft Regulations :

- (1) For payment of bills of the generating company and the transmission licensee through letter of credit on presentation, a rebate of 2% shall be allowed.
- (2) Where payments are made other than through letter of credit within a period of one month of presentation of bills by the generating company or the transmission licensee, a rebate of 1% shall be allowed.

## As Proposed : The following modification is proposed in the respective draft Regulation :

- (1) For **full payment of bills of capacity charges and Energy Charges** only of the generating company and the transmission licensee through letter of credit on presentation, a rebate of 2% shall be allowed.
- (2) Where payments are made even in installments other than through letter of credit and the entire bill amount is paid within a period of one month of presentation of bills by the generating company or the transmission licensee, a rebate of 1% shall be allowed. In case full payment is not released by the beneficiary within a period of one month of presentation of bills, no rebate shall be allowed to the beneficiaries.

However, rebate shall be allowed on the agreed terms & conditions between the parties.

# Tax on Income :

## **As per draft Regulations :**

- (1) Tax on the income streams of the generating company or the transmission licensee, as the case may be, from its core business excluding net UI income and incentives shall be recovered from the beneficiaries, or the long-term transmission customer, as the case may be.

## **As Proposed :** The following modification is proposed in the respective draft Regulation :

- (1) Tax on the income streams of the generating company or the transmission licensee, as the case may be, from its core business including net UI income and incentives shall be recovered from the beneficiaries, or the long-term transmission customer, as the case may be.

**EXPLANATION :** Revenue earning , if any, through UI is basically because of strengthening of the grid by the generator. Incentive earnings are also because of the enhanced generation for mitigating the energy shortfall by the generator.

# Tax on Income cont.....

## EXPLANATION (cont....)

In both the cases, the revenue is generated out of the special efforts and endeavours of the generators to help the grid and beneficiaries to tide over the crises. Earnings through UI and Incentive are from the core business of power generation only and not due to other business activities. Therefore, any tax on such income should also be a pass through and the generator should not be penalised for helping the beneficiaries and the grid.

Therefore, the Tax on these incomes should also be recovered from the beneficiaries as in the past.

# Thank you

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