

Annexure - 2

memorandum of understanding or any such covenant, entered into between the transmission licensee and the long - term transmission customer(s) for construction of the project.

- (ix) **'Long term Transmission Customer'** means a person availing or intending to avail access to intra - state transmission system for a period of twenty - five years or more.
- (x) **'Operation and Maintenance expenses' or 'O&M expenses'** means the expenditure incurred on operation and maintenance of the transmission system including part thereof, and includes the expenditure on man-power, repairs, spares, consumables, insurance and overheads.
- (xi) **'Original Project Cost'** means the actual expenditure incurred by the transmission licensee, as per the original scope of project upto first financial year closing after one year from the date of commercial operation of the last element, as admitted by the Commission, for the purpose of tariff. In the case of existing stations of bundled / integrated utilities, it will mean the asset value as specified in the opening balance sheet of the successor entity.
- (xii) **'Project'** includes transmission system comprising of specified transmission lines, sub - stations and associated equipment.
- (xiii) **'Rated Voltage'** means the manufacturer's design voltage at which the transmission system is designed to operate or such lower voltage at which the line is charged, for the time being, in consultation with the long - term transmission customer(s).
- (xiv) **'Short - term Transmission Customer'** means a transmission customer other than the long - term transmission customer.
- (xv) **'Transmission Service Agreement'** means an agreement, contract, memorandum of understanding or any such covenant, entered into between the transmission licensee and the long - term transmission customer for the operational phase of the project.
- (xvi) **'Transmission Licensee'** means a person who has been granted licence for intra state transmission of electricity and includes any person deemed to be a transmission licensee for intra - state transmission of electricity.
- (xvii) **'Transmission System'** means a line with associated sub stations or a group of lines inter - connected together along with associated sub -stations and the term includes equipment associated with transmission lines and sub-stations.

67. Charges for Auxiliary Energy Consumption in the Sub - Station

The charges for auxiliary energy consumption in the Air conditioned Sub Stations for the purpose of air - conditioning, lighting, technical consumption etc shall be borne by the transmission licensee as part of normative operation and maintenance expenses.

68. Target Availability for recovery of full transmission charges

(i)	AC System	98%
(ii)	HVDC System	95%

Note: Recovery of fixed charges below the level of target availability shall be on pro rata basis. At zero availability, no transmission charges shall be payable.

69. Capital Cost:

- (1) Subject to prudent check by the Commission, the actual capital expenditure incurred on completion of the project shall form the basis for determination of final tariff. The final tariff shall be determined based on the admitted capital expenditure actually incurred upto the date of commercial operation of the transmission system and shall include capitalised initial spares subject to a ceiling norm of 1.5% of the original project cost.
- (2) Where the implementation agreement or the transmission service agreement entered into between the transmission licensee and the long - term transmission customer provides a ceiling on actual capital expenditure, the capital expenditure for the purpose of determination of tariff shall be limited to such ceiling.
- (3) In the case of existing projects, the project cost admitted by the Commission, prior to the notified date of tariff regulations by the Commission as per Regulation 1(2) of these regulations, shall be the basis for determination of tariff.

Note: The Commission shall scrutinise the project cost estimates. Such scrutiny shall be limited to the reasonableness of the capital cost, financing plan, interest during construction.

use of efficient technology and such other matters as the Commission may deem necessary for determination of tariff.

70. Additional Capitalisation:

(1) The following capital expenditure which is within the original scope of work and actually incurred after the date of commercial operation and upto the cut-off date may be admitted by the Commission, subject to prudent check:

- (i) deferred liabilities
- (ii) works deferred for execution
- (iii) procurement of initial capital spares covered in the original scope of works subject to the ceiling norm specified under regulation 69
- (iv) liabilities in connection with implementation of award of arbitration or compliance of the order or decree of a court, and
- (v) on account of change in law

Note: (a) original scope of work along with estimates of expenditure shall be submitted to the Commission along with application for provisional tariff.

(b) a list of the deferred liabilities and works deferred for execution shall be submitted along with the application for determination of final tariff after the date of commercial operation of the transmission system.

(2) Subject to clause (3) of this regulation, the capital expenditure of the following nature actually incurred after the cut-off date may be admitted by the Commission, subject to prudent check.

- (i) deferred liabilities relating to work / services within the original scope of work
- (ii) liabilities in connection with implementation of award of arbitration or compliance of an order or decree of a court
- (iii) on account of a change in law, and
- (iv) any additional works / services which have become necessary for efficient and successful operation of the project, but not included in the original project cost.

(3) Any expenditure incurred on minor items / assets bought after the cut off date like tools and tackles, personal computers, furniture, air-conditioners, voltage stabilizers, refrigerators, coolers, fans, TV, washing machine, heat convectors, mattresses, carpets etc. shall not be considered for additional capitalisation for determination of tariff with effect from notified date of the tariff regulations by the Commission as per Regulation 1(2).

Note: The list of items is illustrative but not exhaustive.

(4) Impact of additional Capitalisation in tariff revision may be considered by the Commission twice in a tariff period including revision of tariff after the cut off date.

Note:

- (1) Any expenditure admitted on account of committed liabilities within the original scope of work and the expenditure deferred on techno-economic grounds but falling within the original scope of work shall be serviced in the normative debt equity ratio specified in Regulation 71.
- (2) Any expenditure on replacement of old asset shall be considered after writing off the entire value of the original asset from the original capital cost.
- (3) Any expenditure admitted by the Commission for determination of tariff on account of new works not in the original scope of work shall be serviced on normative debt – equity ratio specified in Regulation 71.
- (4) Any expenditure admitted by the Commission for determination of tariff on renovation and modernisation or life extension shall be serviced on normative debt – equity ratio specified in Regulation 71 after writing off the original amount of the replaced asset from the original capital cost.

71. Debt – Equity Ratio

(1) In case of all projects, the debt – equity ratio as on the date of commercial operation shall be 70:30 for determination of tariff, provided that the commission may in deserving case consider equity higher than 30% for purpose of determination of tariff, where the transmission licensee is able to establish to the satisfaction of the Commission that the deployment of equity more than 30% was in the interest of general public.
Provided that

- (i) in case of a project, if the actual equity employed is less than 30%, the actual debt and equity employed shall be taken for determination of tariff

- (ii) in case of existing projects the actual debt: equity ratio shall be used for tariff determination. However any expansion shall be governed by clause (1) above.
- (2) The debt and equity amount arrived at in accordance with clause (1) shall be used for calculation of interest on loan, return on equity, Advance Against Depreciation and Foreign Exchange Rate Variation.

72. Transmission Charges:

Annual Transmission charges shall consist the following:

- (a) Interest on loan capital
- (b) Depreciation, including Advance Against Depreciation
- (c) Return on equity
- (d) Operation and Maintenance expenses (inclusive of Employee cost and Administration and General expenses); and
- (e) Interest on working capital

73. Computation of annual transmission charges

The annual transmission charges shall be computed on the following basis:

(1) Interest on loan capital

- (a) Interest on loan capital shall be computed loan – wise, on the loans arrived at in the manner indicated in Regulation 71.
- (b) In the case of existing projects, the actual debt-equity shall be used for tariff determination and any expansion thereto shall be governed as per Regulation 71.
- (c) The transmission licensee shall make every effort to refinance the loan as long as it results in net benefit to the long-term transmission customers. The costs associated with such refinancing shall be borne by the long-term transmission customers.
- (d) The changes, if any, to the loan terms and conditions shall be reflected from the date of such refinancing and the benefits shall be passed on to the beneficiaries.
- (e) In case of any dispute, any of the parties shall approach the Commission with proper application. The long-term transmission customers shall not withhold any payment, unless ordered by the Commission, to the transmission licensee during pendency of any dispute relating to swapping of loan before the Commission.
- (f) In case any moratorium period is availed by the transmission licensee, depreciation provided for in the tariff during the years of moratorium shall be treated as repayment during those years and interest on loan capital shall be calculated accordingly.
- (g) The transmission licensee shall not make any profit on account of swapping of loan and interest on loan.
- (h) The Transmission licensee, at its discretion, swap loans having floating rate of interest with loans having fixed rate of interest or vice – versa at its own cost and gains or losses as a result of such swapping shall accrue to the utility / generating company. Provided that the beneficiaries shall be liable to pay interest for the loans initially contracted whether on floating or fixed rate of interest.

(2) Depreciation including Advance Against Depreciation

(a) Depreciation

For purpose of tariff, depreciation shall be computed in the following manner:

- (i) The value base for the purpose of depreciation shall be the historical cost of the asset.
- (ii) depreciation shall be calculated annually, based on the straight-line method over the useful life of the asset and at rates prescribed by the Central Electricity Regulatory Commission, from time to time as given in Annexure – 'A'. The residual value of the asset shall be considered as 10% and the depreciation shall be allowed upto a maximum of 90% of the historical capital cost of the asset. Land is not a depreciable asset and its cost shall be excluded from the capital cost while computing 90% of the historical cost of the asset. The historical capital cost of the asset shall include Additional Capitalisation on account of Foreign Exchange Rate Variation as allowed by the Central Government / Central Electricity Regulatory Commission
- (iii) on repayment of entire loan, the remaining depreciable value shall be spread over the balance useful life of the asset.
- (iv) Depreciation shall be chargeable from the first year of operation of the asset. For part of the year, depreciation shall be charged on pro rata basis.

(b) Advance Against Depreciation

- (i) In addition to permissible depreciation, the transmission licensee shall be eligible to Advance Against Depreciation computed in a manner as indicated below:
 $AAD = \text{Loan repayment amount as per Regulation 73(1) subject to a ceiling of } 1/10^{\text{th}} \text{ of the loan amount as per Regulation 71 minus depreciation as per schedule.}$
- (ii) The Advance Against Depreciation shall be allowed only if the cumulative repayment upto a particular year exceeds the cumulative depreciation upto that year.
- (iii) The Advance Against Depreciation in a year shall be restricted to the extent of the difference between cumulative payment and cumulative depreciation upto that year.
- (iv) All efforts shall be made for aligning the tenure of the long term debt with permissible rate of depreciation to reduce front loading of tariff through various mechanisms including resort to take out finance to elongate debt repayment period so that there will not be any need for advance against depreciation.

(a) Return on equity

- (i) Return on equity shall be computed on the equity base determined in accordance with Regulation 71 and shall be @ 14% per annum.
- (ii) Equity invested in foreign currency shall be allowed a return upto a prescribed limit in the same currency and the payment on this account shall be made in Indian Rupee based on the exchange rate prevailing on the due date of billing.

Explanation:

The premium raised by the transmission licensee while issuing share capital and investment of internal resources created out of free reserve of the existing transmission licensee, if any, for funding the project, shall also be reckoned as paid up capital for the purpose of computing return on equity provided such premium amount and internal resources are actually utilised for meeting the capital expenditure of the project and forms part of the approved financial package. The definition of equity thus would involve all net worth deployed in the capital of the unit. This shall not include any revaluation of reserves and subsidies.

(3) Operation and Maintenance Expenses

Norms for operation and maintenance expenses per ckt.km and per bay shall be as under:

- (a) The Commission shall, for the purpose of fixing normative rates for operation & maintenance expenses, study the O&M expenses incurred over the last 4 to 5 years and fix appropriate rates per CKt - km of transmission line and per bay. The norms so fixed for 2008-09 shall be escalated at 4% per annum.
- (b) The total allowable O&M expenses for a transmission licensee shall be calculated by multiplying the numbers of bays and CKt - km of line length with the applicable norms for O&M expenses per bay and per CKt-km respectively.

(4) Interest on working capital

- (i) Working capital shall cover the following:
 - (a) Operation and maintenance expenses for one month
 - (b) Maintenance spares @ 1% of the historical cost escalated at 6% per annum from the date of commercial operation and
 - (c) Receivables equivalent to two months of transmission charges calculated on target availability level.
- (ii) Rate of interest on working capital shall be on normative basis and shall be equal to the short term Prime Lending Rate of State Bank of India on 1st April of the year in which the project or part thereof (as the case may be) is declared under commercial operation. The interest on working capital shall be payable on normative basis notwithstanding that the transmission licensee may not have taken working capital loan from any outside agency or taken at different rates and amounts.

74. Payment of Transmission Charges

Full annual transmission charges shall be recoverable at the target availability stipulated in Regulation 68. Payment of transmission charges below the target availability level shall be on pro rata basis. The transmission charges shall be calculated on monthly basis.

75. **Sharing of charges for intra – state assets**

In case of more than one long-term transmission customer of the State Transmission System, the monthly transmission charges leviable on each long-term transmission customer shall be computed as per the following formula:

$$\left[\frac{\sum_{i=1}^n \left(\frac{TC_i}{12} \right) - TRSC}{SCL} \right] \times CL$$

where TC_i = Annual Transmission charges for the ith project in the State computed in accordance with Regulation 73.

n= Number of projects in the region

TRSC = Total recovery of transmission charges for the month from short – term transmission customers for the regional transmission system in accordance with the directions of the Central Electricity Regulatory Commission (Open Access inter-state Transmission Regulations, 2004).

CL = Allotted Transmission capacity to long-term transmission customer.

SCL= Sum of Allotted Transmission Capacities to all the long – term transmission customers of the State Transmission System.

76. **Incentive**

(1) The transmission licensee shall be entitled to incentive @ 1% of equity for each percentage point of increase in annual availability beyond the target availability prescribed under Regulation 68 in accordance with the following formula:

Incentive = Equity X (Annual availability achieved – target availability) ÷ 100

(2) Incentive shall be shared by the long-term customers in the ratio of their average allotted transmission capacity for the year.

77. **Rebate**

For payment of bills of transmission charges through letter of credit on presentation, a rebate of 2% shall be allowed. Where payments are made subsequently, through opening of letter of credit or otherwise, but within a period of one month of presentation of bills by the transmission licensee, a rebate of 1% shall be allowed.

78. **Late payment surcharge**

In case the payment of bills of capacity charges and energy charges by beneficiary (ies) is delayed beyond a period of one month from the date of billing, late payment surcharge at the rate of 1.25% per month shall be levied.

Chapter 5

Distribution

79. **Definitions**

- (i) **'Area of Supply'** means the area within which a distribution licensee is authorised, by virtue of his license, to supply electricity in that area;
- (ii) **'Consumer'** means any person who is supplied with electricity for his own use by a licensee or integrated utility or by any other person engaged in the business of supplying electricity to the public under the Act or any other law for the time being in force and includes any person whose premises is connected for the purpose of receiving electricity with the works of a licensee, integrated utility or such other person as the case may be;
- (iii) **'Distribution licensee'** means a licensee authorised by the Commission to operate and maintain a distribution system for supplying electricity to the consumers in his area of supply.
- (iv) **'Open access customer'** means a consumer permitted by the Commission to receive supply of electricity from a person other than a distribution licensee of his area of supply and the expression includes an integrated utility or a generating company or a licensee who has availed of or intends to avail supply of power through open access.