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**Subject**: Response to Draft Tariff Regulations & Consultation paper-Period 01.04.2019 to 31.03.2024.

Reference: No. L-1/236/2018/CERC Dated the 24th May 2018

Sir,

## 1. Refer Para 7.2.5:

The option for fixed charges and variable charges may be adopted. Fixed component to be linked to target availability to the extent of actual availability and fuel charges including taxes duties, transportation.

- a) Plant older than 25 years may be removed with supercritical units and life extended suitably but not conservatively. Cost benefit analysis must be made in all cases. Instead of setting up a new Thermal Power plants, the renovation of existing plants/units will be more economical with proper and efficient O&M practices not over expenditure for O&M.
- b) Renewable energy generation- Tariff for Renewable Energy shall not exceed the tariff bidding process of Tariff bidding Companies. The forbearance price of RE may be kept below Rs. 4.00/Kwh.

# c) Refer Para 7.6.4 (c)-

RE shall not be bundled with Thermal/ Hydel Energy and may be taken separately to avoid inefficiency and overpricing.

# 2. Refer Para 9.3-

Tariff may be determined for the entire capacity and restricted for recovery to the extent of PPA on provisional basis and the balance capacity may be merchant sale or tied up under section 63 of the EA 2003 as the case may be.

# 3. Refer Para 11-

Capital cost may be adopted on the input cost, IDC and foreign exchange variations, if any up to COD and cutoff date closing on 31th March of the following year or Six months period whichever is earlier. Interest expenses due to delay in construction and past cut- off date expenses subject to prudence regulatory check only. The Bench marking of capital expenses may not be done in hurry. Data may be collected from various agencies and generating companies both from private and public sector from state, central govt. and from companies abroad. Bench marking process may be put up in public domain. Public opinion, discussion and public hearing and final decision shall be arrived at. Bench marked capital cost must be most economically modern and highly efficient supercritical type. Till such time the credible benchmarking is finalized. The existing system of capital cost assessment may be continued but subjected to Regulatory Prudence check. In view of the prevailing conditions of poor demand, low interest rate regime, the RoE may be set at 10%. Notwithstanding power to every home policy adopted by the Indian Govt. the demand of

power may not improve significantly due to poor financial condition of economy and dip in Industrial production. Renovation of old thermal plant, installation of pollution control equipment on old plants may be examined in proper prospective and cost benefit analysis may be carried out. It will be unwise to renovate some equipment of very old plants or installation of pollution control equipment at high cost when the plant would be decommissioned in the near future, thus restricting wasting huge expenses for the PUC equipment on the contrary the plant can be shut down.

## 4. Refer Para 12- Renovation and Modernization:

Transmission lines have longer useful life than Transformer and substation equipment. Moreover most of the transmission system and Transformers are overdesigned and have higher capacity. Hence an increase in load does not necessarily increase in the R&M expenses. Further transmission lines have virtually no maintenance other than occasional physical visit by a line man to avoid any local interference on local hazard. The transformers are overdesigned to cater significant load growth and hence does not ever need other than cleaning dust, oil testing removal of grass in the switchyard (which may be out sourced), very little maintenance is required.

The Commission may allow renovation of only the particular equipment which needs replacement. The life of the equipment are more than 50% of the life assessed earlier. Hence equipment need not be replaced on completion of official life and the existing R&M expenses to be allowed. There is no such thing as increase expenses on completion of official life announced by the Hon'ble Commission. On completion if life the equipment may be visited to assess further useful life and necessary measures can be taken.

## 5. Refer Para No. 13: Financial Parameters:

The system as prevalent is based on normative RoE and others have good enough scope for operational efficiency by reducing the expenses on year to year basis capital and also annual increase in efficiency by atl east 2% . There is no need for any more incentive.

# 6. Depreciation: The Central Commission may adopt the following-

- a) Increase the useful life of well maintenance plants and determine the depreciation accordingly.
- b) Weighted average of useful life in case of combination, due to general commissioning of units.
- c) Limited items & equipment need modernization at the end of the extended life . This must be restricted to 10% of the total cost of the equipment.
- d) May extended useful life of Hydro & Thermal stations to 50 years and 35 years respectively.

# 7. Refer Para 15: GFA approach:

May be continued with the existing mechanism.

## 8. Refer Para 16:

Increasing debt-equity ratio to 20:80 will offer opportunity to more NPA observed so far (more NPA as has been observed shortly) as Banks (both Private and Public) starts coughing up all the NPA (some of which were hiding so far).

Those who wants to set up a Power plant or Transmission line must have adequate resources to do so and not play flamboyance on public money as debt. Hence the debt equity ratio needs to be raised to 50:50 where financial closure has not yet been done and also for future plants.

# 9. Return on Investment:

RoE model of approach may be maintained by the Hon'ble commission.

## 10. Return on Equity:

In view of the melt down of economy and falling interest rates the RoE at 15.5% is exorbitant. The companies are assured it return taxes, interest on debt, generous depreciation, O&M charges and adequate expenses for generation and procurement fuel etc. the risk capital is really very low. RoE may please be re-fixed at 10% post tax subject to actual payment of tax on the return. In other words less income tax paid for any benefit by the govt. or by any scheme , the actual IT paid as per audited statement shall be allowed over RoE @10%.

No negative impact on existing projects or under construction project is envisaged RoE of 10% is substantially high when it is compared either Industries both in private sectors and public sectors.

Hydro projects are being executed casually and in wrong manner. There is no reason for geological surprises if the geo exploration/investigation had been taken care of adequately. However the Hydrogeneration has long gestation period and hence may be allowed 1% extra RoE.. There shall not be no extra RoE or there shall not be no difference in RoE on the size of generating station or line length of transmission system.

RoE shall be allowed from the date of Commissioning of the project. For delayed project a penalty should be levied @ 2% for the delayed period i.e. if the project is delayed by two years, the RoE for initial two years shall be @8% (@10%-@2%).

#### 11. Refer Para 19: Cost of Debt:

Cost of debt may be at least and upfront payment (limited to maximum Rs.10,000/-). The debt be suitably link to RBI policy repo rate plus 200 basic point or 10 year bond @2% of the first rear and to be reviewed every two years. If effort made by the utility to reduce the interest rate with reference to the effective reduction may be allowed as incentive to the utility.

- a) Hence the cost of debt be restricted to actual weighted average rate interest on debt and normative debt.
- b) For new transmission line, it should be taken separately with actual cost of debt and apportioned to the beneficiaries debt and apportioned to the beneficiaries in the ratio it is the main transmission line and the new transmission line.

# 12. Refer Para 20. Interest on working Capital:

The following suggestion is offered-

- a) Existing cash credit system with SBI PLR plus 200 basic point as interest may be adopted.
- b) Actual stock if fuel maintained may be considered.
- c) 155 if maintenance spares be delinked from ICW.

d) Working Capital be linked to target availability.

# 13. Reference Para 21- Operation and maintenance expenses-

- i) Escalation of O&M with refer 21.7 (a)-
- a) CPI and WPI indices may be continued. Pay hike need to be taken in separately as surcharge till next tariff order. Pay hike is also connected with CPI and WPI and not just matter of demand and supply.
  - ii) Efficiency hike of 2% year to year basis be improved in every tariff period.

# b) Refer 21.7(b):

Pollution Control Equipment, as and when installed have to be maintained and actual actual expenditure recorded. Additional man power & expenses need to be catered through suitable addition in O&M. Without any data neither the consumer nor the Hon'ble Commission nor the generating Company is aware of the matter. Hence actual deployment needs to be analyzed and catered for. No comment/suggestion can be offered now.

## c) Refer 21.7 (c):

O&M cost should be on actual expenses and can not be connected with the capital cost.. No such effort may be made by the Commission.

## d) Refer 21.7(d):

O&M expenses shall reduce substantially for the gas based plants working at low level. However actual expenses to be included in the Tariff with low level of generation. In case of higher generation the plant shall offer discount in the billing.

## e) Ref. 21.7 (f);

The existing norms may continue. This is not a new phenomenon. New transformer had been had been inducted and new bays are operated. In view of the stack demand nothing extra is anticipated. In fact with new transformer need no maintenance for the next 3 to 4 years. First year is already under manufacturer's warranty period.

## f) Refer 21.7(f):

Separate norms of O&M expenses levied on block of 5 years may be fixed.

# g) Refer 21.7(g):

Income from other business shall be taken while fixing the tariff and trued up subsequently. In all cases of expenses this shall be subject to prudence check by Regulators.

# 14. Refer Para 22.8 (a) and (b):

a) The real problem lies in the coal mine. The mines pass on their over burden / bad quality coal to the generating companies . Hence the GCV " as received" at the generating station shall be as per express laboratory report and coal bill shall be suitably adjusted. There can not be major difference in GCV "as billed" and "as received. Unless manipulated at some end. The Hon'ble Commission shall look into this anomaly.

As regard quantity lost during transportation may be fixed on normative basis uniformity after due observation with various generating stations.

The gap of GCV from as received and "as fired" is not acceptable may be negligible in the region GCV 10/20. Anything in excess shall be to the Generator's account and losses can not be passed on to the beneficiaries.

## b) Refer Para 22.8 (c):

There cannot be a standardization of GCV "as received" and "air dryed". The Express laboratory of every generating station can decide the lot every time a consignment is received. Same standard may be used with imported coal. There may be minor change in GCV of FOB and "as received". In case of major difference it can be taken up with the Coal supplier and reason detected to apportion cost. The generator may take up the same with supplier.. The matter can be mutually decided by coal mine and generating company and coal supplier.

## 15. Refer Para 23:

Fuel blending of Imported Coal:

There is a whole lot of operational problems due to various constraints . The suppliers the generating station shall decide the GCV "as received" based on transparent laboratory report.

The Hon'ble commission may decide on the best ratio on data received from various agencies and the fixed tariff and minimum variations may be adjusted in the annual true up.

## 16. Refer Para 26: Operation norms:

Normative operational norms must be realistic and can not be generous with low efficiency. Efficiency must increase by at least 0.2% YOY basis and the incentive can be offered.

#### 17. Refer Para 26- Station Heat Rate-

The Station heat rate at 2400 Kcal/Kwh fixed by the Hon'ble Commission is very low and needs revision upwards to 3000 Kcal/Kwh. This is generating inefficiency and opportunity to generating station/ Company to make unreasonable profit.

As regard low demand the situation is only temporary because the Govt. of India is providing light to every house hold. The distribution utility shall arrange smart meter and restrict AT & C loss below 15%. The position stated by the Hon'ble Commission above national average of 23% AT &C loss is not acceptable after two decade of electricity reform.

The other problem of reducing station heat rate, the loss of efficiency by minor amount is prevailing in every Industry. This can be improved by better O&M practices.

The design SHR with 45% margin as recommended by CEA is very high and not related to actual situation in plant and hence unviable.

18. (a) As regard the lower PLF due to renewable Energy (RE), this is a common phenomenon all over the world and not specific to India. The matter is to be tackled with suitable remedial measures.

The auxiliary consumptions of 8.5% for 200 MW and 5.25% of 500 MW station is extremely high and may be brought down 55 and 45 respectively. There may a marginal difference in auxiliary consumption of power for 800 MW station by about 0.5%. The Hon'ble commission may compare such consumption with other efficient power stations of India and abroad. No separate study seems to have been conducted on the matter.

The Colony consumption shall be excluded from the auxiliary consumption and shall be borne by the company from their profit and can not be passed through to tariff. There can not be Presidential House in all power station colonies. The power sector employees are very highly paid and the Hon'ble Commission may bot create oasis affluence surrounded by poor helpless consumers.

## b)Normative Annual plant availability:

The Hon'ble Commission is justifying the inefficiency of the Govt. Power plants compared to private power plants. This matter may be taken up at by the Power Ministry with Rail Ministry and finance ministry. Govt. If the day is encouraging Competition between private and public sector. It is an admitted fact that public sector plants are more efficient than the private sector plants with certain exceptions.

It is felt those problems are influencing the Industry in all sphere and not specifically to power Industry. Hence the matter be left to the generating company to take it up with the govt. and not pass through the ailment to the consumers through tariff. As stated in the draft paper the Govt. of the day collect huge revenue from power Industry and also coal Industry and transport industry. The Regulators cannot solve this problem but may refrain from burdening the consumers the cost of all problems.

- c) Transport and handling loss: The existing norms are hugely generous and may be reduced to 0.1% & 0.5% respectively for pit head and no- pit head stations. The generating company shall only pay the coal "as received" at the plant.
- d) Thermal Generation (Coal washery rejects based):
  The Hon'ble Commission is not clear as to what suggestion the consumers may offer.
- e) Transmission System: Refer para 26.5 Not much data is made available for the stakeholder to offer any suggestion. However it is submitted that all regions to be integrated with uniform availability factor and penalty for less availability.
- f) Transmission loss 4.5% for Inter-state and 4.5% for Intra-state transmission loss is very high and must be brought down. Delhi had been witnessing Inter-transmission losses of 1.65% and Intra-state transmission losses 0.98%. The Hon'ble Commission may fix Interstate state Transmission as 1.5% and Intra state losses as 0.8%. Delhi Intta-state transmission system is very congested and smaller line length with to many sub-stations. Such condition does not hold for other states. Further Intra-state losses are manned by local distributors and Hon'ble commission cannot have much control on such utility.

# g) Refer Para 26.6: Hydro Generation:

Hon'ble Commission may compare Auxiliary Power Consumption with the best in the Industry in India and abroad so as to fix the norms realistically. Without any data mere suggestion of Power consumption 0.7% to 1.2% is suspect of Regulatory generosity to the Hydro station and with impact the efficiency and viability of the Hydropower Company.

# 19. Refer Para 27: Incentive:

a) Refer Para 27.5(a):

The hon'ble commission has not offered any data about the performance of the station who got incentives and how much incentive against their installed capacity. The present incentive is very high and must be brought down to 10 paise/kwh for generation above normative PLF or design energy as the case may be and availability similarly for the Hydro Generating station those which are more than 20 years old may be allowed 50% of the fixed charges as incentive and 255 of the fixed charges as incentive which are less than 20 years old subject to 50% enhance generation

Incentive can not be largesse but reward for the good work culture of the organization.

## b) 27.5 (a)

Incentive at 80 paise /Kwh is a ransom and may be brought down to 20 paise/Kwh. For peak period additional incentive of 05 paise/Kwh may be allowed.

## c) 27.5 (c):

It is submitted that there cannot be any incentive in transmission system and the system shall be available for all period.

## d) 27.5(d):

Disincentive for generation below PLF & availability shall be 50 Paise/Kwh.

#### 20. Refer Para 28:

The Hon'ble Commission may finalize the Regulations in time to avoid the delay in Regulation Period.

#### 21. Refer Para 29:

It may be stated that the gain may be shared 50:50. However for refinancing of loans incentive of 0.2% of gain be allowed to the utility.

## 22. Non-Tariff income:

Non-tariff income as stated by the Hon'ble commission like sale of fly ash, disposal of old plants and machineries, interest on advance, revenue from telecom business, consultancy works etc. which are other business to their core business shall be treated as such to reduce the tariff. No adjustment in O&M cost be made so as to have a transparent O&M expenses. This holds good for the transmission business as well and revenue from telecom business shall be 50% percentage of the communication business subject to a minimum of Rs.20,000.00/KW.

# 23. Tariff mechanism for pollution control system:

## Refer Para 33.4:

The position stated in the Para is not clear. Fund has to be arranged for installation of pollution control instruments for totally safe level of prescribed level of emission standard. As stated earlier if the plant is very old with outdated technology and cost benefit analysis does suggest for replacement incurring extra expenditure, the plant may be decommissioned. If the plant has adequate extended life over 20 years PUC equipments may be installed with fund from increased debt:euity as 50%:50%. On installation of the PUC equipment that has to be included in RoE, depreciations as per standard Accounting practice. In all cases debt:equity ratio should be charged as 50:50.

## 24. Refer to Para 34.4:

If a Thermal Generating company wants to set up Renewable Energy plants, they may do soby a separate company as subsidiary. In no case the Renewable Energy shall be bundled with thermal energy to avoid swapping of costly power with cheap power.

#### 25. Refer to Para No. 35.5:

26. The Hon'ble Commission has asked for suggestion to avoid the dispute between Generating Company and Transmission licensee. Disputes are normal feature when multiple agencies are involved combing operation into one most important task of Generation, transmission, distribution and Trading of power in a economical manner.. It is submitted the Hon'ble Commission shall Regulate equitally as per Section 61 of the EA 2003 so that consumers' interest is protected.

# 27. Refer Para 36: Energy storage System:

The stored energy can have tariff like the power generation/distribution system as stated in 36.6 provided the distribution utility one allowed to drawl of power as required during peak/off peak load from the system . In that case the surplus power which is distributed off at rock bottom rate by the distribution utility can bee fully avoided. Hon'ble Commission may please ensure balancing of such new idea with huge investment so to have a cost benefit analysis and the financial benefit around to the stake holders. Initially pilot project may be started for assessment.

# 28. Refer Para 37Alternate approach to tariff design:

#### a) Refer Para 37.6:

Normative Capital expenditure can not be adopted because of variables equipments, land, construction and hence existing system may continue.

#### b) Refer Para.37.9:

Normative Tariff for fixed AFC as percentage of capital cost.

The stake holders shall suggest more study to establish relation year wise and also the reason for wide variation if any to avoid of a uniform /representative norm.

# 29. Normative tariff by fixing each component of AFC as percentage of total AFC: Refer para 37.14:

The stake holder is concerned with provision of long period of almost 3 years between COD and cut-off date. It clearly indicate manipulated announcement of COD in a hurry when the project is not complete. Hon'ble Commission is doing disservice allowing so much indulgence of cut off period of 3 years and all non essential works are capitalized increasing the over all cost of the project. Cut off period 3 years is a laughable as the total completion of the projects are varied between 28 m0nths to 3 years. It is suggested that shall be 31 st march fo the next 31<sup>st</sup> March of the year with a ceiling period of maximum 6 month.

# 30. Refer para 37.15:

Different norms of tariff principles on different plants , old & new may create more confusion . There is no loss to any utility if the new Tariff principles are adopted. In the alternative the Hon'ble commission may continue within the existing practice and no change is warranted.

# 31. Refer para 31.17 (a),(b) and (c).

The ideal of normative AFC should not be adopted asw the Hon'ble commission needs more data and study. The proposal may be shelved till further study is made. The existing system of tariff determination is adequate and may be continued.

## a) Refer Para 37.17 (d):

Additional capitalization for PUC is an inevitable outcome and pollution surcharge can be made to the Tariff. As regards capitalization as the cut off date is reduced, the utilities shall adjust with the time frame. Only in cases of unexpected capital expenses beyond the control of the utility the Hon'ble Commission may examine the same separately and surcharge tariff may be allowed for such work only as an exception.

## Para 37.17 (d):

There is no scope of change in tariff principles in every control period and such proposal may be discontinued.

## 32. Refer Para 37.21:

- (a) It is submitted that till exhaustive studies have been made & normative Capital cost may not be finalized. The Honble Commission may not please be in hurry to do so. This may be preceded by correction of Debt: Equity ratio may be fixed at 50%:50%.
- (b) For transmission system, the existing system be continued for tariff fixing basedon capital expenses after the prudence check by Hon'ble Commission. The O&M charges for transmission system may be reduced because Transmission system needs very little maintenance and operational expense.
- (c) The cut-off date shall be 31<sup>st</sup> March of the following year or 6(Six) months after COD whichever is earlier.
- (d) Peak and off-peak system can be adopted for AFC without major deviation in Tariff.
- (e) Actual expenditure in cases need Regulatory prudence check but Capital, O&M and other expenses can not be left to the Audited balance sheet alone.
- (f) True up of capital expenditure need to be based on physical verification of asset and GIS compliance. Wasteful expenses need to be excluded. CSR expenses shall be from the net profit of the company and in no way cannot be thrust upon the consumers. CSR activities must be activities no way directly or indirectly related and beneficial to the company or its subsidiary companies.

I shall be available during public hearing and requested the Hon'ble commission to intimate the undersigned well in advance. I am not net savvy and message through internet will not disseminate to me.

Thanking You
Yours faithfully

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