160 E

(34)

नॉर्थ ईस्टर्न इलेक्ट्रिक पावर कॉर्पोरेशन लि.
(भारत सरकार का उदयम)

NORTH EASTERN ELECTRIC POWER CORPORATION LTD.

(A GOVT. OF INDIA ENTERPRISE)

समन्वयन कार्यालय/Coordination Office
15 एनबीसीसी टावर, यूजी फ्लोर/15 NBCC Tower, UG Floor,
भीकाजी कामा प्लेस, नई दिल्ली-66/Bhikaji Cama Place, New Delhi-66
फोन /Phone: +91-11- 26170134 (ईपीबीएएक्स /EPBAX), 26164329
फैक्स /Fax: +91-11-26107555, 26191060
ई-मेल/Email: neepconewdelhi@gmail.com

दिनांक/Dated: 30.07.2018

सं. नीपको/एन.डी./एफ-84/NEEPCO/ND/F-84/2018-19/

सेवा में/To,
सचिव/The Secretary
केंद्रीय विद्युत नियामक आयोग/Central Electricity Regulatory Commission
तीसरी एवं चौथी मंजिल/3rd & 4th Floor,
चंद्रलोक भवन/Chanderlok Building,
36, जनपथ, नई दिल्ली-01/36, Janpath, New Delhi-01.

विषयः 1 अप्रैल 2019 से शुरू होने वाली टैरिफ अवधि के लिए टैरिफ के नियम और शर्तों पर परामर्श पत्र - नीपको की टिप्पणियां।

Sub: Consultation paper on Terms and Conditions of tariff for the tariff period commencing from 1st April 2019- NEEPCO's Comments thereof

संदर्भः सीईआरसी की दिनां 24.05.2018 की पत्र स. एल-1/236/2018/सीईआरसी

Ref: CERC 's letter No. L-1/236/2018/ CERC dated 24.05.2018

महोदय/Sir,

उपर्युक्त के संदर्भ में । अनुलग्नक - क में परामर्श पत्र पर नीपको की टिप्पणियों की 3 हार्ड कापी और सॉफ्ट कापी माननीय आयोग के विचारार्थ संलग्न है।

This has reference to the above. Please find enclosed (3 hard copies + soft copy) at Annexure-A, NEEPCO's comments on the Consultation Paper, for kind consideration of the Hon'ble Commission.

धन्यवाद/Thanking you,

के. वि. वि. आयोग
2195
31 JUL 2018
CERC
प्राप्त हुआ

भवदीया/Yours faithfully,

संलग्नकः यथोक्त/Enclo:As above

(ई. पिरबट)
वरि.प्रबंधक (ई)
नीपको लिमिटेड, नई दिल्ली-66

सतीश
31/8
उपयुक्त (वि-1)
R. Gaurav | Gangakar
618

NEEPCO comments on consultation paper on terms and condition of tariff regulation for tariff period 01/04/2019 to 31/03/2024.

Ref: - CERC letter No. CERC/L-1/236/2018/ Dated 24th May, 2018.

Sl. No.	Para No.	Views as per CERCs comments	NEEPCOs comments
1	5.2.6	As per estimates of Central Electricity Authority, thermal plants are likely to run at low plant load factor (capacity utilisation) and many plants may get partial or no schedule of generation. As per the present regulatory framework, the distribution companies will continue to pay the fixed cost. Therefore, optimization of the power generation and rationalization of tariff structure are required.	The very reason for low LPF is because of DISCOM constraints and this aspect should be dovetailed with DISCOM reforms. The Hon'ble CERC may look at the distribution network and take a holistic approach.
2	5.2.7	There are concerns of the generating companies in respect of ensuring performance of the power purchase agreement. Some of the State utilities have initiated actions for cancellation of concluded Power Purchase Agreements with power producers, including surrender of power from centrally owned generating stations on the ground of changes in market conditions.	Power allocations of the Govt. of India are not followed by the beneficiaries in view of reduction in gap of demand vs supply. Accordingly, many beneficiaries surrendered their allocations and have refused to sign PPAs, leading to huge quantum of stranded power with the generators. Therefore, the present regulations should include stringent provisions to discourage the same, thus eliminating risk to the developer.
3	5.3.1	The gas based thermal generating stations offer greater capability of ramping up and ramping down. Thus, gas based generating station can provide alternative source for balancing power to address the intermittency of renewable generation. However, the gas based generating stations having concluded PPA are facing problem due to shortage of supply of gas from domestic source. The alternative may be to source costlier gas either from spot market or R-LNG.	Gas thermal stations are set up after signing of long term Gas supply agreements and power evacuation system. In the North East Region there is no gas grid and the option of arranging spot gas from the market or R-LNG is not possible.
4	5.5.3	The hydro generation offers greater advantages with its economical and environmental friendly power resource in the long run. However, the cost of electricity of hydro power is comparatively expensive vis a vis	More details are required to comment on the same. The operational limitations /health of Hydro Machines have to be factored in to frame this regulation The current factors which are responsible for high hydro power tariff in the initial

		coal based power plants in the short-run. In view of this, the hydro projects find it difficult to attract investment and many times, do not find buyers. Since the tariff of hydro power is low in the longer run and that it has inherent flexibility, the hydro power generation will have a significant role in future especially in view of large scale additions of renewable energy sources in the grid that has inherent intermittency. Therefore, there is a need to address factors that currently drive hydropower costs up.	period of operation are basically interest on loan & depreciation. Accordingly, it is proposed to extend repayment of loan upto 20 years. In addition, it is suggested that higher rate of depreciation be deployed, say @ 3 % for the first 20 years and the balance may be depreciated over the remaining life of the plant. In addition, extension of useful life for hydro stations upto 50 years, with provision for **periodical** Renovation & Modernisation for the **Electro-Mechanical** and hydro mechanical equipment/ **system and water conductor system,** as required, to maintain desired plant efficiency may be looked into.
5	**5.9(c)**	Clause 5.5 provides that the Appropriate Commission shall fix time period for commissioning of Hydro Electric Project. The Commission will be required to consider this while determination of commercial operation date of HEPs for tariff purpose.	While it is agreed the Appropriate Commissions shall fix time period for commissioning of Hydro Electric Projects, there can be no benchmarking, **as hydro projects are dependent on geological spread, layout and complexity of structures, remoteness, surface communication, accessibility to the site, components & site specific features of plant** viz , dam toe or long tunnel etc. Accordingly, benchmarking cannot be done based on installed capacity of hydro projects.
6	**5.9(d)**	2nd Proviso to the Clause (C) of clause 5.11 has mandated to specify upper ceiling of the rate of depreciation and an option to the developer to seek lower rate of depreciation. The implementation of the above provision would require modification in regulations in terms of treatment of depreciation.	Agreed, but subject to fixation of a floor rate for fixation of depreciation. It is also necessary to take into account the depreciation rates considered during investment clearance of the projects which ensured technical feasibility and ensured guaranteed returns. **The same depreciation rate should be taken for accounting purpose in the books of the Company.**
7	**7.2.2**	In view of decreasing PLF of thermal generating stations, a need has been felt to look into two-part tariff structure being followed now. As discussed in following paragraphs, inter alia, one option may be to introduce three-part tariff structure. The two-part tariff structure for generating station provides the right to use the infrastructure on payment of fixed component irrespective of quantum of electricity generated and the payment of energy cost for procuring each unit of electricity. However, with this tariff structure, following issues emerge. The two-part tariff system structure is suitable when the demand for power ensures	***If three***-part tariff is adopted, the investors returns are liable to change and the proposal will require further details for study and deliberations, to comment on the same. The gas stations are already incurring huge losses due to inadequate fuel (gas) availability ***resulting in low PAF and consequently reduction*** in recovery of the AFC.

		utilization of capacity up to or around the target availability. It allows the procurer to get electricity at reasonable per unit cost through optimu8m utilization of asset. Two-part tariff operates well in power deficit scenario. Due to low demand, coal based power plants are running at a PLF of around 60%. Consequently, States have not been coming forward for long term power purchase to avoid fixed cost liability and rather they have been resorting to short term power purchase to meet their demand.	
8	**7.2.3**	As stated above, the two-part tariff structure works well when the gap between available capacity and dispatch is low. It is because all the procurers are placed in a similar position and it can be said that there is a homogeneous demand. When procurers have homogeneous demand, there is no difference in pricing mechanism whether one procurer purchases electricity from one generating company or many. This situation has undergone change. As the gap between plant availability factor and plant load factor has widened due to low PLF, the procurers are no longer placed in similar position. AFC per unit would be on higher side for the procurers having low demand. When two procurers are not placed on similar positions, the present two-part tariff structure does not provide for charging differential fixed charges from different procurer. Though the tariff determined by the Commission acts as ceiling, there is no mechanism specified to charge the tariff lower than ceiling.	For the long term PPAs, the tariff is fixed as per the CERC regulations and in such case the tariff cannot be lower than the approved rate. However, in case of untied power, the tariff may be decided mutually between the seller and the buyer or market driven, as the case may be.
9	**7.2.5**	The tariff for supply of electricity from a thermal generating station could comprise of three parts, namely, fixed charge (for recovery of fixed cost consisting of the components of debt service obligations allowing depreciation for payment, interest on loan and guaranteed return to the extent of rise free return and part of operation and maintenance expenses), variable charge (incremental return above	Further regarding risk free return and incremental return, **more clarity** is required on the matter to furnish our comments. Calculations in illustrative examples with different scenarios may be furnished.

		guaranteed return and balance operation and maintenance expenses) and energy charges (fuel cost, transportation cost and taxes, duties of fuel).	
10	**7.3.4**	A clear policy/ regulatory decision is required in view of a number of thermal stations crossing the age of 25 years. Possible options could be (i) replacement of inefficient sub critical units by super critical units, (ii) phasing out of the old plants, (iii) renovation of old plants or (iv) extension of useful life etc. it is worth to note that performance of a unit does not necessarily deteriorate much with age, if proper O&M practices are followed.	Keeping in view the possibility of technology obsolescence as well as for maintenance of plant efficiency, the generator should be allowed for up gradation / renovation of plants after completion of 15 years of its operation even if the life of the station is extended beyond 25 years.
11	**7.4.2**	The fixed component may include debt service obligations, interest on loan and risk free return while the variable component may include incremental return above guaranteed return, operation and maintenance expenses and interest on working capital. The annual fixed cost can consist of the components of return on equity, interest on loan capital, depreciation, interest on working capital, and operation and maintenance expenses.	The existing system of two-part tariff structure for hydro station with computation of AFC comprising of depreciation, interest on loan, interest on working capital, O&M and RoE will require more details with clarity. **Considering huge capital investment in hydro power projects accompanied by very long commissioning period, geological uncertainly, risks associated etc, the developers should be adequately protected/compensated by way of recovery of costs incurred along-with adequate return on investment. Accordingly, the present system of determining annual fixed costs covering all costs & admissible returns under two part tariff should continue.**
12	**9.3**	The question is whether the annual fixed charges and energy charges are to be determined to extent of the capacity tied up under Section 62 of the Act or for the entire capacity. One approach could be to determine the tariff of the generating station for entire capacity and restrict the tariff for recovery to the extent of power purchase agreement on pro-rata basis and balance capacity will be merchant capacity or tied up under Section 63, as the case may be.	The approach of determining tariff of the generating station for the entire capacity as is already in practice should be continued.
13	**10.5 (a)**	Extend the useful life the project up to 50 years from existing 35 years and the loan repayment period up to 18-20 years from existing 10-12 years for moderating upfront loading of the tariff.	The extension of useful life up to 50 years with provision for renovations and modernization for electro-mechanical and **hydro-mechanical** equipment after 35 years of operation of the plant seems to be justified. Further extension of loan repayment up to 18-20 years will result in reduction of tariff in hydro stations. These can be segregated in to

			Electro/Mechanical system as follows: 1. Hydraulics 2. Electronics 3. Mechanical Rotary parts 4. Water conductor system up to 35 years 5. Hydro Mechanical system up to 35 years.
14	**10.7**	Scheduling and dispatch of gas based generating station may be shifted to regional level with the primary objective of balancing. After meeting the requirement of designated beneficiaries, the regional level system operator can use it for balancing power at the rate specified by the generating companies. **Alternatively**, all the gas based generating station capacities may be pooled at regional level. After meeting the requirement of designated beneficiaries, the balance generation may be offered for balancing purpose as and when required.	As a generator NEEPCO agrees in principle, with the second option subject to more furnishing of more details on the matter for clarity. Operational limitations should be embedded in the scheme.
15	**11.8**	One of the options is to move away from investment approval as reference cost and shift to benchmark/ reference cost for prudence check of capital cost. However, the challenge is absence of credible benchmarking of technology and capital cost.	Considering the uniqueness of each hydro project based on its geology, hydrology, design features etc., it is not feasible to adopt benchmark capital cost for such projects. Benchmarking will throw up skewed results which will be ineffective in promotion of hydro projects.
16	**11.9**	Higher capital cost allows the developer return on higher base of equity deployed. In the cost plus pricing regime, the developer envisages return on equity as per the original project cost estimation. The regulations allow compensation towards increase in cost due to uncontrollable factor so as to place the developer to the same economic position had this uncontrollable even not occurred. Therefore, in new projects, the fixed rate of return may be restricted to the base corresponding to the normative equity as envisaged in the investment approval or on benchmark cost. The return on additional equity may be restricted to the extent of weighted average of interest rate of loan portfolio or rate of risk free return. Further, incentive for early completion and disincentive for slippage from scheduled commissioning can also be introduced.	NEEPCO is of the view that Equity accrued out of capital investment for project construction (up to investment approval and beyond that) should be treated at par and normative rate on return on equity (RoE) should be applicable on the total equity amount. It is proposed that RoE be allowed to the project developer during construction period also. While agreeing to the concept of early completion of projects, this incentive for slippage from scheduled commissioning should be discouraged for hydro projects, since delay is mostly due to reasons beyond the control of the implementing agency. Challenges are increasing day by day because land acquisition, local resistance, increase in nature of clearances in environment, etc are major factors for hydro projects running into Time and Cost overrun.

17	**12.2**	At times the generating companies file their petitions for renovation and modernisation without giving estimated life extension period, which makes it difficult to carry out cost benefit analysis. In old plants, **R&M** nature of works are sometimes claimed without specific life extension. Servicing of such R&M expenditure at the end of useful life of the station without extension of useful life may be difficult to justify.	In case of generating stations, any expenditure which has become necessary due to obsolescence of technology or non-availability of spares for efficient operation of the stations with/ without assessment of life extension of entire Stations shall be allowed.
18	**13.2**	Comments and suggestions are invited from the stakeholders for continuation of normative approach for specifying financial parameters and alternatives, if any.	The present system of normative approach for specifying financial parameters should continue.
19	**14.3 (iii)**	The useful life of Hydro Stations, as specified in Tariff Regulation,2009, is 35 years. However, the actual life of these Hydro Stations may be much more than 35 years. For hydro stations allowing higher depreciation rates during first 12 years results in front loaded tariff. To keep the tariff on lower side, the depreciation rate for hydro stations could be spread over the entire useful life i.e. 35 years. Similarly for the thermal stations, the life may be more than 25 years and the International experience in this regard needs to be looked into to bring further improvements.	Instead of present policy of 12 years it is proposed that higher depreciation rate may be spread over 20 years beginning from its COD and the remaining depreciation to be spread over the balance useful life. Rate of interest and repayment period will have an impact on the tariff. **Since repayment of loan has impact on tariff of a power station, the same should be spreaded over a longer period accordingly.**
20	**14.6 (a)**	Increase the useful life of well-maintained plants for the purpose of determination of depreciation for tariff.	Normative useful life for project can be increased with provision for allowing periodical renovation and modernization/ up gradation of electro mechanical /hydro mechanical equipment and some of the Civil structures.
21	**14.6 (c)**	Consider additional expenditure during the end of life with or without re-assessment of useful life. Admissibility of additional expenditure after renovation and modernization (or special allowance) to be restricted to limited items/ equipment.	Additional capital expenditure required to be incurred at the end of useful life for maintaining day to day operating efficiency of the project should be considered without re assessment of useful life. However, additional expenditure R&M may be considered with re assessment of extended useful life.
22	**14.6 (d)**	Reassess life at the start of every tariff period or every additional capital expenditure through a provision in the same way as is prescribed in Ind AS and corresponding treatment of depreciation thereof.	It is not feasible to re assess life of the plant at the start of every tariff period or every additional capital expenditure. Accordingly, NEEPCO is not in agreement with the proposed option of re assessment of the life. Developer encounters unprecedented extraordinary situations detrimental to

			the power plant and therefore plant specific enhanced depreciation is to be allowed for reassessment of plant life without linkage to other plants of the developer. For instance, Kopili Hydro Electric Plant has issues of high reservoir acidity which has affected its performance and calls for special R & M measures.
23	**14.6 (g)**	Continue with the existing policy of charging depreciation. However, the Tariff Policy allows developer to opt for lower depreciation rate subject to ceiling limit as set by notified Regulation which causes difficulty in setting floor rate, including zero rate as depreciation in some of the year(s)	The existing policy of charging depreciation should continue. However, charging of depreciation at higher rate may be extended to 18-20 years in place of the present policy of 12 years. Regarding opting lower depreciation rate by the developer, the same should be subjected to fixation of a floor rate for depreciation.
24	**15.2**	An option should be to base the returns on the modified gross fixed assets arrived at by reducing the balance depreciation after repayment of loan in respect of original project cost.	The Gross Fixed Asset (GFA) approach as per the existing policy without reduction of depreciation should continue so that return to the investor based on initial investments assured. The proposed option of return on the modified gross fixed asset approach is likely to discourage investors, particularly for hydro projects.
25	**16.4**	For future investments, modify the normative debt-equity ratio of 80:20 in respect of new plants, where financial closure is yet to be achieved.	The present Debt – Equity ratio of 70:30 should continue. Reduction in equity component may be against the interest of the investors.
26	**17.4**	Comment and suggestions are invited from the stakeholders on the continuation of fixed rate of return approach or alternatives, if any.	The present procedure of fixed rate of return approach should continue so that investors are assured of the return when investing for power projects.
27	**18.7 (a)**	Review the rate of return on equity considering the present market expectations and risk perception of power sector for new projects.	Rate of return for new projects may be reviewed time to time based on related parameters.
28	**18.7 (b)**	Have different rates of return for generation and transmission sector and within the generation and transmission segment, have different rates of return for existing and new projects.	Considering the capital investment as well as the construction period for a generating station, rate of return for generation sector should be increased. For the existing projects including projects under construction, the rate of return should continue with the existing norms. However, for new projects the same may be reviewed periodically.
29	**18.7 (c)**	Have different rates of return for thermal and hydro projects with additional incentives to storage based hydro generating projects.	The existing policy on additional incentive (1% above normative RoE) for storage based and ROR with pondage hydro generating station as per Cl 24(2) should continue.
30	**18.7 (d)**	In respect of Hydro sector, as it experiences geological surprises leading to delays, the rate of return	NEEPCO is not in agreement with the approach of bifurcation of RoE based on project commissioning time. Since for

		can be bifurcated into two parts. The first component can be assured whereas the second component is lined to timely completion of the project.	hydro stations delay in commissioning is mostly due to reasons beyond control of the developer. Reduction in RoE for delay in commissioning will be a deterrent in development of the power sector.
31	**18.7 (e)**	Continue with pre-tax return on equity or switch to post tax return on equity.	The present approach of pre-tax return on equity should continue.
32	**18.7 (f)**	Have differential additional return on equity for different unit size for generating station. Different line length in case of the transmission system and different size of substation.	Return on equity should be same irrespective of size of the generating stations.
33	**18.7 (g)**	Reduction of return on equity in case of delay of the project.	Delay in commissioning of projects are for reasons which are generally beyond control of the developer and accordingly no reduction or RoE for delay should be considered.
34	**19.5 (a)**	Continue with existing approach of allowing cost of debt based on actual weighted average rate of interest and normative load, or to switch to nor5mative cost of debt and differential cost of debt for the new transmission and generation projects.	The existing approach of allowing cost of debt based on actual weighted average rate of interest and normative loan should continue so as to ensure recovery of cost of debt through tariff.
35	**19.5 (b)**	Review of the existing incentives for restructuring or refinancing of debt.	NEEPCO is in agreement to review the proposal.
36	**19.5 (c)**	Link reasonableness of cost of debt with reference to certain benchmark viz. RBI policy repo rate or 10 year Government Bond yield and have frequency of resetting normative cost of debt.	Cost of debt allowable through tariff should be based on actual weighted average rate of interest, so that the generators are protected for recovery of actual cost of debt through tariff.
37	**20.3 (a)**	Assuming that internal resources will not be available for meeting working capital requirement and short-term funding has to be obtained from banking institutions for working capital, whose interest liability has to be borne by the regulated entity, IWC based on the cash credit was followed during previous tariff period. Same approach can be followed or change can be made.	Interest on working capital should be continued as per the existing regulation, i.e., SBI based rate as on 1st April of each financial year.
38	**20.3 (c)**	While working out requirement of working capital, maintenance spares are also accounted for. Since O&M expenses also cover a part of maintenance spares expenditure, a view may be taken as regards some percentage, say, 15% maintenance spares being made part of working capital or O&M expenses.	Maintenance spare as a percentage of O&M expense for computation of working capital should continue as per the existing regulations i.e. 15% for hydro and 30% for gas based power station. The thermal power station requires more maintenance spares and accordingly should have higher percentage in comparison to hydro stations for calculation of working capital.
39	**20.3 (d)**	Maintenance spares in IWC which is	Since cost of maintenance spare is a

		also a part of O&M expenses results in higher IWC for new hydro plants with time and cost overrun. For old hydro stations, the higher O&M expenses due to higher number of employees also yield higher cost for "Maintenance Spares" in IWC. Therefore, option could be to de-link "Maintenance Spares" in CWC from O&M expenses.	part of O&M expense, the present regulation of allowing 15% of O&M expense for maintenance spares while computing working capital should continue.
40	**21.7 (a)**	Review the escalation factor for determining O&M cost based on WPI & CPI indexation as they do not capture unexpected expenditure.	NEEPCO is in agreement for review of escalation factor for determination O&M cost. It is proposed that escalation should be project specific based on variation of actual O&M expenses incurred during the past periods on year to year basis.
41	**21.7 (c)**	Review of O&M cost based on the percentage of Capital Expenditure (CC) for new hydro projects.	NEEPCO is in agreement for review of O&M cost based on percentage of capital expenditure for new hydro projects.
42	**21.7 (e)**	Rationalization of O&M expenses in case of the addition of components like the bays or transformer or transmission lines of transmission system and review of the multiplying factor in case of addition of units in existing stations.	O&M expenses allowed for addition of units in existing station should be properly addressed so that additional expenses are allowed for maintenance of such new additions.
43	**21.7 (f)**	Have separate norms for O&M expenses on the basis of vintage of generating station and the transmission system.	Separate O&M expense for old generating stations is agreed to, to ensure desired efficiency. Expenditure incurred due to ageing of plants and machineries will need to be covered under the same.
44	**26.3.3**	**Station Heat Rate**	The approach for determination of station heat rate may need review based on various factors like continuous partial loading, age of plant, Low Calorific value of supplied gas & insufficient fuel supply. Relaxed norms for specific stations considering the above factors may be allowed to enable recovery of AFC.
45	**26.3.11**	**NAPAF**	The existing NAPAF norms of 85 % are uniform for all the gas generating stations of NEEPCO with the exception of Assam Gas Based Power Plant which is 72 %. Despite this, due to erratic gas supply, this plant is often unable to recover its AFC. Chronic gas supply shortage has hit the remaining two stations of NEEPCO as well. This has led to full scale commissioned plants operating at part load and incurring loss of AFC. The **Tripura Gas Based Power Plant,**

			Monarchak has been commissioned successfully but has been facing gas shortage ever since commissioning. The Gas supply agreement with ONGC is for supply of 0.5 MMSCMD for running of the plant at its rated capacity. But only 80 % of gas is being received on average, ie 0.4 MMSCMD of gas, leading to average PAF of 76 % in the first quarter of 2018-19. Similarly, **Agartala Gas Based Combined Cycle Plant** which has a long time gas supply agreement for 0.75 MMSCMD of gas is also operating on part load due to continual low supply of gas by GAIL, leading to huge under recovery of AFC. Such a situation requires that the Hon'ble CERC may revisit the NAPAF norms separately for individual plants that are facing continual fuel shortages and relax the operating norms of such plants. It is proposed that an in-depth analysis of fuel supply constraints be conducted to allow relief in NAPAF to such plants struggling with fuel constraints.
46	**26.6**	The existing Operational norms of Hydro generation include norms for auxiliary consumption, transformation losses and normative annual plant availability factor. Capacity Index as a measure of plant availability was implemented by 57 the Commission during tariff periods 2001-2004 and 2004-09. It was based on the concept that hydrology risk has to be borne by beneficiaries all the time. After consultation, capacity index concept was modified with the new concept of Normative Annual Plant Availability Factor (NAPAF) during 2009-14 and continued during 2014-19 based on actual data. However, in case of a few hydro plants the same was revised. This is based on the premise that hydrology risk is to be shared by the generator & the beneficiary in the ratio of 50:50. There may be need for review of existing values of NAPAF based on actual PAF data for last 5 years.	The AFC for Hydro Station is recovered in two parts: 50% of AFC as Capacity Charge based on PAF achieved during the year and 50% of AFC as Energy Charge based on energy generated yearly. Presently, scheduling of energy is done by respective RLDC (for ISGS) based on requisition by the beneficiaries. In addition, RLDC at times compels the ISGS to back down the generation, to avoid congestion/ huge export to other Regions/ under drawal by beneficiaries etc. NEEPCO is facing huge backing down of hydro generation even during high monsoon, non-spilling period and even during spilling period. This has resulted in generation loss as well as financial loss in the form of less recovery of Energy Charge. This situation leads to improper utilization and wastages of natural resources. Considering, the present demand-supply scenario, the Hon'ble CERC is requested to address the issue. The CERC may consider recovery of AFC for hydro stations through capacity charge only as had been allowed for the tariff period 2004-09.
47	**27**	**Incentive**	a) The existing method for incentive i.e. linking incentive to fixed charges may be continued. However, different

			incentive mechanism for new and old stations may be adopted with the provision of suitable regulation. b) Further elaboration is required on the issue of different incentive for peak and off peak periods c) Further elaboration is required on the issue of review of incentive and disincentive mechanism. d) Generation beyond the design energy presently being paid at 80Paise/kWh in case of hydro generating stations needs to be revised to provide incentive to the hydro project developer.
48	**28**	**Implementation of Operational Norms**	Implementation of operational norms should be considered from the effective date of control period irrespective of the date of issue of tariff order
49	**29**	**Sharing of gains in case of controllable Parameters**	Sharing of gains at the existing ratio between the generating company and beneficiaries may be continued
50	**30**	Late Payment **Surcharge & Rebate**	The late payment surcharge currently being allowed may be upwardly reviewed as the present mechanism has not been a sufficient deterrent for clearance of outstanding dues, NEEPCO is still grappling with unpaid outstanding dues. Late payment surcharge may be calculated from the 1st day of billing instead of 61st day; for severe defaulters for clearance of outstanding dues. **Rebate**: As bills are presented in electronic form, rebate should be provided if the payment is made within 2 working days of issuance of the bill.
51	**31**	**Non-Tariff Income**	The adjustment of non-tariff income with O & M expense of generating company may result in decrease in O &M expenditure. The treatment of said non-tariff income is also subject to accounting norms. Therefore the proposal of reducing O & M expenditure on account of non-tariff income is not be agreed to.
52	32	**Standardization of Billing Process**	Standardization of billing process may be agreed to.
53	33.3(d)	**Auxiliary Power Consumption**	The **Tripura Gas Based Power Plant, Monarchak** has an average auxiliary power consumption of 4.5 % against the normative of 2.5 %. But the design auxiliary power consumption is 5.5 % for Combined Cycle and 6.3% for Open Cycle at rated capacity. This is because the gas booster station is run by high rating motor driven gas

			compressors, Static frequency converter for starting of gas turbine, and 2 nos of high rated Boiler feed pumps required for full loading of STG. ***It is proposed that auxiliary power consumption for this plant be fixed accordingly by the Hon'ble Commission considering the high auxiliary power consumption.*** The **Agartala Gas Based Combine Cycle Project (AGTCCP)**, Ramchandranagar, Tripura is a Gas based thermal power station with Dry Cooling Condensation System, which require 1% additional Auxiliary power for running the combine cycle. As per Tariff Regulation 2014-19, Coal based thermal power stations with Dry Cooling system, are allowed 1% additional Auxiliary Energy consumption. ***It is proposed that auxiliary power consumption for this plant (AGTCCP) be fixed as 2.5%+1% = 3.5% by the Hon'ble Commission considering the additional power consumption for Dry Cooling system.***
54	35.5	**Commercial Operation or Service**	a)_To address the shortcomings in respect of trial run of generating station through appropriate regulatory mechanism is agreed b) Issue of declaration of COD of the generating station due to non-availability of load or evacuation system needs to be addressed through regulatory mechanism. **Generator should be made responsible for availability of data telemetry at line terminal end at switchyard only. Generally, communication link is maintained by CTU/STU. Making the data telemetry available at nearest node is very difficult task for the generator where CTU and STU both are involved with multiple hopping. Generator should not suffer due to lack of infrastructure under STU.** Liability of data, Telemetry parameters etc should be at the Bus bar of the generating company. c) Linking of actual COD with scheduled COD or scheduled commencement date of PPA or_LTAA is not felt necessary
55	39	**Relaxation of norms**	In case the generating station does not achieve the normative parameters for reasons beyond its control , the Hon'ble Commission should allow appeals for relaxation of norms for 01 year instead of 06 months.

56	40	**Merit order Operation**	Merit order operation should not be based on only variable cost but on the overall tariff
57	**New**	**Environmental Concerns**	Gas power plants and hydro power plants are environment friendly and may be offered higher returns as incentives for setting up more capacity, subject to availability of fuel gas. In case of hydro, especially storage plants which offer water security higher returns may be considered.
58	**New**	**Provisional Tariff**	A provision for declaring provisional tariff of generating companies in line with the provision for transmission companies needs to be incorporated in the Regulations.
59	**New**	**Basket Tariff**	Basket tariff should not be less than the pooled tariff of the weighted average tariff of NEEPCO.