Summary of the comments and suggestions received on Approach Paper on Terms and Conditions of Tariff Regulations for the tariff period 1.4.2014 to 31.3.2019

(Ref No. 20/2013/CERC/Fin(Vol-I)/Tariff Reg/CERC Date: 25th June'2013)

3.4 Net Fixed Asset v/s Gross Fixed Asset Approach

The Comments are invited in regard to following the issues, namely_

a) ***Whether liability side approach of Gross Capital cost be continued or there is a need to shift to Net Fixed Asset (NFA) Model where the NFA shall be arrived at by deducting the accumulated depreciation from the Gross Capital Cost admitted for tariff purposes ? Also this needs to be commented in context with ROCE approach.***

Sr.No.	Name of organization/stakeholder	Comments/ Suggestions
A) Autonomous Bodies (JERCs/SERCs/Other Commissions)		
A.1	Rajasthan Electric Regulatory Commission	No comments
A.2	Uttar Pradesh Electricity Regulatory Commission	Since the provision of depreciation is envisaged for the repayment of debts it will be proper to work out the tariff at the NFA model.
A.3	Chhattisgarh State Electricity Regulatory Commission (CSERC)	The present method of GFA may continue with just one modification that after repayment of loans (including normative loan) the depreciation should be counted for repayment of equity too. In the present scheme the equity continue to attract ROE even after recovery of 90% of capital cost. In view of the above, the ROE method may continue instead of introduction of ROCE approach.
B) Government Departments		
B.1	Govt of Odisha	It is suggested to follow Net Fixed Asset (NFA) in place of GFA for the obvious reasons as stated in the Approach Paper.Net Fixed Asset Model wherein asset shall be derived by deducting the Accumulated depreciation from the Gross Capital Cost admitted for tariff purposes is preferred in view of ROCE approach.
B.2	Government of Punjab, Dept. of Power	Existing approach of GFA may be continued. ROCE approach may be rejected as there is no consistency in interest rates.
C) Central Sector (Generators/Transmission Cos./ NLDCs/RLDCs)		
C.1	Tehri Hydro Development Corporation Limited (THDC Ltd.)	Present approach of GFA needs to be continued.
C.2	Narmada Hydroelectric Development Corporation Ltd.	The present GFA Approach ensures the predictability of returns and thus provides the consistency under uncertain market scenario on long term basis. Hence, change in present GFA approach may not be conducive at present.

	(NHDC Ltd.)	
C.3	Damodar Valley Corporation (DVC)	Any switch over from GFA Approach to NFA Approach at this stage will further aggravate the investment flow to the Power Sector. It is, therefore, considered appropriate to continue the GFA Approach during the next Tariff Regulation with effect from 01.04.2014 and a review can be made at the end of the next Regulatory Period depending on the power crisis situation all over the country.
C.4	National Hydroelectric Power Corporation (NHPC)	The liability side approach of Gross Capital cost should be continued
C.5	North Eastern Electric Power Corporation Ltd. (NEEPCO)	Gross Fixed Asset (GFA) approach should continue in the interest of desired growth of the power sector. Shifting to Net Fixed Asset (NFA) approach will have substantial adverse impact on the sector & investment.
C.6	National Thermal Power Corporation (NTPC)	Gross Fixed Asset (GFA) approach should continue in the interest of desired growth of the power sector. NFA approach will lead to decrease in investors return with age of the Plant and thus likely to reduce investment interest in this sector. NTPC submitted that it has been planning the capacity addition targets on the cash flow projections based on the GFA approach. Any change in the approach at this stage on such a fundamental principle would severely affect the cash flow of NTPC and would jeopardize the capacity addition plan of not only NTPC, but of the whole country.
C.7	Power Grid	An approach which leads to reduction in the returns on equity has already been set aside in judgment dated 16th May 2006 in appeal no 121 of 2005 by Appellate Tribunal for Electricity (ATE) in case of POWERGRID Vs CERC regarding the depletion of equity. Accordingly, the current approach of GFA as the base should be continued.
C.8	Neyveli Lignite Corporation	Existing GFA approach may be followed. However, GFA approach can be contemplated for the existing stations under NFA methodology also, provided CERC allows normative return on the total gross block including admitted additions as at the beginning of the tariff period.
C.9	Central Electricity Authority (CEA)	The Commission had adopted liability side approach to equity in 2001 because at that time it was necessary to attract investment. In the tariff based competitive bidding scenario, the incentive/return on cost plus/regulated schemes should be reviewed. It is suggested that after the loan is repaid through depreciation, equity amount to be serviced should be reduced as per the depreciation paid every year till 90% of the capital is repaid through depreciation. This practice should be applied to generation, transmission and distribution sectors across the board. In case of distribution, there is significant CAPEX every year and therefore the NFA approach to equity would not significantly reduce the return of distribution companies.

D) State Sector (Generators /Transmission Cos./Distribution Cos./SEBs/SLDCs)		
D.1	Madhya Pradesh Power Generation Co. Ltd.	Existing approach of Gross Fixed Asset based tariff determination may be continued. However, the interest earned by the Generating Companies on the depreciation amount after meeting loan liabilities can be treated as income and may be deducted from Annual Fixed Charges.
D.2	Rajasthan Discom Power Procurement Centre	The existing approach should be continued. As regard to ROCE approach this has already been discussed in length earlier and has been rejected as there in no consistency in interest rates.
D.3	Uttar Pradesh Power Corporation Ltd. (UPPCL)	The GFA approach may be continued since the investor gets back 70% component of GFA as pay back of loan through depreciation, 10% of GFA as salvage value and 20% of GFA through balance depreciation after the loan is paid. NFA method is suitable in context of ROCE method.
D.4	GRIDCO	Net Fixed Asset Model wherein asset shall be derived by deducting the Accumulated depreciation from the Gross Capital Cost admitted for tariff purposes is preferred in view of ROCE approach
D.5	Gujarat Urja Vikas Nigam Limited	CERC may switch over to the NFA (asset side) approach. NFA is the correct approach since the beneficiaries shall be required to pay for the useful value of asset in operation after providing the depreciation. At the same time reduction in the equity pursuant to full repayment of debt on account of depreciation may be limited at 80% of the project cost and not 90% (present Regulation) in order to incentivize the generator to continue the ongoing business and simultaneously the interest of beneficiaries will also be protected.
D.6	Orissa Power Generation Corporation Ltd.	• Returns to the equity holders become volatile in a net fixed assets approach and will not motivate developers from adding capacity. The Indian markets have been very volatile and therefore ROCE cannot be benchmarked.
D.7	Chhattisgarh State Power Distribution Co. Ltd.	The existing approach of GFA should be continued. In ROCE model, the generators will get undue advantage of more return on loan component also as the interest rates are lower on the loan as compared to return allowed.
D.8	MP Power Management Company Ltd.	The existing approach of Gross Fixed Assets (GFA) creates internal resources for capacity replacement and should be continued along with partial modification. In this method, the investor gets back 70% component of GFA as pay back of loan through depreciation, 10% of GFA as salvage value and 20% of GFA through balance depreciation after the loan is repaid.
D.9	Maharashtra State Power Generation Co. Ltd.	Even the K.P. Rao Committee recommended that once the loan is reduced to zero, the equity component will be reduced progressively to the extent of further depreciation recovered. Thus, normative equity should be reduced to the extent of depreciation charged after notional loan is repaid. Therefore,

		GFA approach should be modified in accordance with the provision contained in Section 61 (d) of the Electricity Act 2003.
D.10	Kerala State Electricity Board (KSEB)	NFA approach should be adopted for tariff determination with accumulated depreciation deducted from the Gross Capital Cost.
D.11	Tamil Nadu Generation and Distribution corporation limited (TANGEDCO)	The NFA approach would benefit the end consumer by way of lower tariff. The equity in respect of NFA approach may be limited to a prescribed percentage of the capital invested and treat the balance as notional loan failing which every PSU will be tempted to pre-close the loans as the present rate of return allowed on equity is much higher than the borrowing cost. The notional loan (excess equity) should be serviced at the weighted average rate of interest of actual loans. Once the entire term loan is repaid, then prescribed ROE shall be allowed on the balance equity amount until Equity is reduced to 10%.
E) Private Sector (Generators/Transcos./Distribution Cos)		
E.1	Moser Baer Electric Power Ltd	• Gross capital cost approach should be continued. • NFA approached will further reduce the effective return on equity.
E.2	Athena Infraprojects Pvt. Ltd.	The prevailing methodology of GFA may be continued where loan repayment is considered further, depreciation should not be considered to reduce the equity component
E.3	BSES Rajdhani Power Ltd.	There is a need to shift to Net Fixed Assets (NFA) model as it is prudent to consider the depreciated value of the asset for estimating AFC. Further, the present value of the asset may be evaluated by a third party and this may bring in efficiency in maintenance of the plant equipment and reduce the burden of excessive cost on the consumer.
E.4	BSES Yamuna Power Limited	Liability side approach to Gross Capital Cost duly amended should be continued.
E.5	Association of Power Producers (APP)	Gross capital cost approach should be continued in order to maintain regulatory certainty. If the NFA is considered the returns will reduce after debt repayment is made. NFA may not be the suitable option as benchmarking of ROCE is difficult in current unstable Indian financial markets. Any variation in cost of debt would add to the risk profile of the developer. Hence the ROCE approach should not be considered.
E.6	Rudraksh Energy	The existing GFA approach should be continued.
E.7	Torrent Power	1. Gross capital cost approach has been in use under the Tariff Regulations 2009-14. The same should continue in order to maintain regulatory certainty. 2. GFA Approach is reasonable. Project Equity once invested continues to remain with the company for lifetime. NFA will have a substantial adverse effect on the investment decision. The concept of NFA can be adopted only if depreciation is allowed on higher rate so that the whole investment may be

		recovered within a span of 10 years. 3. For projects which are implemented under Tariff Regulation 2009 and for which tariff revision is due on Apri-2014, shifting from GFA to NFA shall not be feasible and the same shall create financial problem. 4. Currently, when generating plants are facing acute fuel shortage at affordable price, it is essential to follow GFA approach for creation of adequate internal resources. 5. Therefore, the Existing method of providing Depreciation on GFA basis should be continued which has been framed to ensure generation of sufficient cash flow to the investors and ultimately facilitate loan repayment obligation. However, the depreciation rate need to be revised upward.
G) Other Organizations/Institutions/Banks/Investors		
F.1	FICCI	ROE approach has been adopted in the Power Sector and is generally accepted as a good method by various stakeholders across the sector. This approach may be continued
F.2	Electric Power Transmission Association (EPTA)	As the funding of any asset happens via debt & equity in a certain ratio, the gradual reduction in the asset value (due to depreciation) should also happen pro-rata in the same ratio for debt and equity. As the assets are systematically written down over the asset life and as the asset is funded via 70% debt and 30% equity, the depreciation allowed should also be pro-rata distributed in the ratio of 70% and 30% to reduce the debt and equity portions respectively. The interest cost and the return on equity for the successive years needs to be calculated on the amounts reduced by the pro-rata depreciation for the earlier years. Once the debt and equity portions are reduced to zero over a period of time by depreciation, the developer should be reimbursed only the additional costs for running the asset and should not be allowed any additional RoE on the equity that is already reimbursed in form of depreciation.
H) Individual /Public Group/Any others		
G.1	Shri R.B.Sharma	Even the K.P. Rao Committee recommended that once the loan is reduced to zero, the equity component will be reduced progressively to the extent of further depreciation recovered. Thus, it is equitable for the Central Commission to hold that the normative equity be reduced to the extent of depreciation charged after notional loan is repaid and hence accept the modified GFA approach which would be in accordance with the provision contained in Section 61(d) of the Electricity Act, 2003.
G.2	Dr.Ashok Kundapur	ROCE approach is a better option.
G.3	Shri Arun Kumar Dutta	The approach needs to be shifted to NFA model.

b) ***Alternative to NFA approach, can existing GFA approach be partially modified where gross capital may be divided in the ratio of loans and equity and the loan amount may be reduced to the extent of depreciation accrued. Once the loan amount is fully repaid and reduced to zero, further depreciation would be allowed to reduce the equity component.***

Sr.No.	Name of organization/stakeholder	Comments/ Suggestions
A) Autonomous Bodies (JERCs/SERCs/Other Commissions)		
A.1	Rajasthan Electric Regulatory Commission	No comments
B) Government Departments		
B.1	Govt of Odisha	As mentioned above in a)
B.2	Government of Punjab, Dept. of Power	This approach was recommended in KP Rao Committee Report. This must be implemented to avoid undue profits to developer and to safeguard consumer interest.
C) Central Sector (Generators/Transmission Cos./ NLDCs/RLDCs)		
C.1	Tehri Hydro Development Corporation Limited (THDC Ltd.)	This sort of hybrid method is not rational. Generating company is not permitted any return on the equity invested during the long gestation period, when a project is under construction. The existing GFA approach belatedly compensates the generating company for the lost revenue of which it was deprived upfront.
C.2	Narmada Hydroelectric Development Corporation Ltd. (NHDC Ltd.)	(Same as above))
C.3	Damodar Valley Corporation (DVC)	(Included in (a) above)
C.4	National Hydroelectric Power Corporation (NHPC)	Combination of GFA and NFA approach in existing ROE method is not acceptable
C.5	North Eastern Electric Power Corporation Ltd. (NEEPCO)	The present system of reducing normative loan by the accrued depreciation for the year should continue. No reduction of Equity component once loan amount is repaid is suggested/ proposed, since the investors should get return on gross investment already made by them regardless of depreciation.
C.6	Neyveli Lignite Corporation	Existing GFA approach cannot be partially modified. Further, Return on Equity is the only source available for the generator to get equity being serviced. Eroding of equity to the extent of balance depreciation will reduce the accumulation of internal resources which are being used for capital replacement/additions.
D) State Sector (Generators /Transmission Cos./Distribution Cos./SEBs/SLDCs)		
D.1.	Rajasthan Discom Power	Yes.

	Procurement Centre	This approach was recommended in **KP Rao Committee** Report. This must be implemented to avoid undue profits to developer and to safe guard. Consumer interest.
D.2	Uttar Pradesh Power Corporation Ltd. (UPPCL)	Yes. Precisely this was recommended by **KP Rao Committee** Report. If it is adhered then after the payment of loan which is 70% of GFA, 30% of GFA as equity will be paid by 10% selvage value of GFA and 20% balance depreciation during the life of the plant
D.3	Orissa Power Generation Corporation Ltd.	Under NFA the returns for equity holders will reduce. Therefore, GFA approach should be continued.
D.4	Chhattisgarh State Power Distribution Co. Ltd.	Alternative to NFA approach, existing GFA approach can be partially modified where gross capital may be divided in the ratio of loans and equity and the loan amount may be reduced to the extent of depreciation accrued. Once the loan amount is fully repaid and reduced to zero, further depreciation would be allowed to reduce the equity component.
D.5	MP Power Management Company Ltd.	If there is modification in GFA approach, then after the payment of loan which is 70% of GFA, 30% of GFA as equity will be paid by 10% salvage value of GFA and 20% balance depreciation during the life of the plant. Once the loan amount is repaid and reduced to zero, further depreciation should be allowed to reduce the equity component. MP, since long, was pleading for reduction in equity component, after loan is repaid in full to reduce the burden on return on equity to 10% of the equity. This should be implemented to ensure safeguarding interest of the ultimate consumers.
D.6	Maharashtra State Power Generation Co. Ltd.	GFA approach should be modified in accordance with the provision contained in Section 61 (d) of the Electricity Act 2003.
D.7	Kerala State Electricity Board (KSEB)	NFA approach should be adopted for tariff determination with accumulated depreciation deducted from the Gross Capital Cost.
D.8	Tamil Nadu Generation and Distribution corporation limited (TANGEDCO)	NFA approach as recommended by K.P.Rao committee and accepted by GOI should be the basis for the tariff determination and the equity is to be depleted once the loan is fully serviced by the amount of depreciation recovered through tariff. Further, Power Grid vide appeal no. 121/2005 filed an appeal before ATE to restore the equity depleted in the initial stages of formation of Power Grid, wherein the transmission tariff was determined by GoI by considering the 50:50 debt-equity ratio and deducting the depreciation amount collected each year to reduce the debt & equity equally and awarded tariff through NFA method. In this regard, ATE in its judgment dated 16.05.2006 had ordered to return the equity. Therefore, the Commission has to take a view on this issue. It is suggested that NFA shall be considered for the determination of the tariff for future periods, in respect of all the projects already commissioned and to be commissioned.
D.9	Assam Power Distribution Company	May be adopted.

	Ltd.	
E) Private Sector (Generators/Transcos./Distribution Cos)		
E.1	Athena Infraprojects Private Ltd.	In case of aforesaid debt: equity ratio is further increased , it would be difficult for the private developer to achieve financial closure for the project. It may be stated that even current regulations do not prohibit a Debt: Equity ratio higher than 70:30 and in case a developer is able to tie up financing of a higher proportion of project cost through Debt, the actual debt is considered while determining the tariff. Therefore, it is felt that there is no need to fix Debt: Equity ratio as higher than 70:30.
E.2	BSES Rajdhani Power Ltd.	NFA model shall be considered. On account of depreciation and present value of asset evaluated at regular interval, the Commission may assess requirement of R&M/add capitalization for the plant at the fag end of its life.
E.3	BSES Yamuna Power Limited	Since capital represents 'service to capital subscribed' as a matter of principle progressively once the capital subscribed is recovered through depreciation, the equity component should be reduced just as normative debt component was earlier reduced during initial 12 years. Further, once equity capital is reduced to 10%, there will be no incentive for the CGU/CTU to run existing plants. This will be against national interest. Therefore, CGU/CTU may be given management fees for efficient management of these plants.
E.4	Association of Power Producers (APP)	Equity invested at the beginning of the project remains unaltered throughout the life of the project; in fact it is increased due to accumulation of undistributed profit. NFA will have substantial adverse impact on the sector and investment. This can be adopted only if depreciation/AAD is allowed on high rate which can, in 10 to 12 yrs, recover the whole investment (equity and debt both) and the legal framework allows redemption of equity every year in the same manner as repayment of debt.
E.5	Rudraksh Energy	Alternative to NFA approach, existing GFA approach may be partially modified
E.6	Torrent Power	NFA approach will have a substantial adverse impact on the sector and investment.
F) Individual /Public Group/Any others		
G.1	Shri Arun Kumar Dutta	Alternative to NFA approach, existing GFA approach may be partially modified where gross capital may be divided in the ratio of loans and equity and the loan amount may be reduced to the extent of depreciation accrued. Once the loan amount is fully repaid and reduced to zero, further depreciation would be allowed to reduce the equity component

c) ***Suggestion if any on continuation of existing approach of Gross Fixed Asset base tariff determination.***

Sr.No.	Name of organization/stakeholder	Comments/ Suggestions
A) Electricity Regulatory Commissions (JERCs/SERCs)		
A.1	Rajasthan Electric Regulatory Commission	No comments
B) Government Departments		
B.1	Govt of Odisha	As mentioned above in a)
B.2	Government of Punjab, Dept. of Power	Existing approach of GFA may be continued. ROCE approach may be rejected as there is no consistency in interest rates.
C) Central Generators/Transmission License		
C.1	Tehri Hydro Development Corporation Limited (THDC Ltd.)	The existing approach of GFA needs to be continued.
C.2	Narmada Hydroelectric Development Corporation Ltd. (NHDC Ltd.)	(Same as (a) above))
C.3	National Hydroelectric Power Corporation (NHPC)	The existing approach of GFA should continue
C.4	North Eastern Electric Power Corporation Ltd. (NEEPCO)	The existing GFA approach should continue due to following justification: ➢ The investors should continue to get return on their gross investment, which continues to remain with the company till it exists. ➢ It provides incentive to the investors for creating its internal resources required for capacity addition and to maintain efficient operation of the Plant. Thus, it attracts more investors in the sector
C.5	National Thermal Power Corporation (NTPC)	Existing approach of Gross Fixed Asset based tariff determination may be continued.

C.6	Neyveli Lignite Corporation	The GFA method may be continued. However, for the existing plants of TPS-I, TPS-I-E & TPS-II, NFA method may be continued to be adopted. Further, GFA approach can be contemplated as stated above, provided CERC allows normative return on the total gross block including admitted additions as at the beginning of the tariff period.
D)	**State Generators /Transmission License**	
D.1	Rajasthan Discom Power Procurement Centre	The existing approach be continued. As regard to ROCE approach this has already been discussed in length earlier and has been rejected as there in no consistency in interest rates.
D.2	Uttar Pradesh Power Corporation Ltd. (UPPCL)	The existing approach of GFA based tariff may be continued.
D.3	Chhattisgarh State Power Distribution Co. Ltd.	The existing approach of GFA based tariff may be continued with modifications where gross capital may be divided in the ratio of loans and equity and the loan amount may be reduced to the extent of depreciation accrued. Once the loan amount is fully repaid and reduced to zero, further depreciation would be allowed to reduce the equity component.
D.4	MP Power Management Company Ltd.	The existing approach of GFA based tariff may be continued with modifications
D.5	Maharashtra State Power Generation Co. Ltd.	GFA approach shall be continued with partial modification where gross capital may be divided in the ratio of loans and equity and the loan amount may be reduced to the extent of depreciation accrued.
D.6	Kerala State Electricity Board (KSEB)	There is no scarcity of funds in the financial markets to invest in power sector. Hence, there is no need to continue the GFA approach with the intention of resource mobilization.
D.7	Tamil Nadu Generation and Distribution corporation limited (TANGEDCO)	The continuation of GFA method is not in the interest of end consumers, as they will be servicing the equity in addition to payment of depreciation even after completing the debt servicing.
E)	**Private Sector (Generators/Transcos./Distribution Cos)**	
E.1	Jaiprakash Power Ventures Ltd.	The existing approach of Gross Fixed Asset based tariff determination may be continued as there is still a need to attract huge investment in power sector.
E.2	Torrent Power	1. Existing approach of Gross Fixed Assets should be continued. The concept of, NFA can be adopted only if depreciation is allowed on higher rate so that the whole investment may be recovered within a span of 10 years. 2. For projects which are implemented under Tariff Regulation 2009 and for which tariff revision is due on Apri-2014, shifting from GFA to NFA shall not be feasible and the same shall create financial problem. 3. Currently, when generating plants are facing acute fuel shortage at affordable price, it is essential to follow GFA approach for creation of adequate internal resources. 4. Therefore, the existing method of providing Depreciation on

		GFA basis should be continued which has been framed to ensure generation of sufficient cash flow in the hands of the investors and ultimately facilitate loan repayment obligation. However, the depreciation rate should be revised upwards
F)	Individual /Public Group/ Any others	
G.1	Shri Arun Kumar Dutta	Existing approach of Gross Fixed Asset should be discontinued.