

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)

Additional Comments/Suggestions

Sr. No.	Name of organization/ Stakeholder	Issue	Comments/ Suggestions
A) Autonomous Bodies (JERCs/SERCs/Other Commissions)			
A.1	Rajasthan Electricity Regulatory Commission	Electronics publicity of petitions	<ul style="list-style-type: none">➤ It has been felt that tariff petitions before CERC does not have such wide electronics publicity as those before State ERCs. It is suggested that for wider electronic publicity these may please be placed on CERC website till the period of offering comments and should be kept in full form (including forms and statement of accounts) by generating company / licensees on their website till the decision on next such petition so that data of later petition can be cross checked with that of previous. Commission may consider its incorporation in its order and regulations.➤ Data available in petition as well as in public domain are not adequate for cross checking and time available between notifications for comments and date of offering comments is short to enable collection of such data. It will be appropriate that Commission specify placing some important and performance parameter's data always on company's web site. These may consists of annual accounts, specified performance parameters project status on quarterly basis, corporate loans with interest rates, income tax payments and refunds etc., for past 5 years.➤ Commission may consider that petitions for adoption of the tariff under sec.63 of the Act, shall contain asset wise estimated capital cost data to act as a reference to determine bench mark cost and to act as a basis for any claim for change in law etc. Similarly, Transmission tariff petitions, whether under section 62 or under section

			63 to have capital cost data line wise with line voltage, no. of circuits and length, as well as substation wise with transformer capacity, no. of bays and shunt reactor capacity with type (line or bus type) of shunt reactor.
B) Government Departments			
B.1	Gujarat Urja Vikas Nigam Limited	Availability of domestic fuel	The generating company shall declare the separate availability on domestic and imported coal so that beneficiary can make their planning and decide on the off take of power. Further, inefficiency on procurement of fuel (lower grade) should not be passed on to Discoms.
		Reserve Shut Down (RSD)	In case supply of power is greater than demand, then Central Generating Stations may be directed to put their Units under RSD or schedule the technical minimum power to beneficiary who wants to schedule power from these units.
B.2	Gujarat State Federation of Co-operative Sugar Factories Ltd.	Plant Load Factor	Further, the Commission should reduce the proposed plant load factor of 60% to 53%, as rightly considered by CERC for these project for the State of Gujarat, otherwise these projects will become non bankable and financially unviable.
		Cost of Fuel, I.E. Bagasse	The market cost of bagasse has increased due to market availability for bagasse on account of upcoming paper plants and industries in Gujarat. Accordingly, CERC should increase the fuel cost for these projects for determination of tariff for bagasse cogen projects, otherwise these projects will become non bankable and financially unviable.
		Interest Rate	CERC should consider the interest rate for term loan at 13.5% and that for working capital at 14% as per CERC guidelines of February 2013, which are in line with current lending norms from banks/financial institutions and expected increase during next 2 years, for tariff determination.
		Other Commercial issues including Transmission & Wheeling charges, Cross-subsidy Surcharge, Energy Metering, CDM benefits, Banking	As addressed by the Commission.

		facility, RECs, Applicability of the Order, etc,	
C) Central Sector (Generators/Transmission Cos./ NLDCs/RLDCs)			
C.1	Tehri Hydro Development Corporation Limited (THDC Ltd.)	ROE	The provisional of additional 0.5% for completing the project within the stipulated time may be withdrawn and combined with ROE.
		Capital Cost	There is no need to get capital cost vetted by independent agency .
		Pumped Storage Scheme	Different dispensation is needed. Referece vide THDC letter no.THDC/RKSH/COMML/C-01/51/2002 dt.05.07.2012 attached.
		Secondary Energy	It is proposed that the rate for the secondary energy should be equal to primary energy rate and since the hydro energy is generally peaking energy, therefore, it will be a good incentive to provide more and more peaking support and there by more and more secondary energy. There is a case to view a liberal approach for old stations than the new ones.
C.2	Damodar Vally Corporation (DVC)	Add Cap	Any capital expenditure for a new substation or transmission line in respect of composite T&D network of DVC is required to be considered as additional capitalization since the beneficiaries of a substation or line cannot be identified in its true sense.
		Renewable Energy Scheme	Hydel Power units of DVC below 25 MW situated at Maithon (2 x 20 MW & 23.2 MW) and at Tilaiya (2 x 2 MW) may be considered as small hydro under the Renewable Energy Scheme in terms of Regulation 2 (w) of CERC Regulation (Terms & Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2012.
C.3	National Hydroelectric Power Corporation (NHPC)	Additional Capitalization	(i) Capital expenditure on minor assets, tools & tackles, spares, AC, TV etc. should be considered in O&M expenses. Alternatively, suitable compensation allowance as allowed to Thermal generating stations should also be extended for Hydro generations stations. (ii) Provision should be inserted for allowing expenditure, beyond original scope, for successful and efficient operation of the generating station, up to cut off date.

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		O & M Expenses	<p>(i) Justification for variation of more than 20% in O&M expenses should only be asked for in tariff petition.</p> <p>(ii) Prior Period adjustment should be considered in O&M expenses.</p> <p>(iii) VRS expenses should be allowed in employee cost.</p> <p>(iv) CSR & CSD and R&D expenses should be considered as these are necessary to be incurred as per govt. policies / directives.</p> <p>(v) Separate provision for claiming the O&M expenses disallowed by CERC considering them as abnormal or non-recurring should be incorporated in ensuing tariff regulations.</p>
		Taxes, Duties, Levies, Cess etc	Provision for recovery of such unforeseen charges levied by any govt. / authorities need to be kept in tariff regulations so that accumulation of amount can be avoided
		Late Payment Surcharge	Charging of late payment surcharge on delayed payment is not in line with TPA. A provision shall be provided in Tariff regulations in line with TPA.
		Cut-off date	The cut-off date should be increased from existing 2 years to 3 years.
		Compensation of PAF due to forced outages beyond control of Hydro Stations	It is proposed that if there is forced outage of 12 hrs or more in a day due to reasons beyond the control of Hydro Stations then NAPAF of that project may be given for that day, subject to availability of Generating units.
		Reduction in live storage due to siltation of reservoir over the period	Condition of providing continuous 03 hrs DC for availing 100% PAF for that day may be modified to 1.5 hrs for two times in a day instead of 03 hrs in respect of older Power Stations where present live storage is less than 60% of designed live storage
C.4	IL & FS Energy	Miscellaneous issues for Tariff determination	<p>a) Commission may consider all the imported coal based projects in the cost plus approach.</p> <p>b) It is submitted w.r.t interest on long term loan, in most of the cases loans are fully floating and interest rate changes with every change in base rate. Therefore, there has to be a system for adjustments allowed in tariff for variation in such changes of interest rate on long term loan and working capital loan. Such adjustments may be levied on quarterly basis with supporting documents.</p>

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			<p>c) Commission may consider giving additional weight age to the environment factors and should promote the benign environment technologies.</p> <p>d) There are some projects where MOEF has advised developers for installation of additional equipments which are capital intensive in nature. The tariff of the projects with these additional facilities should allow for additional capital cost vis a vis the power plants without these facilities.</p>
C.5	Neyveli Lignite Corporation	New Projects - Stabilization period and relaxed norms	<p>Based on the recommendation of CEA, relaxed operational norms should be restored during stablization period of new units, especially the plants where a new process technology or higher sized Unit is introduced for the first time. The relaxed norms can be permitted for a period of one year from the date of COD of the Units. The relaxed norms should cover all parameters - Normative Annual Plant Availability, Station Heat Rate, Auxiliary Power consumption and specific fuel oil consumption.</p> <p>Further, Specific requirements in respect of norms and parameters relating to Coal based power stations in respect of NTPL, UP, Seerkazhi may be mentioned.</p>
		Initial Spares	<p>The ceiling limit may be fixed taking into account both the project cost and the number of units in a generating station with the ceiling percentage inversely varying with the no. of units and also providing for items like spare TG Rotor over and above the ceiling limit.</p>
		Barsingsar Thermal Power Plant	<p>The expenditure relating to water may be recovered through Tariff separately as water is pumped from 60 km from power station.</p>
		Interest on Working Capital	<p>Return on working capital margin: 25% of WC has to be financed by way equity as margin money. Hence the return on the margin money may be allowed at the grossed up rate of return allowed for equity.</p>
		Late payment surcharge	<p>Explicit provision may be made in the forthcoming Tariff Regulations for adjustment of surcharge/interest amounts first and principal amount thereafter, from the payments made by beneficiaries.</p>
		Delay in settlement of dues and Accumulation of Dues	<p>The settlement of arrear bills raised after CERC order is delayed for years. Hence Generator may be permitted to raise bills at revised rates</p>

			<p>as per the petition filed (based on CERC guidelines).</p> <p>The DISCOMS should settle 90% of the increase in tariff immediately and the balance as determined in CERC order with interest on both sides.</p> <p>More Stringent provisions may be included in the new regulations in order to bring discipline in the payment mechanism.</p>
C.6	Bhakra Beas Management Board (BBMB)	Tariff Determination of BBMB Generation and transmission lines	<p>The norms for allowing the O&M expenditure for transmission and generation functions of BBMB may be fixed after disallowing the following expenditure so that consumers of power of the Partner States can be protected.</p> <ul style="list-style-type: none"> • Expenditure on Pay and allowances which was being paid to employee in contravention Section 97(2) to Punjab Reorganization Act, 1966 and objected by CAG of India as Statutory Auditor. • Loss on workshop and consultancy cell of BBMB. • Expenditure on street light, road maintenance and hospital is to be restricted. • Expenditure on illegal regularization of employee should not be allowed so that Orders of the Supreme Court (case of Uma Devi) can be honored. • Share of expenditure of Irrigation Wing being booked to Power Wing in contravention to notification of Ministry of Power, GoI in compliance of Supreme Court Judgment dated September 27, 2011.
D) State Sector (Generators/Transmission Cos./Distribution Cos./SEBs/SLDCs)			
D.1	Tripura State Electricity Corporation Ltd.	Payment of fixed and energy charges	<p>Tripura is liable to pay both fixed charges and energy charges to respective Central Sector Utilities as per tariff determined by CERC time to time.</p> <p>Further, a balance need to be established through Regulation so that Utility can survive and sustain their business.</p>
D.2	Power Company of Karnataka Ltd.	Under Recovery of Interest on Loan	<p>Any mismatch between recovery of interest on normative loan basis and actual recovery through tariff consequent to under availability of generating station or transmission system may be recovered by the beneficiary through raising separate bill at the end of the financial year. In case of any disputes, the parties may</p>

			approach commission through application. As an alternative, the mismatch between recovery of interest may be claimed in the next tariff period.
		Synchronization	If the generator has not commissioned the power plant within 6 months from the date of synchronization, short recovery if any in actual cost of fuel expenditure incurred by the generating company and charges recovered through infirm power pumped to the grid shall not be passed on to the account of the beneficiaries.
		Liquidate Damages	Generating Company/Transmission Licensee has to pay the liquidated damages to the beneficiary in case of delay in the commissioning of the projects on scheduled date except due to the force majeure event or default of the beneficiary. The non-availability of load or evacuation system may be treated as a force majeure and beneficiary will pay only the interest on debt and normative repayment of debt (depreciation) to the generating company / transmission licensee when the commissioning of projects depend on each other.
E) Private Sector (Generators/Transcos./Distribution Cos)			
E.1	Lanco Power Ltd.	COD	Date of placing order on BTG may be considered while arriving at operational norms of the project.
		Normative availability	Normative availability for super critical plants (660/800 MW) during first year of operation may be considered lower than 85% at an appropriate value to be decided by the commission.
E.2	Calcutta Electric Supply Corporation Limited (CESC Ltd.)	R&M	R&M expenses may be allowed where a Detailed Project Report for the same is submitted giving complete details of benefits like life extension, improvement of performance norms etc. A separate filing and approval might be required for approval of R&M with a complete DPR to avoid cases of R&M expenditure being allowed without commensurate benefits accruing to the consumers. Also there may be a mechanism to allow R&M expenses to comply with Norms given under Perform-Achieve-Trade scheme notified under the Energy Conservation Act, 2001.

E.3	SPI Power Operations Private Limited	IC Engine Norms	Notify the tariff norms for IC Engine Technology
E.4	Arkay Energy (Rameswaram) limited	IC Engine Norms	Notify the tariff norms for IC Engine Technology
E.5	Athena Infraprojects Pvt. Ltd.	Rationalizing Transmission Charges from NE Region	Landed cost of NE Hydro Power should be brought at par with that of evacuation of power from power projects in the Northern Region . Further, the cost incurred on the transmission project needs to be rationalized in proportion to the capacity not commissioned so as to avoid putting the performers at a disadvantage.
		O&M Expenses	The existing O&M expenses should also include expenses incurred by the project developers in litigations, environmental issue and other legal expenses and such Expenses should be allowed as a pass through in the tariff. Considering the recent natural calamities the risk perception of insurance companies has increased leading to hardening of the insurance rates. It would be unfair to thrust the increased Insurance cost on the generator for no fault of his. A proviso needs to be built in for addressing such Contingencies either by enhancing the current O&M rate or by any other mechanism. It is also suggested that mid-term Review of O&M norms should be considered to address the Issue of high variation in price of employee cost, water.
		Hydrological Risk	The earlier provisions for recovery of hydrology risk in the same year needs to be restored.
		Transmission Losses	Norms for transmission losses of a dedicated transmission line / tie line from the Project bus-bar to the delivery point may also be specified
		Advance Against Depreciation	Provision for Advance Against Depreciation (AAD) as may be reintroduced wherein such AAD be permitted only if Cumulative repayment upto a particular year exceeds cumulative depreciation upto that year
E.6	JINDAL STEEL & POWER Ltd.	Competitive bidding	To maintain regulatory certainty in tariff approach completion of award of works before December 31, 2015 should not be considered as a mandatory condition for exempting hydro projects. Hydro projects should continue to be regulated under the said Tariff Regulations

			over the next Control Period.
E.7	DB Power Ltd.	Recovery of AFC	<p>In lieu of facilities extended by the state government for development of thermal power project, depending upon the policy of the state developers are mandated to provide 5 (five) percent to 10(ten) percent of the net power (gross power minus auxiliary consumption) generated by the project at energy (variable) charges to the home state.</p> <p>However, unlike hydro projects, the fixed cost of the variable power sold by thermal generating station to home state is not allowed to be recovered from the beneficiaries in proportion to the respective allocation in the saleable capacity (i.e. capacity excluding the variable charge power to the home state). Hence, about 5 (five) percent to 10 (ten) percent of the total fixed charges of the thermal generating station providing variable charge power to home state goes un-covered.</p> <p>Hence, it is requested that "the fixed cost of a thermal generating station shall be computed on annual basis, based on norms specified under these regulations, and recovered on monthly basis under capacity charge (inclusive of incentive) and energy charge, which shall be payable by the beneficiaries in proportion to their respective allocation in the saleable capacity of the generating station, that is to say, in the capacity excluding the free power to the home State"</p>
E.8	Athena Demwe Power Limited	Hydrological Risk	The earlier provisions for recovery of hydrology risk in the same year needs to be restored.
		Transmission Losses	Norms for transmission losses of a dedicated transmission line/tie line from the Project bus-bar to the delivery point may also be specified
E.9	Association of Power Producers (APP)	Un-discharged liability as a part of capital Cost	<ul style="list-style-type: none"> Inclusion of un-discharged liability as a part of capital Cost for the tariff purpose should be allowed provided constructed/procured assets are capitalised. Capital cost to be as per books of accounts.
		Pass through of FERV	<ul style="list-style-type: none"> Present Norms provides for pass through of FERV. It is suggested that complete pass through of FERV shall be allowed without linking to hedging keeping in view the uncertainty in the interest rates and

			difficulties in assessing the benefits coming out of hedging. Hedging in all cases may not result in lowering of cost.
		Advance Against Depreciation	<ul style="list-style-type: none"> • AAD concept may be re-introduced. It will help the developers in servicing the debt. Existing rate of depreciation is required to be enhanced so that the quantum of depreciation is sufficient to meet the debt repayment obligation.
		Residual value	<ul style="list-style-type: none"> • Residual value should be 5% instead of 10%;
		Insurance	<ul style="list-style-type: none"> • Insurance premium should be allowed separately.
		Water Charges	<ul style="list-style-type: none"> • Water Charges should be allowed separately: Water Charges are increasing on year on year basis. Water cess and water rate should be reimbursed at actual. • Water cost of desalination Plant to be separately allowed.
		Stabilisation Period	<ul style="list-style-type: none"> • Relax norms of SHR and SFC during the stabilisation period of the plant.
		Option to file application for determination of either (a) only Energy (Variable) Charges or (b) both, Energy plus Capacity Charges for the Generating Station	<ul style="list-style-type: none"> • Many thermal as well as hydro projects are conceived under the MOU/State Energy Policy route with the respective State Governments. As per the state energy policies, the Generating Stations have to offer a percentage of the power/capacity on Energy (Variable) Charges only. In view of the above, it is imperative that the Regulations allow for determination of only Energy Charges (without determining the Capacity Charges).
		Considering the determination of only Energy Charges, certain cost elements (which are currently covered under Capacity Charges) needs to be covered under Energy Charges	<ul style="list-style-type: none"> • Considering determination of only Energy Charges, all variable costs incurred for generation of this power should be recovered by the Generator. Therefore, the following cost elements should be covered under computation of Energy Charges: <ul style="list-style-type: none"> a) Interest on Working Capital should cover: <ul style="list-style-type: none"> a.1. Cost of primary fuel for the pre-determined period corresponding

			<p>to NAPF</p> <p>a.2. Cost of secondary fuel for the pre-determined period corresponding to NAPF</p> <p>a.3. Receivables equivalent to 2 months energy charges for sale of electricity</p> <p>a.4. O&M expense for 1 month</p> <p>a.5. Cost of consumables like Water Charges</p> <p>a.6. LTSA/LTMA cost for gas based plant with Advances Class Machines</p> <p>b) Operation and Maintenance Expenses</p> <p>c) Expense on Secondary Fuel oil consumption</p>
		<p>Apportionment of Common expenses for Stage / Unit-wise COD: Need for a methodology to appropriately apportion common pre-operation expense like IDC, IEDC, in case of stage / unit-wise COD of Generating Station / Transmission Assets</p>	<ul style="list-style-type: none"> • here is a need for a methodology for apportionment of other pre-operative expenses like IDC, IEDC, which may be booked at a Company level and not unit/stage-wise. This would reflect this factual position, which is not the case in the existing Regulations. <p><u>Suggestion</u> - Consider the direct cost incurred on the individual stage / unit to compute the proportionate expense / cost incurred on the individual stage / unit. This weighted average shall then be applied to the total common expenses like IDC, IEDC to derive the same for the individual stage / unit.</p>
		<p>Recognition of new technologies like Air Cooled Condensers and FGD - Need to recognize new technologies being deployed in modern day power plants, like Air Cooled Condensers, Flue Gas Desulfurization, et al and accordingly make suitable amendments</p>	<ul style="list-style-type: none"> • There is a requirement to define the norms of operation and capital cost considering the option of new technologies like ACC system and FGD system too.

		in the Normative Parameters	
		Tariff determination for power based on captive coal	<ul style="list-style-type: none"> Substantial power capacity is being set up on captive coal. Several states have also signed MOUs for PPAs with captive coal. Pending the setting up of a coal regulatory authority, the CERC needs to evolve a methodology for valuation of coal from various coal blocks. Further, in doing so, the following may be kept in mind - since the capital costs associated with captive coal mining are fixed costs by nature, such capital investment should be treated as part of the capacity charge of a coal block - only the variable portion of coal production needs to be covered in energy charges.
		Tariff determination for projects based on imported coal	<ul style="list-style-type: none"> To fulfil the requirement of a power plant, the developer may be forced to use a portion of imported coal. This imported coal can either be obtained from the international market, or be sourced from captive mines in international jurisdictions. To ensure that the benefit of the coal sourced from international blocks is passed onto the consumer, tariff determination should be undertaken for coal produced from international coal blocks as well.
		Gas based power plants	<ul style="list-style-type: none"> Gas based power is likely to occupy an important place in fulfilment of peak load requirement of utilities. In view of this, a fuel pass through, fixed capacity charge tariff determination must be undertaken to ensure that gas based power can be signed up by utilities under Section 62.
		Foreign exchange fluctuations	<ul style="list-style-type: none"> The Indian rupee is facing unprecedented volatility, and foreign currency is always a significant component of EPC/ BTG costs. Therefore, a mechanism for cost pass through in case of fluctuations in foreign exchange must be built into the tariff.
		Rebate on early payment	<ul style="list-style-type: none"> Rebate on payments should be only allowed on Fixed Charge and not on Energy Charge.
E.10	Power Grid	Timelines for completion of projects	<ul style="list-style-type: none"> Timelines in the regulations should have a

		for earning additional RoE	<p>period of 6/12 months for pre-award activities in addition to the construction period already notified in the regulation.</p> <ul style="list-style-type: none"> • Actual time required in arranging clearances/ ROW/ court-matters/ Multilateral Agencies like World Bank, ADB etc. may be allowed. • The additional ROE should be allowed on stage wise completion of transmission elements which can be put into regular service independently in line with generation projects. • Timelines to be provided for new transmission elements.
		Additional Capitalisation	The Central Commission may permit the utility to deploy such de-capitalized assets at other places at the historical cost (less accumulated depreciation), if considered feasible by POWERGRID based on technological and commercial considerations. However, the applicable tariff against such de-capitated cost should continue to get recovered from beneficiaries till such deployment elsewhere in the system.
		Performance Related Pay (PRP) to be considered as part of O&M	PRP is part of salary and thereby becomes expenditure on manpower which is part of O&M expenses. As such CERC may consider PRP as O&M expenses while deciding O&M norms for POWERGRID.
E.11	Prayas Energy Group	Detailed review of past MYT implementation	The approach paper should first present a detail review of past control periods along with quantitative analysis of various performance parameters, detailing how the regulations impacted financial and operational performance as well as tariffs in that period. Once such data and analysis is available, it will become easier to focus on the areas of strength and improvement.
		Analysis of Best Practices across different countries	Especially in the context of move towards, RPI-x kind of regulatory regime, it will be important to understand various aspects of data capturing, monitoring and forecasting techniques used for this purpose. It is very important to highlight best practices with respect to transparency and better reporting and monitoring of data. It will be helpful if the commission could share any international

			<p>experience or evidence where MYT regime has led to significant efficiency and cost improvements from consumer point of view. Further, attention should also be given to how regulators across different countries evaluate prudence of major capital expenditure or planning processes and so on. Detailing the pros and cons of each such approach and accounting their experience would be helpful in evaluating how they would suit Indian needs, if at all.</p>
		<p>Assessment of possible options and their impact on tariff:</p>	<p>The approach paper must also present possible options and its impact on tariff. Instead of simply listing all possible questions, the commission must instead develop scenarios by clubbing similar alternatives and presenting a comparative analysis detailing how tariff will be determined or affected by each set of assumptions/changes. This would help stakeholders to understand the significance of choosing any particular scenario or option.</p>
		<p>Web-based monthly reporting of fuel availability and performance parameters:</p>	<p>All generating companies must be mandated to publish unit-wise information regarding source wise (i.e. CIL subsidiary, captive mine, e-auction and/or imports) quantity and cost (separating out transportation cost) of coal procured on monthly basis. Similarly, all generating companies regulated by CERC must be directed to share on their website monthly unit-wise performance in terms of net and gross generation, auxiliary fuel consumption, heat rate, load factor, availability, etc. along with fixed and variable costs for that period. This information can also help in comparing operational performance and variable cost of different generating stations across regions and time periods.</p>
		<p>Benchmarking</p>	<p>The benchmarks can be developed by a comparative analysis of performance over time across various plants/ stations after factoring for the differences on account of technology, vintage, fuel source, etc. Competitively discovered tariff can also be one of the factors to be considered for such comparison. Utilities should be incentivized to perform lower than the ceiling and penalized if they cross the same.</p>
		<p>Return on Equity</p>	<p>As per the present regulations of many state commissions, the equity put in by the utility does not get reduced despite coming close to</p>

			the end of the life of the asset. CERC must ensure that such anomaly does not exist in its tariff regulations.
		Fixed assets	Ownership of assets post their useful economic life should be transferred to consumers at a very nominal value as they have paid for the assets throughout the useful life. The commission should explicitly deal with this issue and clarify the same through the regulations.
		Third Party Verification	The new regulations should have provision for third party audit and verification of capex schemes to facilitate such post facto analysis.
		Take help from CAG in audit processes and financial analysis	In addition to taking help and assistance from private firms and/or consultants, the CAG can become an additional consultant for the regulatory commissions. The section 20 of the CAG act specifies that it can be requested to look into the books of accounts of even a corporate entity if it is in the public interest. Therefore, the Central commission should amend its regulations so as to enable seeking help of external organizations such as CAG
		Need for the commission to have a broader perspective:	The commission should not only look at expenses and capital expenditure of regulatory businesses but also undertake financial analysis of regulatory business by studying the various financial statements such as balance sheet, profit and loss and cash flow. Apart from regulatory business, the commission should take the broader perspective and also look at the combined regulated and unregulated businesses, wherever applicable. This becomes more relevant in context of many privately owned corporate entities engaging in multiple businesses also entering into power generation and transmission which is a regulated business. In order to ensure proper segregation between regulated and unregulated aspects of any business, the regulator should look at and/or seek information from various other government agencies (e.g. CAG, SEBI, etc.) filing made by these companies under companies act, Income act and ensure that regulatory business is run in a prudent and efficient manner.
E.12	Tata Power	Ash Disposal Expenses for the various Coal-fired Generating	The Commission may provide a separate norm (in Paise/kWh) for Ash Disposal Expenses and the same may be annually escalated at a

		Stations:	<p>percentage applicable to the increase in Normative O&M Expenses. For the purpose of arriving at the Norm, the following table may be considered:</p> <table border="1"> <thead> <tr> <th colspan="4">Proposed Norm for Ash Disposal Expenses</th> </tr> <tr> <th>Particulars</th> <th>Formula</th> <th>UoM</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Heat Rate proposed by 2x525 MW Maithon Power Limited</td> <td>a</td> <td>kCal/kWh</td> <td>2443</td> </tr> <tr> <td>GCV of Coal</td> <td>b</td> <td>kCal/kg</td> <td>3775</td> </tr> <tr> <td>Specific Coal Consumption</td> <td>c=a/b</td> <td>kg/kWh</td> <td>0.65</td> </tr> <tr> <td>Percentage of Ash in Coal</td> <td>d</td> <td>%</td> <td>45%</td> </tr> <tr> <td>Quantum of Ash Generation per unit of electricity</td> <td>e=cxd</td> <td>kg/kWh</td> <td>0.29</td> </tr> <tr> <td>Quantum of Fly Ash (% of total ash)</td> <td>f</td> <td>%</td> <td>80%</td> </tr> <tr> <td>Quantum of Bottom Ash (% of total ash)</td> <td>g</td> <td>%</td> <td>20%</td> </tr> <tr> <td>Quantum of Fly Ash</td> <td>h=exf</td> <td>kg/kWh</td> <td>0.23</td> </tr> <tr> <td>Quantum of Bottom Ash</td> <td>i=exg</td> <td>kg/kWh</td> <td>0.06</td> </tr> <tr> <th colspan="4">Ash Disposal Expenses</th> </tr> <tr> <th>Particulars</th> <th>Formula</th> <th>UoM</th> <th>Value</th> </tr> <tr> <td>Fly Ash utilization by Cement, Brick manufacturers (at Nil Cost)</td> <td>j</td> <td>%</td> <td>10%</td> </tr> <tr> <td>Ash Disposal at Nil Cost</td> <td>k=jxh</td> <td>kg/kWh</td> <td>0.02</td> </tr> <tr> <td>Balance fly ash to be disposed at Cost</td> <td>l</td> <td>kg/kWh</td> <td>0.21</td> </tr> <tr> <td>Add: Moisture Addition</td> <td>m</td> <td>%</td> <td>30%</td> </tr> <tr> <td>Moisture added to balance fly ash</td> <td>n=mxl</td> <td>kg/kWh</td> <td>0.06</td> </tr> <tr> <td>Total ash disposed with water</td> <td>o=i+l+n</td> <td>kg/kWh</td> <td>0.33</td> </tr> <tr> <td>Cost of disposal</td> <td>p</td> <td>Rs/kg</td> <td>0.255</td> </tr> <tr> <td>Normative Auxiliary Power Consumption</td> <td>q</td> <td>%</td> <td>6.50%</td> </tr> <tr> <td>Ash Disposal Expenses (Net)</td> <td>r=pxo/(1-q)</td> <td>Rs/kWh</td> <td>0.09</td> </tr> <tr> <td>Ash Disposal Expenses (Net)</td> <td>s=rx100</td> <td>Paise/kWh</td> <td>9</td> </tr> </tbody> </table> <p>Thus, the Ash Disposal Expenses work out to about 9 Paise per kWh (net)</p>	Proposed Norm for Ash Disposal Expenses				Particulars	Formula	UoM	Value	Heat Rate proposed by 2x525 MW Maithon Power Limited	a	kCal/kWh	2443	GCV of Coal	b	kCal/kg	3775	Specific Coal Consumption	c=a/b	kg/kWh	0.65	Percentage of Ash in Coal	d	%	45%	Quantum of Ash Generation per unit of electricity	e=cxd	kg/kWh	0.29	Quantum of Fly Ash (% of total ash)	f	%	80%	Quantum of Bottom Ash (% of total ash)	g	%	20%	Quantum of Fly Ash	h=exf	kg/kWh	0.23	Quantum of Bottom Ash	i=exg	kg/kWh	0.06	Ash Disposal Expenses				Particulars	Formula	UoM	Value	Fly Ash utilization by Cement, Brick manufacturers (at Nil Cost)	j	%	10%	Ash Disposal at Nil Cost	k=jxh	kg/kWh	0.02	Balance fly ash to be disposed at Cost	l	kg/kWh	0.21	Add: Moisture Addition	m	%	30%	Moisture added to balance fly ash	n=mxl	kg/kWh	0.06	Total ash disposed with water	o=i+l+n	kg/kWh	0.33	Cost of disposal	p	Rs/kg	0.255	Normative Auxiliary Power Consumption	q	%	6.50%	Ash Disposal Expenses (Net)	r=pxo/(1-q)	Rs/kWh	0.09	Ash Disposal Expenses (Net)	s=rx100	Paise/kWh	9
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		Heat Rate for Part-Load Operation	<p>The part load operation of the units is an uncontrollable factor for a Generating Company as the same is the result of the lower scheduled generation and the grid conditions. Therefore, the Commission may include suitable provisions for Normative Heat Rate at partial load operation.</p> <table border="1"> <thead> <tr> <th colspan="4">Normative Heat Rate</th> </tr> <tr> <th>Particulars</th> <th>Formula</th> <th>UoM</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Heat Rate proposed by 2x525 MW Maithon Power Limited</td> <td></td> <td>kCal/kWh</td> <td>2443</td> </tr> <tr> <td>Degradation of Heat Rate between 100% and 70% operation</td> <td></td> <td>%</td> <td>0.0221</td> </tr> <tr> <td>Proposed Normative Heat Rate at 70% MCR Operation</td> <td></td> <td>kCal/kWh</td> <td>2497</td> </tr> </tbody> </table>	Normative Heat Rate				Particulars	Formula	UoM	Value	Heat Rate proposed by 2x525 MW Maithon Power Limited		kCal/kWh	2443	Degradation of Heat Rate between 100% and 70% operation		%	0.0221	Proposed Normative Heat Rate at 70% MCR Operation		kCal/kWh	2497																																																																								
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F.1	Federation of Indian Chambers of Commerce and Industry (FICCI)	Applicability of Tariff Regulation 2014-19 for hydro projects	In order to maintain regulatory certainty in tariff approach especially under the current market scenario, the completion of award of works before December 31, 2015 should not be considered as a mandatory condition for exempting hydro projects for participating under mandatory competitive bidding and the																																																																																												

			Tariff for those hydro projects should continue to be regulated and be determined as per the Tariff norms to be notified by CERC under the said Tariff Regulations over next Control Period (2014-2019).
		Advance Against Depreciation (AAD)	Advance Against Depreciation (AAD) concept may be re-introduced. It will help the developers in servicing the debt. Insurance premium should be allowed separately. Due to technology change and non-availability of experienced man power for super critical units (660/800 MW), Normative availability for the these plants to be commissioned in next tariff period may be considered as 80%
G) Individual/Public Group/Any others			
G.1	R.B.Sharma	Availability of domestic coal	<p>(a)The shortfall in fuel supply for thermal generation (coal + gas) is causing concern to the beneficiaries as the same is pass through in the tariff determination and not subject to regulation. The increase in the cost of imported coal is so high that even 10% blending of the imported coal with the domestic coal raises the variable cost of the tariff very high and has the potential to de-stabilize the entire thermal generation in the country. And if the variable cost which is unregulated component is so high in comparison to the fixed cost which is regulated component, then the question arises on the efficacy of the regulatory regime.</p> <p>(b) In a petition filed by GRIDCO Limited bearing Petition No. 152/MP/2012 wherein the entire thermal generation of NTPC Ltd. in the Eastern Region was analyzed which showed that the average fixed charge elements which is regulated constitute only 23% of the total cost of energy generated. Similarly the average variable charge component which is unregulated is very high and 77% of the total cost of energy. Thus, it is necessary for the Commission to issue guidelines on blending of the imported coal with the domestic coal by the Central Sector thermal generating company whose tariff is decided on the 'COST PLUS' approach to enforce the efficacy of the regulatory regime.</p> <p>(c) The calculation of variable energy charges from the coal blended with imported coal in various proportions and then charging this</p>

			<p>variable energy charges from the beneficiaries amounted to cross subsidization of the energy charge inter-se amongst the beneficiaries. Subsidization in generation and transmission is not permissible under the Electricity Act, 2003. Thus, it is necessary for the generator to take prior permission from the beneficiaries to procure imported coal and the blending proportion in advance.</p> <p>(d) In view of the above legal issues, the para wise suggestion are furnished as under</p> <ul style="list-style-type: none"> ➤ Para a) The ceiling norm of blending ratio be specified and within the ceiling norm blending ration can be agreed in advance with the beneficiaries in the RPC forum. ➤ Para b) Prior consent of beneficiaries is necessary in view of legal issue as per para 6.1.3 above. This is practical as such consent can be taken in the RPC forum prescribed under the Electricity Act, 2003. ➤ Para c) The reasonability and competitiveness of the procurement of fuel through e-auction coal or imported coal can also be debated in the RPC forum. ➤ Para d) The situation of shortage of fuel is expected during the tariff years 2014-19 and hence existing provision of Regulation 21(4) needs retention.
G.2	Awadh Behari Giri	Sale of Hydro Power	<p>Hydro Power Policy permits competitive Bidding. Therefore, in order to make sensible, viable & financeable business model based on the principle of business risk and market reward in the financing model, allocation of hydro power project site on any single competitive parameter should consider the following :</p> <ul style="list-style-type: none"> a) The cost of the upfront premium, paid in securing the project, duly adjusted for loss of value during the gestation until commissioning, or b) The additional free energy (AFE) that is given to free to the State Govt., upon commissioning of the project, or c) The cost of the free equity to the State Govt. that will be funded by the developer during the project development and construction stage over years. <p>Further, hydro power projects should be</p>

			without any obligation to sell major (60%) part of its saleable generation under PPA based on cost plus tariff.
		Other Aspects in existing that needs consideration	<p>a) Hydro Projects need to be facilitated and encouraged by the regulatory system for longer effect.</p> <p>b) Hydro projects are awarded through competitive bidding for a concession period of 35 to 40 years without providing adequate information on projects cost and energy generation (because the same is finalized by CEA post award and completion of studies to be carried out by the project developer at his own costs and risks.</p> <p>c) The tariff regulations do not consider passing the costs and risks or development into the tariff.</p> <p>d) The long project execution time and risks, dilute the effective Return on Equity which is fixed @15.5%.</p> <p>e) In absence of hydro specific bids for energy purchases (peaking/seasonal supply, non-availability of round the clock power requirement) invited by State Utilities, it is difficult to tie-up the 60% of the Capacity on long term PPA, which is a mandatory prerequisite set by lenders for financial closure.</p>