Comments on Draft CERC Tariff Regulations, 2019-24

S. No.	Clause	Draft Regulations	Comments/ Suggestions	Rationale
1.	2 (1)	Provided that any generating station for which agreement(s) have been executed for supply of electricity to the beneficiaries on or before 5.1.2011 and the financial closure for the said generating station has not been achieved by 31.3.2019, such projects shall not be eligible for determination of tariff unless fresh consent of the beneficiaries is obtained and furnished.	Provided that any generating station (except those where all the units for which have not attained COD) for which agreement(s) have been executed for supply of electricity to the beneficiaries on or before 5.1.2011 and the financial closure for the said generating station has not been achieved by 31.3.2019, such projects shall not be eligible for determination of tariff unless fresh consent of the beneficiaries is obtained and furnished.	 Unless the PPAs are terminated, Commission should determine the tariff for such stations. Such revision in regulations will encourage Discoms to arm-twist the generators.
2.	3(5)	'Auxiliary Energy Consumption' or 'AUX: In relation to a period in case of a generating station means the quantum of energy consumed by auxiliary equipment of the generating station, such as the equipment being used for the purpose of operating plant and machinery including switchyard of the generating station	Auxiliary Energy Consumption' or AUX: In relation to a period in case of a generating station means the quantum of energy consumed by auxiliary equipment of the generating station, such as the equipment being used for the purpose of operating plant and machinery or installed in compliance of a Law/Directions from authorities including switchyard of the generating station	This definition as per draft doesn't cover the FGD system as they are not used to operate the plant. Therefore, the Definition may be modified to that extent to cover the emission control systems also that are not necessary to operate the plant but are installed as a part of Compliance of law/directions from Govt.
3.	3 (26)	'Force Majeure' for the purpose of these regulations means the event or circumstance or combination of events or circumstances including those stated below which partly or fully prevents the generating company or transmission licensee	'Force Majeure' for the purpose of these regulations means the event or circumstance or combination of events or circumstances including those stated below which partly or fully prevents the generating company or transmission licensee	 The definition should also define that delays in execution of project for reasons not attributable to the developer qualifies as a Force Majeure event. 100 years is a very long period and even future calamities /events may



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		a) b) c) d)	a) Act of God including lightning, drought, fire and explosion, earthquake, volcanic eruption, landslide, flood, cyclone, typhoon, tornado, geological surprises, or exceptionally adverse weather conditions which are in excess of the statistical measures for the last hundred years; or b) c) d) e) reasons not attributable to the developer /qenerators	not the predicted. Therefore, this clause may be amended appropriately. Even with in excess of the statistical measures of last 10/15/25 years etc. shall also have an adverse impact on the performance of the project after operation. The definition may be amended accordingly.
4.	3.(35)	'Indian Govt. Instrumentality' means the Government of India, Governments of State (where the project is located) and any ministry or department or board or agency controlled by Government of India or Government of State where the project is located, or quasi-judicial authority constituted under the relevant statutes in India;	Indian Govt. Instrumentality' means the Government of India, Governments of State (where the project is located and affected) and any ministry or department or board or agency controlled by Government of India or Government of State and any other State where the project is located, or quasi-judicial authority constituted under the relevant statutes in India; and all Statutory agencies/bodies and Agencies under direct or indirect control of the State or Central Govt.	 The definition should also include the Statutory agencies/bodies and Agencies under indirect control of the State or Central Govt. The definition may be amended accordingly.
5.	3 (41)	(41) 'Investment Approval' means approval by the Board of the generating company	(41) 'Investment Approval' means approval by the Board of the generating company or	NTP (notice to proceed) is issued only after FC (Financial Closure). Therefore



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		or the transmission licensee or Cabinet Committee on Economic Affairs (CCEA) or any other competent authority conveying administrative sanction for the project including funding of the project and the timeline for the implementation of the project: Provided that the date of Investment Approval shall reckon from the date of the resolution of the Board of the generating company or the transmission licensee where the Board is competent to accord such approval and from the date of sanction letter of competent authority in other cases;	the transmission licensee or Cabinet Committee on Economic Affairs (CCEA) or date of financial closure or any other competent authority conveying administrative sanction for the project including funding of the project and the timeline for the implementation of the project: Provided that the date of Investment Approval shall reckon from the date of the resolution of the Board of the generating company or the transmission licensee where the Board is competent to accord such approval and from the date of sanction letter of competent authority in other cases;	it would be prudent if any appraisal of delay is COD is considered based on FC.
6.	3 (42)	(42) 'Landed Fuel Cost' means the total cost of coal (including biomass in case of co-firing), lignite or the gas delivered at the unloading point of the generating station and shall include the base price or input price, transportation cost (overseas or inland or both) and handling cost and applicable statutory charges;	(42) 'Landed Fuel Cost' means the total cost of coal (including biomass in case of co-firing), lignite or the gas delivered at the unloading point of the generating station and shall include the base price or input price, transportation cost (overseas or inland or both) and handling cost and washing and associated charges including applicable statutory charges;	 Many IPPs are forced to undertake washing of coal to comply with MoEF norm to achieve 34% ash content. Therefor cost of washing may be included in landed cost.
7.	3 (49)	(49) 'Original Project Cost' means the capital expenditure incurred by the	(49) 'Original Project Cost' means the capital expenditure incurred by the	• There can be certain capital expenditure items that were not in



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		generating company or the transmission licensee, as the case may be, within the original scope of the project up to the cutoff date, and as admitted by the Commission;	generating company or the transmission licensee, as the case may be, within the original scope of the project up to the cutoff date, and as admitted by the Commission; in case of beyond Original Scope of work, genuine expenditure may be allowed by Commission on case to case basis.	"Original Project Cost" but became necessary. Eg: Major accident like failure of equipment's requiring complete replacement of the equipment's.
8.	3 (79)	'Useful life' in relation to a unit of a generating station, integrated mines, transmission system and communication system from the date of commercial operation shall mean the following: Hydro generating station including pumped Storage hydro generating stations: 40 years	Increase in the life of project has direct impact on the rate of depreciation allowed by CERC. However, there is no change in the rate of depreciation allowed by CERC in draft regulations. Even if rates are not revised, depreciation from 13 th year onwards will be revised downwards. Therefore, projects with pending loan repayments will be impacted by lower recovery of depreciation.	Change in useful life should have an impact on loan repayment profile. Since repayment is supported by recovery of depreciation in tariff, the depreciation period may be increased to match with the actual loan repayment tenure. Also, long term funding is being advocated by various agencies at different forums including the proposed hydro policy.
			We request that considering the increase in project life depreciation period of 12 years shall be increased (say 15 years) in case of hydro in order to match the actual loan repayment to some extent. Also rate of depreciation should not be revised downwards w.r.t change in the life of project.	Also plants with pending loan repayment will be impacted as due to increase in project life, as per methodology, from 13 th year, the remaining depreciation will be spread into 28 years instead of 23 years.



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9.	3 (79)	Useful Life: (a) (b) (d) AC and DC sub-station : 25 years (e) Gas Insulated substation: 25 years	Existing regulations specify useful life as 35 years for AC and DC Substations and GIS for which NIT is issued after 01.04.2014, this contradicts the useful life as per Draft Regulations. Kindly clarify	Clarification on useful life considered for GIS and AC & DC Substation.
10.	8 (6)	Provided also that the Gross Calorific Value of coal rejects shall be as measured jointly by the generating company and the beneficiaries in a mutually agreed manner	GCV for coal rejects to be measured as per the process for coal. Clarification is required on the methodology for determination of GCV of coal rejects in order to avoid ambiguity	
11.	9 (3)	Application for determination of tariff: (3) In case of emission control system required to be installed in existing generating station as per revised emission standards, the application shall be made for determination of supplementary tariff (fixed charges or variable charge or both) based on the actual capital expenditure duly certified by the Auditor;	Application for determination of tariff: 3) In case of emission control system required to be installed in existing generating station as per revised emission standards, the application shall be made for determination of supplementary tariff (fixed charges or variable charge or both) based on the actual or projected capital expenditure duly certified by the Auditor;	 Capital expenditure can be certified by Auditor only after COD of such emission system. For reducing the time in tariff approval process, CERC may consider allowing provisional supplementary tariff (In line with Regulation 5 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) (First Amendment) Regulations, 2011) based on cost estimates. The same may be allowed after due prudence check by CERC during the truing-up process. This will reduce the cash flow mismatch for generators. This is in line



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				with the practice of CERC in issuing provisional tariff for generation tariff.
12.	11.	In-principle Approval in Specific circumstances: The generating company or the transmission licensee undertaking any additional capitalization on account of change in law events or force majeure conditions may file petition for in-principle approval for incurring such expenditure after prior notice to the beneficiaries or the long term	In-principle Approval in Specific circumstances: The generating company or the transmission licensee undertaking any additional capitalization on account of change in law events or force majeure conditions may file petition for in-principle approval for incurring such expenditure after prior notice to the beneficiaries or the long term. In case Emission Control Systems are required to be installed the same may also be considered for In-Principal approval	 As per draft regulation 9(3), for emission control system the Applicant has to file petition after the actual expenditure. The current provision is against the clause 9 (3) Since MOEF notification 2015 is already declared as Change in law, resulting into substantial additional investment to the generators, therefore, it must be eligible for in principle approval.
13.	13	Truing up of tariff for the period 2019-24: (3) The generating company or the transmission licensee, as the case may be, may make an application for interim truing up of tariff in the year 2021-22, if the annual fixed cost increases by more than 20% over the annual fixed cost as determined by the Commission for the respective years of the tariff period. Provided that if the actual additional capital expenditure falls short of the projected	Truing up of tariff for the period 2019-24: (3) The generating company or the transmission licensee, as the case may be, may make an application for interim truing up of tariff in the year 2021-22, if the annual fixed cost increases by more than 20% over the annual fixed cost as determined by the Commission for the respective years of the tariff period. Provided that if the actual additional capital expenditure falls short of the projected	 Mid-term truing-up should continue to be allowed as in FY 14-19 regulations. Such truing-up helps generating companies in keeping their books updated and also helps in better cash flow management. Keeping the truing-up due for 5 years shall come as onetime write-off or loss in books which could make project financially non-viable.



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		additional capital expenditure allowed under provisions of Chapter 7 of these regulations, the generating company or the transmission licensee, as the case may be, shall not be required to file any interim true up petition for this purpose and shall refund to the beneficiaries or the long term customers, as the case may be, the excess tariff recovered corresponding to the projected additional capital expenditure not incurred under intimation to the Commission at the bank rate as on 1st April of the respective years.	additional capital expenditure allowed under provisions of Chapter 7 of these regulations, the generating company or the transmission licensee, as the case may be, shall not be required to file any interim true up petition for this purpose and shall refund to the beneficiaries or the long term customers, as the case may be, the excess tariff recovered corresponding to the projected additional capital expenditure not incurred under intimation to the Commission at the bank rate as on 1st April of the respective years.	
14.	14 (1)	14. Components of Tariff: (1) The tariff for supply of electricity from a thermal generating station shall comprise two parts, namely, capacity charge (for recovery of annual fixed cost consisting of the components as specified in Regulation 51 of these regulations) and energy charge (for recovery of primary and secondary fuel cost and limestone cost where applicable).	14. Components of Tariff: (1) The tariff for supply of electricity from a thermal generating station shall comprise two parts, namely, capacity charge (for recovery of annual fixed cost consisting of the components as specified in Regulation 51 of these regulations) and energy charge (for recovery of primary and secondary fuel cost and limestone cost & Ammonia related cost, where applicable).	More clarity to be provided on use of re-agents used in SOX and NOX control.
15.	18 (2)	18. Capital Cost	18 (2)	Existing proposition does not include forex directly paid to a contractor.



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		(2) The Capital Cost of a new project shall include the following:	(o) (p) Capital expenditure in form of forex loss to be allowed.	
16.	18 (3)	(3) The Capital cost of an existing project shall include the following:	(3) The Capital cost of an existing project shall include the following: (g) Expenditure on account of change in law and force majeure events.	Existing generating stations should be allowed capital cost for any change in law or force majeure, incurred during construction/operation as the case may be.
17.	18 (5)	(5) The following shall be excluded from the capital cost of the existing and new projects:(d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy:	(5) The following shall be excluded from the capital cost of the existing and new projects: (d) Proportionate cost of land of the existing project which is being used for generating power from generating station based on renewable energy:	The benefit of lower cost shall be reflected in tariff of renewable energy generator and power sold. Hence it would be a double hit for the project company.
18.	21 (b)	Controllable and Uncontrollable factors: The following shall be considered as controllable and uncontrollable factors leading to cost escalation, IDC and IEDC of the project:	Controllable and Uncontrollable factors: The following shall be considered as controllable and uncontrollable factors leading to cost escalation, IDC and IEDC of the project:	Delay in execution of project on account of contractor, supplier may not be classified as "controllable factors".



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		 i. (1) The "controllable factors" shall include but shall not be limited to the following: a. Efficiency in the implementation of the project not involving approved change in scope of such project, change in statutory levies or change in law or force majeure events; and b. Delay in execution of the project on 	 i. (1) The "controllable factors" shall include but shall not be limited to the following: a. Efficiency in the implementation of the project not involving approved change in scope of such project, change in statutory levies or change in law or force majeure events; and b. Delay in execution of the project on 	 In cases where developer has made significant advance payments to the contractor /supplier, it is very difficult to ensure timely execution in case such supplier goes into bankruptcy. Developer has no recourse but to go to NCLT for resolution and therefore such issue cannot be in control of the developer.
		account of contractor, supplier or agency of the generating company or transmission licensee.	account of contractor, supplier or agency of the generating company or transmission licensee.	 Commission may evaluate such issues on case to case basis instead of considering such issues as "Controllable".
19.	21(b)	(2) The "uncontrollable factors" shall include but shall not be limited to the following: a. Force Majeure events; b. Change in law; and c. Time and cost over-runs on account of land acquisition except where the delay is attributable to the generating company or the transmission licensee;	2) The "uncontrollable factors" shall include but shall not be limited to the following: a. Force Majeure events; b. Change in law; and c. Time and cost over-runs on account of land acquisition except where the delay is attributable to the generating company or the transmission licensee, any force majeure event or any other reason beyond the control of developer like delay in providing enabling infrastructure by govt. etc. to be determined on case to case basis	 In case of time and cost over-runs, there may be instances wherein reasons are beyond the control of developer, these should be considered like case to case basis. Like in hydro, any natural calamity not covered in force majeure event such as moderate flood/snowfall impacting progress, enabling infrastructure to project area which is to be provided by state authorities etc. should have impact in project schedule along with cost.



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				These things should be considered on case to case basis.
20.	29.	Additional Capitalization on account of Revised Emission Standards:	Revised Emission Standards:	Kindly clarify - whether CEA specified technology is the only technology which can be used for installation of
		(1) A generating company requiring to incur additional capital expenditure in the existing generating station for compliance of the applicable revised emissions standards shall share its proposal with the beneficiaries and file a petition for approval for undertaking such additional capitalization;	(1) A generating company requiring to incur additional capital expenditure in the existing generating station for compliance of the applicable revised emissions standards shall share its proposal with the beneficiaries and file a petition for approval for undertaking such additional capitalization; provided that <i>The projects</i>	all the technologies. (eg. ammonia based technology is yet to be assessed by CEA). Therefore, it is essential that all the globally established technology should be included for assessment by CEA and for prudence check by CERC.
		(2) The proposal under clause (1) above shall contain details of proposed technology as specified by the Central Electricity Authority, scope of the work, phasing of expenditure, schedule of	where power is being supplied to beneficiaries under Sec-61 & 63 of the act need not need to file a fresh petition. (2) The proposal under clause (1) above shall contain details of proposed	CERC may also issue benchmark cost for all the global technologies. The projects where power is being supplied to beneficiaries under Sec-61 & 63 of the act
		completion, estimated completion cost including foreign exchange component, if any, detailed computation of indicative impact on tariff to the beneficiaries, and any other information considered to be relevant by the generating company;	technology as specified by the Central Electricity Authority, scope of the work, phasing of expenditure, schedule of completion, estimated completion cost including foreign exchange component, if any, detailed computation of indicative impact on tariff to the beneficiaries, and	need not need to file a fresh petition for approval in case a petition is already filed for the same project. As it would lead to unnecessary burden of cases. • Provisional tariff may be allowed in line
		(3) Where the generating company makes an application for approval of additional	any other information considered to be relevant by the generating company;	with Regulation 5 of the Central Electricity Regulatory Commission (Terms and



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		capital expenditure on account of implementation of Emission Control Standards, the Commission may grant approval after due consideration of the reasonableness of the cost estimates, financing plan, schedule of completion, interest during construction, use of efficient technology, cost-benefit analysis, and such other factors as may be considered relevant by the Commission. (4) After completion of the implementation of revised emission standards, the generating company shall file a petition for determination of tariff. Any expenditure incurred or projected to be incurred and admitted by the Commission after prudence check based on reasonableness of the cost and impact on operational parameters shall form the basis of determination of tariff.	(3) Where the generating company makes an application for approval of additional capital expenditure on account of implementation of Emission Control Standards, the Commission may grant approval after due consideration of the reasonableness of the cost estimates, financing plan, schedule of completion, interest during construction, use of efficient technology, cost-benefit analysis, and such other factors as may be considered relevant by the Commission. (4) At least 6 months before the completion of the implementation of revised emission standards, the generating company shall file a petition for determination of tariff. Any expenditure incurred or projected to be incurred and admitted by the Commission after prudence check based on reasonableness of the cost and impact on operational parameters shall form the basis of determination of tariff. (5) The Provisional tariff may be determined by prior to implementation of the revised	Conditions of Tariff) (First Amendment) Regulations, 2011



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	Clause 30.	Return on Equity: (1) (2) Provided that: i. Return on equity in respect of additional capitalization after cut off date within or beyond the original scope shall be	emission Standards on specific request if the commissions deems it fit. Return on Equity: 1) . (2: Provided that: Provided that: i. Return on equity in respect of additional capitalization after cut off date within or	 Additional RoE provides incentive for timely commissioning of the projects and therefore should be continued for FY 19-24 period as well.
		computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system;	beyond the original scope shall be computed at the weighted average rate of interest on actual loan portfolio of the generating station or the transmission system; i. in case of projects commissioned on or after 1st April, 2019, an additional return of 0.50 % shall be allowed, if such projects are completed within the timeline specified.	 Hydro being a capital intensive project also involves lot of construction challenges/risk. To attract more investors in this domain, an additional RoE (say 0.5%) should be provided over and above the existing RoE Also, RoE for the RoR project is less than storage project. It is to be noted that RoR scheme considered to be base load plant and therefore in the tariff preference, it has disadvantage over storage type project. Storage based project can get additional benefit out of peak tariff as storage based project supports peak generation particularly in lean season.



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				Considering this aspect, it would be prudent to have higher RoE for RoR scheme over storage scheme.
				Any equity invested should attract the ROE.
22.	33	Depreciation: (3) The salvage value of the asset shall be considered as 5% and depreciation shall be allowed up to maximum of 95% of the capital cost of the asset: Provided that the salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered depreciable. Provided further that in case of hydro generating station, the salvage value shall be as provided in the agreement, if any, signed by the developers with the State Government for development of the Plant: Provided also that the capital cost of the assets of the hydro generating station for	Depreciation: (3) The salvage value of the asset shall be considered as 5% and depreciation shall be allowed up to maximum of 95% of the capital cost of the asset: Provided that the salvage value for IT equipment and software shall be considered as NIL and 100% value of the assets shall be considered depreciable. Provided further that in case of hydro generating station, the salvage value shall be as provided in the agreement, if any, signed by the developers with the State Government for development of the Plant: Provided also that the capital cost of the assets of the hydro generating station for	Reducing salvage value to 5% is in line with company' act and accounting practices. However, CERC may clarify that rate of depreciation will change because of such reduction in salvage value or only the depreciation post completion of first 12 years will undergo a change.
		the purpose of computation of depreciated value shall correspond to the percentage of	the purpose of computation of depreciated value shall correspond to the percentage of	



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		sale of electricity under long-term power purchase agreement at regulated tariff:	sale of electricity under long-term power purchase agreement at regulated tariff:	
		Provided also that any depreciation disallowed on account of lower availability of the generating station or generating unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life and the extended life.	Provided also that any depreciation disallowed on account of lower availability of the generating station or generating unit or transmission system as the case may be, shall not be allowed to be recovered at a later stage during the useful life and the extended life.	
		(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I to these regulations for the assets of the generating station and transmission system: Provided that the remaining depreciable value as on 31st March of the year closing after a period of 12 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.	(5) Depreciation shall be calculated annually based on Straight Line Method and at rates specified in Appendix-I to these regulations for the assets of the generating station and transmission system: Provided that the remaining depreciable value as on 31st March of the year closing after a period of 15 years from the effective date of commercial operation of the station shall be spread over the balance useful life of the assets.	Period of 12 years need to be reviewed in light of the actual loan tenure being provided by lenders. Generally, it is higher than this and hence there is gap between depreciation & repayment amount post 12 th year. In order to streamline, this period should be 15 years which is a generally accepted loan tenure among most of the funding arrangement concluded by lenders so far.
23.	34	Interest on Working Capital: (1) The working capital shall cover:	Interest on Working Capital: (1) The working capital shall cover:	Considering the severe coal shortage prevailing in country, plants should be



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		(a) Coal-based/lignite-fired thermal generating stations (i) Cost of coal or lignite and limestone towards stock, if applicable, for 15 days for pit-head generating stations and 20 days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity whichever is lower;	(a) Coal-based/lignite-fired thermal generating stations (i) Cost of coal or lignite and limestone towards stock, if applicable, for 15 days for pit-head generating stations and 20 30 days for non-pit-head generating stations for generation corresponding to the normative annual plant availability factor or the maximum coal/lignite stock storage capacity whichever is lower;	 encouraged to stock coal to ensure plants are not shutdown in case of shortfall in supplies by CIL (eg. During strike periods in mines) Such reduction from existing 30 days is unfair and will discourages generators to stock coal. Therefore, the prevailing norm of 30 days may be continued to for both pit-head and non-pit head plants.
24.	34	Interest on Working Capital: (1) The working capital shall cover: (a) Coal-based/lignite-fired thermal generating stations (v) Receivables equivalent to 45 days of capacity charges and energy charges for sale of electricity calculated on the normative annual plant availability factor; and (c) Hydro generating station (including pumped storage hydroelectric generating station) and transmission system: (i) Receivables equivalent to 45 days of annual fixed charges;	Interest on Working Capital: (1) The working capital shall cover: (a) Coal-based/lignite-fired thermal generating stations (v) Receivables equivalent to-45 90 days of capacity charges and energy charges for sale of electricity calculated on the normative annual plant availability factor; and (c) Hydro generating station (including pumped storage hydroelectric generating station) and transmission system: (i) Receivables equivalent to 45 90 days of annual fixed charges;	 Today most of the plants are struggling to get timely payments from Discoms with delay of 3-4 months on regular bills and more than 1-2 year for disputed bills. The fact can be verified from the portal (PRAAPTI) managed by Ministry of Power (MoP). As per the PRAAPTI website the outstanding receivables for GMR Energy is more than 1600 Crs as on Oct'2018.



S. No.	Clause	Dr	aft Regulations	Com	ments/ Suggestions		Rationale
25.	35.	(1) Thermal Gel	Maintenance Expenses: nerating Station: Normative Maintenance expenses of	Operation and Expenses: (1) Thermal Normative	Generating Station: e Operation and		For 300/ 350 MW units, O&M expenses allowed for FY 20 @24.22 lakhs/MW is less than allowed for FY 19 @25.47 lakhs/MW under existing regulations. Kindly clarify how the
		follows:	ating stations shall be as		nce expenses of thermal g stations shall be as follows:		O&M cost for the starting year FY19- 20 has been determined in Draft Regulations.
		Year	300/330/ 350 MW Series			•	Further, average escalation considered in FY 14-19 was 6.30%
		FY 2019-20	24.22				whereas average escalation
		FY 2020-21	24.99				considered in FY 19-24 is considered
		FY 2021-22	25.79		•	@3.20%. O&M expenses for thermal power	
		FY 2022-23	26.62				
		FY 2023-24	27.47	Year	300/330/ 350 MW Series		plants is based on expenditure
				FY 2019-20	27.08		incurred on spares and services during
				FY 2020-21	28.78		a year. Normally only 15% of the O&M is in form of spares balance 85% is
				FY 2021-22	30.60		services which is basically the labour
				FY 2022-23	32.52		cost. Service related contracts are
				FY 2023-24	34.57		mainly dependent on manpower
						•	deployed and hence should be closely linked to the actual changes in labour rates, which may vary from one state to another. Therefore, reliance on WPI / CPI for is not prudent because it does not reflect the actual increase in labour cost. It



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				would be prudent if Commission considers actual labour price increase. Therefore, RBI index for Labour prices must be used for computations of O&M cost. • Therefore, CERC may consider the existing escalation of 6.30% or Use to RBI Labour Index for FY 19-24 period.
26.	35	Operation and Maintenance Expenses: (2) Hydro Generating Station: (b) In case of the hydro generating stations declared under commercial operation on or after 1.4.2019, operation and maintenance expenses of first year shall be fixed at 2.5% of the original project cost (excluding cost of rehabilitation & resettlement works, IDC and IEDC) and, in case of hydro generating station which have not completed a period of three years as on 1.4.2019, operation and maintenance expenses of 2019-20 shall be worked out by applying escalation rate of 4.70% on the applicable operation & maintenance expenses as on 31.3.2019. The operation & maintenance expenses for subsequent years of the tariff period shall	Clarity needed on original project cost to form base. Is it going to be based on CEA apprised cost or FC cost or completion cost which supposed to be considered for tariff determination.	 Normally only 15% of the O&M is in form of spares balance 85% is services which is basically the labour cost. Service related contracts are mainly dependent on manpower deployed and hence should be closely linked to the actual changes in labour rates, which may vary from one state to another. Therefore, reliance on WPI / CPI for is not prudent because it does not reflect the actual increase in labour cost. It would be prudent if Commission considers actual labour price increase. Therefore, RBI index for Labour prices must be used for computations of O&M cost. Therefore, CERC may consider using the RBI Labour Index for FY 19-24



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		be worked out by applying escalation rate of 4.70% per annum.		
27.	39	Capital Cost	Kindly clarify whether the Capital cost incurred till the Mine Target Capacity will it be allowed to be amortized over the recoverable mine reserves.	
28.	35 (2-b)	in case of hydro generating station which have not completed a period of three years as on 1.4.2019, operation and maintenance expenses of 2019-20 shall be worked out by applying escalation rate of 4.70% on the applicable operation & maintenance expenses as on 31.3.2019.	Kindly clarify - whether cap of 4% of the admitted capital cost on COD of the respective year will be applicable on such project.	
29.	39 (2)	The expenditure incurred for development of the integrated mine by the generating company upto date of commercial operation shall be considered for the purpose of capital cost and the expenditure incurred after the date of commercial operation till the date of achieving target capacity shall be treated as capital work in progress (CWIP) and shall be capitalized on year to year basis as additional capital expenditure corresponding to the coal production level specified in the progressive mining plan or actual production, whichever is higher;	Kindly clarify on "achieving target capacity" - is it the Peak Rated Capacity of the Mine as per the approved Mine Plan.	



S. No.	Clause	Draft Regulations	Comments/ Suggestions	Rationale
30.	42A,	Depreciation in respect of integrated coal mine shall be computed from the date of commercial operation and value base for the purpose of depreciation shall be the capital cost of the asset admitted by the Commission. Depreciation shall be chargeable from the first year of commercial operation. In case of commercial operation of the asset for part of the year, depreciation shall be charged on pro-rata basis.	Kindly clarify - WDV method shall be applicable for determining depreciation.	
31.	42B	The Operation and Maintenance expenses of mine shall be determined based on the original project cost for first year and thereafter, it shall be escalated at the average rate of wholesale price index (WPI) for each financial year.	Fuel cost, Consumables cost and lubrication cost should be allowed as pass-through since it will be a function of the lead distance and the mine lift, which progressively changes with the Mine Plan, which shall be subject to True up at the end of the Control Period.	
32.	45(1)	The input price of coal sourced from the integrated mine shall be derived based on the production cost and shall comprise following components: (a) Capital Cost; (b) Depreciation; (c) Interest on loan capital; (d) Return on equity; (e) Interest on working capital; and (f) Operation and maintenance expenses	Kindly clarify on the inclusion of capital cost as a part of the captive mine production cost.	



S. No.	Clause	Draft Regulations	Comments/ Suggestions	Rationale
33.	50.	Landed Price of Reagent; (Limestone, Sodium Bi-Carbonate, Urea and Anhydrous Ammonia etc.): (1) Where the specific reagent such as limestone, Sodium Bi-Carbonate, Urea and Anhydrous Ammonia are used during operation of emission control system, the landed price of such reagents shall be determined based on normative consumption specified in clause (2) of this Regulation and purchase price of the reagent through competitive bidding, applicable statutory charges and transportation cost; (2) The normative consumption of specific reagent for the various technologies installed for Emission Control System shall	CERC may also notify the norms of consumption norms for Ammonia based systems (Efficient Ammonia dosing system) for SOX Control system.	As per our assessment EADS is equally efficient technology with lower operational cost and lesser issues of managing by-products. Therefore, proper assessment of such technologies may be evaluated by CERC.
34.	51.	be considered as under: Computation and Payment of Capacity Charge for Thermal Generating Stations: (1) 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. The total capacity charge payable for a generating	CERC may continue with the existing process of Annual Plant Availability Factor.	There are instances of unforeseen and events beyond the reasonable control of generators on account of which there are prolonged forced shutdown ex. on account of water shortages (in Maharashtra), The concept of NQPAF fails to consider such issues.



S. Clause	Draft Regulations	Comments/ Suggestions	Rationale
NO.	station shall be shared by its beneficiaries as per their respective percentage share or allocation in the capacity of the generating station. Capacity Charge for the month shall be recovered in two parts viz., Capacity Charge for Peak period of the month and Capacity Charge for Off-Peak period of the month. (5) Achievement of PAF less than the specified NQPAF in "Peak" or "Off-Peak" periods shall result in pro-rata reduction in recovery of Capacity Charge for the appropriate period. Provided that if the cumulative peak period PAF achieved during a quarter is more than the specified NQPAF for peak period and the cumulative Off-Peak period PAF achieved during the quarter is less than the specified NQPAF for Off-Peak period, the loss in recovery of Capacity Charge for Off-Peak period shall be off-set against the notional gain on account of overachievement in Peak period, subject to the ceiling of full recovery of Capacity Charge for Off-Peak period;		 Recovery of capacity charges based on cumulative Plant Availability allows generating stations to cover up any loss of availability due to economic or forced shutdown. Therefore, introduction of new concept of NQPAF would severely impacts recovery of fixed charges and the financial performance. Further in the prevailing coal supply shortage scenario, generating stations are not in a position to ramp up and ramp down during peak and off-peak hours. Coal shortage is now prevailing for more than 2-3 years and this is a situation which is completely beyond the control of generators. Therefore, it will be highly prejudiced to introduce peak and off-peak tariff in such an environment where generators are not in a position of full coal availability in spite of making 100% advance payments. We feel peak and off-peak tariff for generators can be introduced once the market is more mature especially in context of ready / easy availability of



S. No.	Clause	Draft Regulations	Comments/ Suggestions	Rationale
		Provided further that if the cumulative peak period PAF achieved during the quarter is less than the specified NQPAF for peak period and the cumulative Off-Peak period PAF achieved during the quarter is more than the specified NQPAF for Off-Peak period, the loss in recovery of Capacity Charge for Peak period shall not be off-set against the notional gain on account of over-achievement in Off-Peak period; Provided also that carry forward of underrecovery of Capacity Charge shall not be allowed for recovery from one quarter to the subsequent quarter.		coal and healthy (financially strong) power procurer.
35.	52.	Computation and Payment of Energy Charge for Thermal Generating Stations:	Computation and Payment of Energy Charge for Thermal Generating Stations:	include provision for Discom to pay upto 80% of disputed amount.



S. No.	Clause	Draft Regulations	Comments/ Suggestions	Rationale
		Provided that in such case, prior permission from beneficiaries shall not be a precondition, unless otherwise agreed specifically in the power purchase agreement: Provided further that the weighted average price of use of alternative source of fuel shall not exceed 30% of base price of fuel computed as per clause (7) of this Regulation.	the use of alternative source of fuel supply shall be permitted to generating station: Provided that in such case, prior permission from beneficiaries shall not be a precondition, unless otherwise agreed specifically in the power purchase agreement: Provided further that the weighted average price of use of alternative source of fuel shall not exceed 30% of base price of fuel computed as per clause (7) of this	alternative sources of fuel in case of Linkage Coal Shortfall.
		Provided also that where the energy charge rate based on weighted average price of use of fuel including alternative source of fuel exceeds 30% of base energy charge rate as approved by the Commission for that year or energy charge rate based on weighted average price of use of fuel including alternative sources of fuel exceeds 20% of energy charge rate based on based on weighted average fuel price for the previous month, whichever is lower shall be considered and in that event, prior consultation with beneficiary shall be made not later than three days in advance. 4	Provided also that where the energy charge rate based on weighted average price of use of fuel including alternative source of fuel exceeds 30% of base energy charge rate as approved by the Commission for that year or energy charge rate based on weighted average price of use of fuel including alternative sources of fuel exceeds 20% of energy charge rate based on based on weighted average fuel price for the previous month, whichever is lower shall be considered and in that event, prior consultation with beneficiary shall be made not later than three days in advance.	



S. No.	Clause	Draft Regulations	Comments/ Suggestions	Rationale
		5 6	4 5 6 7 However, it is clarified that in case of any dispute the DISCOMs shall pay the 80% of the disputed amount till the matter is finally settled. If post final settlement any excess amount is paid by either party the same shall be returned back to other party at the rate of late Payment surcharge as specified in these regulations.	
36.	52 (3)	In case of part or full use of alternative source of fuel supply by coal based thermal generating stations other than as agreed by the generating company and beneficiaries in their power purchase agreement for supply of contracted power on account of shortage of fuel or optimization of economical operation through blending, the use of alternative source of fuel supply shall be permitted to generating station: Provided further that the weighted average price of use of alternative source of fuel shall not exceed 30% of base price of fuel computed as per clause (7) of this Regulation.	It is suggested that that 30% criteria must be either removed or relaxed considering the shortage of coal supply and generator having no control over procurement prices of Coal.	A generator doesn't have any control over the landed cost of the coal/lignite. Base ECR determined by the commission in the beginning of the tariff period is determined based on data of past three months only which can undergo changes in the later months based on actual coal supply & demand scenario.



S. No.	Clause	Draft Regulations	Comments/ Suggestions	Rationale
37.	59	Norms of operation for thermal generating station; The norms of operation as given hereunder shall apply to thermal generating stations: (A) Normative Quarterly Plant Availability Factor (NQPAF) (a) For all thermal generating stations, except those covered under clauses (b), (c), (d), & (e) - 83% Provided that for the purpose of computation of Normative Quarterly Plant Availability Factor, annual scheduled plant maintenance shall not be considered.	Norms of operation for thermal generating station: The norms of operation as given hereunder shall apply to thermal generating stations: (A) Normative Quarterly Plant Availability Factor (NQPAF) (a) For all thermal generating stations, except those covered under clauses (b), (c), (d), & (e) - 83% Provided that for the purpose of computation of Normative Quarterly Plant Availability Factor, annual scheduled plant maintenance shall not be considered and generating stations have to achieve the specified PLF excluding the annual scheduled maintenance as explained below: NQPAF= Availability* Days of Actual Operation/{Availability* Days in the Quarter of the Year- Days of Planned Shutdown)	For abundant clarity, CERC may clarify in the regulations that generators have to achieve PLF of 83% excluding or including the annual scheduled plant maintenance.
38.	59	Norms of operation for thermal generating station; The norms of operation as given hereunder shall apply to thermal generating stations: (A) Normative Quarterly Plant Availability Factor (NQPAF)	NQPAF should be set as per the Quarterly variation in Coal Supply as per the FSA. Further for gas plants the threshold for recovery of Fixed Cost should be set taking into consideration the availability of gas for power plants.	In order to avoid generating plant's under- recovery on FC should include this aspect also.



S. No.	Clause	Draft Regulations	Comments/ Suggestions	Rationale
			As per CEA recommendations, Norms of operation may be considered for coal plants.	
39.	59.	Norms of operation for thermal generating station 59. The norms of operation as given hereunder shall apply to thermal generating stations: (B) Normative Quarterly Plant Load Factor (NQPLF) for Incentive: (a) For all thermal generating stations, except those covered under clauses (b), (c) - 85%	It is suggested that incentive must be payable based on Availability declaration by Generator not on the basis of Offtake by beneficiaries.	Since PLF is dependent on various factors which are not under direct control of a Generator i.e. offtake of Power, Fuel Availability etc. Therefor incentive must be payable based on Declared Capacity.
40.	59	The norms of operation as given hereunder shall apply to thermal generating stations: (C) Gross Station Heat Rate: (a) Existing Thermal Generating Station (i) For existing Coal-based Thermal Generating Stations, other than those covered under clauses (ii) and (iii) below: 200/210/250 MW Sets - 2,410 kCal/kWh 500 MW Sets (Sub-critical) - 2,375 kCal/kWh	CERC may include normative heat rate for 300/350 MW size units. Further CERC may clarify the Heat rate for "New" Generating Stations are those commissioned from 1.04.2009 or 10.4.2019.	 Heat rate is one of the most critical factor in the energy charges for thermal generating stations. However, there is lacuna in the CERC methodology for determination of heat rate norms as follows. There is no norm specified by CERC for 300 / 350 MW category. Norms specified by CERC is based on the actual data of NTPC stations with BHEL as BTG supplier. Whereas there are several imported BTG suppliers for



S. No.	Clause	Draft Regulations	Comments/ Suggestions	Rationale
				which design parameters are defined in a different manner.
				CERC may appropriately address the above two issues in the regulations by publishing specific norms for 300/350 MW size units as well.
				Further CERC may exercise its own prudence check in working out the station heat rate for thermal generating stations. For eg:
				CERC allows heat rate degradation of 4.5% over and above the design heat rate.
				Gross design heat Rate = (Gross Turbine heat rate / Boiler efficiency)
				In BHEL supplier contract, all the above parameters – turbine heat rate and boiler efficiency is defined. However, the same is not defined in Chinese / Korean machines supplier contracts. Where as in several Chinese contracts, gross design heat rate is not defined and the same has been derived as follows:



S. No.	Clause	Draft Regulations	Comments/ Suggestions	Rationale
				Gross design heat Rate = (Gross Turbine heat rate / Boiler efficiency) + design margin. Such design margin is ~50 kcal/kwh and varies as per the unit size. CERC may consider such variations on case to case basis while allowing the heat rate.
41.	59 (E)	(E) Auxiliary Energy Consumption :	Separate Auxiliary energy consumption should be provided for 300/350 MW size units.	 Auxiliary consumption of 300/350 MW sized unit cant be kept at same level of 500 MW unit. For most of the 300/350 MW sized unit even the design AEC is higher than the specified AEC of 5.75%.
42.	65	Note 3: FEHS = Free energy for home State, in percent and shall be taken as 13% or actual whichever is less.	Note 3: FEHS = Free energy for home State, in percent and shall be taken as per home state policy or 13% in absence of such policy in the state	 In state of HP, state policy mandates a hydro developer to give free power of 12%, 18% and 30% for different periods. It has also came up with deferment of free power from initial years towards later stages. This should be allowed to pass through in the tariff at this is as per the state policy and has to be adhered.
43.	70	Sharing of gains due to variation in norms:	Sharing of gains/Losses due to variation in norms:	No sharing of gains should be allowed by CERC or the losses should also be



S. No.	Clause	Draft Regulations	Comments/ Suggestions	Rationale
		(2) The financial gains by the generating company or the transmission licensee, as the case may be, on account of controllable parameters shall be shared between generating company or transmission licensee and the beneficiaries or long term transmission customers, as the case may be, on monthly basis with annual reconciliation. The financial gains computed as per the following formulae in case of generating station other than hydro generating stations on account of operational parameters as shown in Clause 1 of this Regulation shall be shared in the ratio of 50:50 between the generating stations and beneficiaries.	(2) The financial gains <i>or losses</i> by the generating company or the transmission licensee, as the case may be, on account of controllable parameters shall be shared between generating company or transmission licensee and the beneficiaries or long term transmission customers, as the case may be, on monthly basis with annual reconciliation. The financial gains/ <i>losses</i> computed as per the following formulae in case of generating station other than hydro generating stations on account of operational parameters as shown in Clause 1 of this Regulation shall be shared in the ratio of 50:50 between the generating stations and beneficiaries.	 shared equally among the stakeholders If sharing of loss cannot be an acceptable principle. The same should also not be considered for sharing of gains made by generating stations. There could be scenario that some project may get benefit out of CER (Carbon Emission Reduction) by way of adopting superior technology. Such benefits should go to the Generating Company as the generating company must be spending additional cost for achieving such CR reduction.
44.	New proposed		Tariff Regulations should also include specific clause for determination of tariff for cross border projects which will be supplying to India	These regulations are essential as there are many bilateral projects in Nepal and Bhutan with future plans to supply power to Indian States. Special provisions for recovery outside India It should also include projects located outside India having Loans in Foreign currency for Ex USD. Inclusion of tariff regulations for such cross border projects will help in sale of



S. No.	Clause	Draft Regulations	Comments/ Suggestions	Rationale
				power at reliable prices compared to volatility of prices discovered on power exchanges or bilateral short/mediumterm agreements.