

To

Date: 20.02.2024

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Subject: Comments on CERC MYT Regulations 2024 for the period commencing from 1st April, 2024.

Reference: No.L-1/268/2022/CERC dated 4th January 2024.

Sir,

It is fact that the major component of distribution retail tariff comprises of power purchase cost from generating companies, traders and transmission Tariff. Around 80-85 % of the distribution tariff is power purchase cost. It is also fact that since distribution companies are purchasing electricity from the different sources including ISGS and ISTS and pass over to the consumers and therefore DISCOMs not agitating much before the Central Commission in determination of Tariff resulting inflated retail tariff to the consumers. It is also fact that over last 25 years existence of the Central Commission the Central Commission failed to make necessary arrangements to reach out every state, civil societies and common public through various means i.e. presentations, interactions, discussions, debates encouraging public to participate in the Tariff determination process. Rather in contrary there are instances that the Central Commission discourages the public for participation. This results in unjust enrichment to the Central utilities in tariff. Following comments are submitted for kind consideration of the Hon'ble Commission-

1. It has been observed from last 25 years of existence of the CERC, total 5(five) Multi Year Tariff (MYT) Regulations were made since 2001. All those MYT Regulations were made under Section 61 of the EA 2003 (henceforth the Act) to determine tariff under section 62 of the EA 2003(henceforth the Act). The cost-plus Tariff determines under those Regulations broadly have five fixed components for generating and transmission companies-
 - a) Return on Equity (RoE)
 - b) Depreciation
 - c) Interest on loan capital

- d) O&M charges and
- e) Interest on working capita (IWC)

In case of Thermal generating units a variable cost on fuel is included.

2. **Regulation no.2 and Chapter 9 Reg.37 to56 :The Regulation is called Central electricity Regulatory Commission (terms and conditions of determination of Tariff) Regulations 2024. The definition of electricity is provided U/S 2 subsection 23 of the Electricity Act 2003 and Electricity means electrical energy (a)generated, transmitted, supplied or traded for any purpose. The Commission neither has any member of mining engineering nor a technical field of coal energy. The Commission has no right to decide the prices of coal as per statute. The matter was brought before the Commission during hearing of MYT 2019 Regulations. And the Central Commission dropped the Regulations in their final draft. Subsequently it was brought with amendments of Regulations surreptitiously during 2020**
3. It is unfortunate to observed that over the years the Central Commission failed to carry out any works for encouraging competition nor efficiency gain and economical use of resources in the Electricity industry as mandates under Section 61 of the EA Act 2003(henceforth as ACT). This adversely effects on the interest of the consumers at the receiving end. In a cost-plus tariff where no competition prevails, the Central Commission could have efficient bench marking for utilities which is absent in the draft Regulations. It is fact that the consumers at the receiving ends are under the state Commission but electricity as a chain from generation to the distribution sector, the Central Commission has greater responsibility towards safeguarding the interest of the consumers which the Central Commission failed to carry out over the years. The Central Commission only and mainly fulfill the requirements of the utilities operates ISGS and ISTS in the country.
4. It is generally observed that the Central Commission does not publish the public notice on draft Regulations in the newspaper as per requirement U/S 178(3) of the Act and their own rules. From the annual report of the Commission for FY 2022-23, almost 1(one) Crore rupees was spent, yet the Commission did not feel to publish the regulations on public interest. This is the first time that CERC conducted the public hearing before last date of submission of comments on the MYT Regulations. It was not understood why there was tearing hurry to conduct the public hearing in such a manner. It is also a matter of concern that

the public notice was published on 04.01.2024 without Explanatory memorandum (EM) and other operational data. The Central Commission uploaded the EM on 29.01.2024 without providing the date of uploading. CERC extended the last date of submission till 20.02.2024 and date of public hearing was deferred to 15.02.2024. It indicates that that the Commission is discouraging the public to participate in the public hearing which is against the provisions u/s 79(3) of the Act. Tariff fixation is a statutory function of the Commission. From the action of the Central commission, it is abundantly clear that Commission decided the draft Regulations in consultation with generating companies and the transmission licensees providing enormous benefits with low level of efficiency & performance. Error galore in the draft Regulations. CERC habitually carried out hurriedly the exercises in all occasions in the past without following due procedure to avoid public response. It is not by chance but by design. Now inviting comments from public, conducting public hearing becomes merely a eye wash for the Commission without fulfilling the main objectives as prescribes in the statute. We protest such attitude of squeezing time by the Central Commission and hope that this will not be repeated in future.

5. The draft Regulations are voluminous containing more than 270 pages, EM around 289 pages and OM data uploaded also voluminous. As a consumer unlike other utilities has resources to study and make submission. It is well nigh impossible to consumers to go through the voluminous papers in such short duration and provide comments on it.
6. **Chapter 2 and Chapter 9:** It is regretted that CERC does not true up for last 23 years as a result accumulation of huge surplus in the accounts of utilities. The huge accumulation of surplus shall be considered in this draft Regulations. **Once the truing up exercises would be carried out, the excess amount of ARR must be considered under section 62(6) and the new efficient norms are to be re-determined considering the ARR petitions.** Similar conditions are applicable to Regulation 13. Once truing up is made the additional ARR realizes in the form of surplus from the utilities is to be adjusted under Section 62(6) of the Act and the norms of operations are to be evaluated and norms of operations are to be revised and finalized.
7. It is generally observed that due to non-truing up with prudence check and relaxed norms provided to the Central utilities the tariff is constantly rising in

the cost-plus tariff. On contrary due to reducing loan capital it should have been reduced. It is also matter of concern that the fixed cost of generating companies has been increasing year to year and if we compare those for few years of fixed cost which is given in the table below (source CERC Annual Report and submitted for example only)-

Sl. No.	Name of the station	2010-11 Rs.	2013-14 Rs.	2018-19	2022-23 Rs.	Total tariff 2022-23 Rs.
1	Rihand Sg.1	0.50	0.8236	0.8576	0.660	
2	Rihand sgII	0.79	0.9426	0.7117	0.884	
3	Kahalgaoon Sg-I	0.55	0.9687	1.0753	1.089	
4	NTPC Dadri st.1	0.55	0.8850	0.9869	0.93	
5	NTPC Dadri stage II	1.49	1.5958	1.4499	1.393	
6	Dadri CCGT	0.33	0.5416	0.5825	0.515	
7	Assam GasPS	0.86	1.4670	2.3010	1.8835	
8	AartalaGasPS	1.34	1.2450	2.060	1.884	
9	Bongaigaon		2.9050	2.7142	2.406	
10	Loktak HEP	1.29	2.73	3.84	3.89	
11	Doyang HEP	2.95	4.06	5.0820	6.751	
12	Ranganadi HEP	1.25	4.20	1.67	2.745	
13	Anta Gas	0.36	0.6990	0.7173	0.709	19.979
14	Auraya	0.25	0.5254	0.6419	0.365	19.769

Out of above few stations fixed cost of Loktak rises 300% and doyang more than 200%. It pertinent that the gas bases projects Anta and Auraya are very old and their unit rates are exorbitantly high. Such unsustainable due to high-cost stations must be closed down and scrapped. Such with other projects also whose generation cost is very high. By continuing such projects is high burden to the consumers' tariff.

8. The Thermal units which had completed 25 years of the useful life, MYT Regulations 2009 provided incentives to the utilities for renovations and modernizations and life extensions. Due to non-truing up and examining the actual achievements and expenditure, utilities are enjoying R&M fund. The Central Commission must direct them to furnish the amount utilized and result obtained. Same has been continued in the subsequent MYT periods of 2014-19 and 2019-24 without proper scrutiny. This is in addition to regular Repair maintenance. No truing up with prudent checks were carried out by the Commission for those periods. The Central commission must true up with

prudence check before finalizing this draft Regulations, otherwise whole intension of multiyear tariff shall be defeated.

9. **Return on equity Reg. 30:** The present RoE is very high and this should not be more than 10% at any cost. Considering the downward revision of Marginal Cost of Funds Based Landing Rate (MCLR) of the Public Sector Banks and 10-year G-Sec Rates, it is felt prudent to revisit and redetermine the Rate of Return on Equity for the control period FY 2024-25 to 2028-29 by the Central Commission. It is pertinent to submit that the overall interest rate has shown a declining trend during the past period mainly the RBI Repo Rate, Interbank Rate and SBI Base Rate/MCLR Rate have come down during this period. With better control over inflation, the interest rates have remained low and stable over short & medium term. It could be observed from the following table, that SBI MCLR rates have gradually fallen down from April 2019 onwards:

Table 1 SBI MCLR RATE March'19 to Mar'22

Date	Rate %	Date	Rate%	Date	Rate %
15.03.2022	7.00	10.03.2021	7.00	10.03.2020	7.75
15.02.2022	7.00	10.02.2021	7.00	10.02.2020	7.85
15.01.2022	7.00	10.01.2021	7.00	10.01.2020	7.90
15.12.2021	7.00	10.12.2020	7.00	10.12.2019	7.90
15.11.2021	7.00	10.11.2020	7.00	10.11.2019	8.00
15.10.2021	7.00	10.10.2020	7.00	10.10.2019	8.05
15.09.2021	7.00	10.09.2020	7.00	10.09.2019	8.15
15.08.2021	7.00	10.08.2020	7.00	10.08.2019	8.25
15.07.2021	7.00	10.07.2020	7.00	10.07.2019	8.40
15.06.2021	7.00	10.06.2020	7.00	10.06.2019	8.45
15.05.2021	7.00	10.05.2020	7.25	10.05.2019	8.45
10.04.2021	7.00	10.04.2020	7.40	10.04.2019	8.50
				10.03.2019	8.55

After detail analysis it is found that The yield on 10-year benchmark Government Bond has also come down to 5.96% (1-year average) during FY 2020-2021 as compared to 7.40% at the beginning of FY 2019-20, while it was 6.84% at the end of FY 2021-22. Although there are various models available for estimation of cost of equity i.e. RoE. Heever the model normally use by various State and central ERC has been adopted here for arriving at RoE.

In accordance with Section 3 of the Electricity Act 2003, the Central Government has notified the Tariff Policy on 6th January, 2006. Further amendments to the Tariff Policy were notified on 31st March, 2008, 20th January, 2011 and 8th July, 2011. In exercise of powers conferred under Section 3(3) of Electricity Act, 2003, the Central Government notified the revised Tariff Policy on 28/01/2016. Tariff Policy mandates to have appropriate return on investment. The Tariff Policy has mandated the Distribution Licensees to procure their future requirement of power through Tariff Based Competitive Bidding. The market forces are likely to exert downward pressure on the IRR (Internal Rate of Return) of the new projects. Further, the rate of interest has also come down in recent times. Therefore, there is market dynamics which favours reduction of rate of return. Under the above scenario ROE is to be reviewed considering the present market expectations. Electricity is an essential commodity and therefore risk perception is minimal.

MODEL FOR RATIONALISED STRUCTURE OF RETURN ON EQUITY

CAPITAL ASSET PRICING MODEL (CAPM)

(1) The CAPM describes the relationship between the expected return and risk of investing in a security. It shows that the expected return on a security is equal to the risk-free return plus a risk premium, which is based on the beta of that security.

(2) CAPM is also the most popular and widely accepted method for determining the cost of equity. It is recognised that this model will give the approx. rate of return on equity, as it is based on the assumption of data e.g. market return data, Risk Free rate taken as Government/Sovereign Bonds yield for 1 year or more will also impact the rate of return on equity.

(3) In financial market, CAPM is a well-established model for calculation of return on equity of an asset. Essentially it is based on Modern Portfolio Theory and theory of diversification of risk wherein a rational investor maximizes his portfolio's expected return for a given amount of portfolio risk, or equivalently minimize risk for a given level of expected return, by carefully choosing the proportions of various assets.

(4) The CAPM gives an approximate rate of return on equity, which can be used to take an informed decision on rate of return on equity. In order to compute the Market Risk Premium (R_m), the return expected by the market has been estimated by assuming the past returns provided by the equity market, as it mirrors the expectations of the investors (by considering the market return for 10 years from April 2012-Mar 2022). In order to compute the Risk free return,

the average of daily last traded price (PX_LAST) of 10 Year G-Sec (Government Security) for the past 3 years (FY 2019-20 to FY 2021-22) is considered.

(5) CAPM is being applied to "quantify what the market should expect ROE of generating companies/ Transmission Licensees/Distribution Licensees which are either traded in the stock market or their Group Companies are Traded or not Traded and whose Tariff is being determined by the various Commissions." CAPM is just one of the models that tries to determine what the market should expect.

(6) It needs to be noted that on one hand while these companies are regulated entities these are also listed and traded in the stock markets. This would act as a useful insight on the expectation of the financial / portfolio investors in these companies, how they perceive risk in these companies and their expected return. With this data analysis and information, it would be better placed to arrive at the ROE to be allowed to these regulated companies.

(7) It is also noteworthy to mention that there are several other unregulated IPP also listed and traded in the stock market. The expected return on these companies has also been calculated and compare with the returns of the regulated companies.

(8) It is also worth emphasizing that there are a large number of power generating companies which are listed and the stock are liquid. This is helpful in terms of market data available for analytic purposes.

POWER UTILITIES CONSIDERED FOR CAPM

(9) As mentioned in the preceding paragraph, Power companies listed in the stock markets have been classified into two categories which are considered for CAPM: -

a) Regulated Power companies traded in stock markets which include

1. NTPC
2. NHPC
3. PGCIL
4. NLC
5. SJVNL
6. GIPCL

b) De-regulated Power Companies or IPP's traded in stock markets include

1. Tata Power
2. Reliance Power
3. Torrent Power
4. CESC
5. JSW Energy

6. Rattan India Power

7. Jaiprakash Power Ventures Limited

(10) In the case of private power companies, it is noted that while some of the companies are pure play generating companies, some are also in to power distribution business and some have exposure to other infrastructure business. Hence the expected returns to that extent their returns do not reflect the pure power generation business expected returns but also risk associated with infrastructure and power distribution businesses.

(11) Since most of the regulated companies are listed instock market and although certain deregulated companies are not listed but their parent companies are listed in the stock exchange, therefore , same are appropriately factored in their CAPM.

STEPS FOR CAPM

(12) As mentioned earlier, the CAPM describes the relationship between the expected return and risk of investing in a security. It shows that the expected return on a security is equal to the risk-free return plus a risk premium, which is based on the beta of that security. CAPM can be summarized according to the following formula:

Required (or expected) Return = Risk Free Rate + (Market Return – Risk Free Rate) x Beta.

Expected Return on a Stock = Risk Free rate of return +Beta *(Risk Premium of Stocks over risk free rate of return).

This defines as follows-

$$E(R_i) = R_f + \beta_i \{E(R_m) - R_f\}$$

Where,

(R_i) is expected return on capital asset

R_f is the risk-free rate of interest such as interest arising from government bonds

β_i (the beta) is the sensitivity of the expected excess asset returns to the expected excess

$$\beta_i = \frac{\text{COV}(R_i - R_m)}{\text{Var}(R_m)}$$

E(R_m) = is the expected return of the market

E(R_m) - R_f = is sometimes known as the market premium (the difference between the expected market rate of return and the risk-free rate of return).

E(R_i) - R_f is also known as the risk premium

) For estimating the rate of return on equity using CAPM, following steps were followed:

Step1: CALCULATE RISK FREE RATE (RF) for using 10-year govt. bond yields. Though Government securities do not have a default risk, they are still susceptible to reinvestment risk and inflation risk. To eliminate reinvestment risk, zero coupon securities have been considered. However, inflation risk is still not effectively mitigated. Due to the lack of any better measure of risk free rate, the yield on Government securities is considered as Risk Free rate. The risk free rate for India has been estimated based on yield on average yield of 10-year government bond over past 3 years (FY 2019-20 to 2021-22)

STEP-2 -CALCULATE HISTORICAL MARKET RETURNS (RM) for the past 10 years (April 2012 – March 2022) using BSE Sensex data to determine the Expected rate of return (Rm). The market return has been estimated based on historical data of returns of BSE Sensex over past 10 years from FY 2012-13 to FY 2021-2022. The data has been taken for 10 years including the Financial Year 2021-22 in which year there was a spurt in the Sensex considering the fact there was a dip in the Sensex during Financial Year 2020-21 due to COVID related strains. The market return for a period from FY 2012-13 to FY 2021-22 work out to around 11.59%.

a) In order to compute the Market Risk Premium (Rm), the return expected by the market has been estimated by assuming the past returns provided by the equity market, as it mirrors the expectations of the investors. For determining the market return, the returns provided by the BSE Sensex in different period ranges has been considered as a proxy for the historical returns provided by the Indian equity market.

Table 2: BSE SENSEX RETURN

Table2:BSE SENSEX RETURN	Open	High	Low	Close	Returns
2012	15534.67	19612.18	15358.02	19426.71	25.70%
2013	19513.45	21483.74	17448.71	21170.68	8.98%
2014	21222.19	28822.37	19963.12	27499.42	29.89%
2015	27485.77	30024.74	24833.54	26117.54	-5.03%
2016	26101.5	29077.28	22494.61	26626.46	1.95%
2017	26711.15	34137.97	26447.06	34056.83	27.91%
2018	34059.99	38989.65	32483.84	36068.33	5.91%
2019	36161.8	41809.96	35287.16	41253.74	14.38%
2020	41349.36	47896.97	25638.9	47751.33	15.75%
2021	47785.28	62245.43	46160.46	58253.82	21.99%
2022	58310.09	61475.15	52260.82	54884.66	-5.78%

					11.59
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b) The average annual growth rate of the BSE Sensex over the period of FY 2012-13–FY 2021-22 works out to around 11.59%. the same has been considered as market return for calculating ROE.

STEP 3 - BETA (β) is a measure of the volatility, or systematic risk, of a security or a portfolio in comparison to the market as a whole. For computing the Beta for CAPM formula, firstly the Beta is estimated for all major power sector companies in the business of power generation and transmission listed in the BSE. In the next step, the composite Beta based on the weighted average of market capitalization separately for Regulated entities and IPPs has been computed to estimate the business risk of the concerned companies. The Beta for various Power Sector Companies (based on daily returns) has been estimated for the FY 2012-13 to FY 2021-22 as well the Composite Beta which is calculated on the basis of Market capitalisation of various Power Sector Companies on 31/03/2022 which is tabulated below-

Table 3: BSE MARKET CAPITALISATION AS ON 31/03/2022

Sl.No	Script Code	Company Name	Market Cap (Rs Cr.)
1	532898	POWER GRID CORPORATION OF INDIA	1,51,262.70
2	532555	NTPC LTD.	1,30,856.51
3	500400	TATA POWER CO.LTD	76,320.69
4	533148	JSW ENERGY LTD	49,140.11
5	533098	NHPC LTD	27,925.20
6	532779	TORRENT POWER LTD	23,641.54
7	533206	SJVN LTD	10,787.29
8	500084	CESC LTD.	9,482.64
9	513683	NLC India Limited	8,673.41
10	532627	JAIPRAKASH POWER VENTURES LIM	4,653.50
11	532939	RELIANCE POWER LTD.	4,590.17
12	533122	RATTANINDIA POWER LTD.	2,862.27
13	517300	GUJARAT INDUSTRIES POWER CO.LT	1,109.43

c) The different betas calculated are: -

i. Composite Beta of the Regulated Companies

ii. Composite Beta of IPPs (For Comparison with Regulated Companies)

iii. Composite Beta of Regulated companies and IPPs

d) Methodology of Beta Calculation:

i. Beta calculation: The daily stock return has been regressed against the daily Sensex returns to calculate the beta of the stock. Linear regression has been used with Sensex return as an independent variable and stock returns as the dependent variable.

ii. Calculation of return: As is the practice in financial markets, the return taken are the Logarithmic returns i.e. $R = \text{LN} (P_t/ P_{t-1})$

iii. Time period: Data from April 2012 – March 2022 have been used.

e) Individual Beta of each stock has been calculated. Thereafter the Composite Beta of regulated Companies and Composite Beta of IPPs has been calculated. The market capitalization of the stock has been used as weight for the composite beta calculation.

STEP 4 – EXPECTED RETRUN is a return expected by an investor in a stock.

f) The expected return is calculated using the CAPM and is dependent on Beta, market risk premium and risk free rate. The below table shows the Beta and the Expected return on the stock.

g) The expected return of all Regulated Companies combined together is also found using CAPM and taking the composite beta.

h) Difference between Expected Return on a stock and Return of Equity (ROE) allowed by Regulators: The ROE to be allowed by regulators is a public information and is known to the market. This information gets factored in the stock price and the expected return gets adjusted accordingly. The expected return adjusted itself to many other factor like macro economy factors, industry factors, company specific business risk, management quality etc. . Accordingly, the required (expected) return is shown in the following Tables:

Table 4: Return on Equity- Regulated Companies

Sno.	IPPs-Unregulated Companies	Daily Beta	Market Cap (Rs. cr)	Daily beta x Market Ca	Composite Beta (Daily)	ROE_ Daily Beta based
1	NTPC	0.7127	1,30,857	93,266.85		
2	NHPC	0.6576	27,925	18,364.93		

3	PGCIL	0.5920	1,51,263	1,51,263	0.64	9.69
4	NLC	0.6477	8,673 5	617.74		
5	SJVN	0.4140	10,787 4	465.76		
6	GIPCL	0.6682	1,109	741.29		
	TOTAL		3,30,615	2,11,998		

Table 5: Return on Equity-Independent Power Producers (IPPs)

7	TATA	1.0553	76,321	80540.37	1.00	11.59
8	RELIANCE POWER	0.96514	590 4	430.17		
9	TORRENT POWER	0.7660	23,642	18,109.72		
10	CESC	0.8579	9,483	8,134.81		
11	JSW	1.0638	49,140	52,277.53		
12	RATTAN INDIA POWER	0.8621	2,862	2,467.55		
13	JPVL	0.9644	4,654	4,487.69		
	Total		170691	2,16,439.90		

Table 6: Return on Equity -Regulated Companies and IPPs

Sno.	IPPs-Unregulated Companies	Daily Beta	Market Cap (Rs. cr)	Daily beta x Market Cap	Composite Beta (Daily)	ROE Daily Beta based
1	NTPC	0.7127	1,30,857	93,266.85	0.76	10.34%
2	NHPC	0.6576	27,925	18,364.93		
3	PGCIL	0.5920	1,51,263	1,51,263		
4	NLC	0.6477	8,673 5	617.74		
5	SJVN	0.4140	10,787 4	465.76		
6	GIPCL	0.6682	1,109	741.29		
7	TATA	1.0553	76,321	80540.37		
8	RELIANCE POWER	0.96514	590 4	430.17		
9	TORRENT POWER	0.7660	23,642	18,109.72		
10	CESC	0.8579	9,483	8,134.81		
11	JSW	1.0638	49,140	52,277.53		
12	RATTAN INDIA POWER	0.8621	2,862	2,467.55		
13	JPVL	0.9644	4,654	4,487.69		
	Total		5,01,305	4,57,723		

After putting all the information and it has been found that for regulated entity Return on equity for daily Beta bases is 9.69% and for Independent Power producer RoE daily Beta based is 11.59% and daily Beta based for both Regulated companies and IPPs will be 10.34%. Daily rate of RoE 10.34% and rounding off to the nearest whole number RoE as @10%.

Therefore on return of equity should be:

In view of the above analysis, the rate of Return on Equity can be rationalised as follows: **GENERATING ENTITY = 10% on post tax basis.**

TRANSMISSION LICENSEE = 10% on post tax basis

The Central Commission arbitrarily provide higher RoE without due diligence. The Central Commission while finalizing draft must consider not more than 10%.

10. **Regulatory Certainty & Tariff determination:** Tariff determination of Regulated entities is according to the process prescribed under section 62(5) & 62(6) of the Act which says-

"Section 62. (Determination of tariff): --- (1) The Appropriate Commission shall determine the tariff in accordance with the provisions of this Act for – (5) The Commission may require a licensee or a generating company to comply with such procedures as may be specified for calculating the expected revenues from the tariff and charges which he or it is permitted to recover.

(6) If any licensee or a generating company recovers a price or charge exceeding the tariff determined under this section, the excess amount shall be recoverable by the person who has paid such price or charge along with interest equivalent to the bank rate without prejudice to any other liability incurred by the licensee."

As such tariff to be determined under the Act is a future tariff only and the tariff provided must be true up in the subsequent year/ years and the additional amount paid by the consumers on actual tariff must be returned back with interest to the consumers. It is unfortunate to mention that no such exercise has ever been carried out by the Commission after future tariff is provided. For example, the norms provided by the Central commissions are ceiling norms only. After prudent check carried out by the Commission if it is found that actual performances are much less, the excess amount must be refunded back to the consumers and if the performances of entities are above norms the additional amount incurred by the entities shall be on their account as per the Act. The trueing up exercise has never been carried out as per mandate. If no trueing up exercise is carried out is not only against the interest of consumers but also spirit of sections 61 and 62 of the Act. For providing suggestions on both the

approach it is found that frequent changing of methodology in approach in determination of tariff for Regulated entities will result on uncertainty in tariff which is against the spirit of legislative principles. MYT principles clearly mandate that both controllable and uncontrollable parameters are such that the tariff should be provided in future period and both the controllable parameters must be trued up after a regular period once the is over and the excess payment incurred by the entity of to be adjusted in the ARR of future tariff. The principle must be followed holistically by the Central Commission.

11. **Chapter-5, Capital structure:** After notification of tariff policy 2006 all the projects of generation and transmissions are to be established under bidding route and the tariff policy gave five years window for PSUs i.e. after 06.01.20211 even the projects under PSUs also should come under bidding route and tariff to be determined u/s 63 of the Act. At present only few languishing HEPs are remaining to be completed whose tariff determination would be made by CERC. In case of those hydro projects whose tariff are to be determined, cost overrun due to time overrun must be carried out with prudence check and if any cost overrun found attributable to the generating company or their contractors, cost overrun should be in developer's account only. If the cost overrun due to beyond the control of the developers such as force majeure conditions such as geological surprises or change in law, the amount must be shared equally 50%:50% between the developers and the beneficiaries as per APTEL judgement dated 27.04.2011 in the Appeal Petition 72 of 2010. Same principle shall also be applied for calculation of IDC and IEDC under Reg. 21 of the draft.
12. **Reg. 27. Additional Capitalisation on account of Renovation and Modernisation:** W.e.f MYT period of 2009-14 on wards provisions were made for additional capitalization for Renovation and Modernization of the power projects and transmission projects who has completed its useful life. As Regulations before expenditure is incurred Commission must approve the proposed project reports. But the Central Commission never put that information in their web-site provides opportunity for manipulation. Under the statute while discharging duties Central Commission must be transparent. A comprehensive study must carried out in all the generating stations and transmission lines during all MYT periods w.e.f MYT period 2009-14 onwards. The Central Commission should also upload the approve detailed project in their website for better transparency as mandated by the Act. It is also the fact before allocation of such amount, prior to FY2009-10 the performances of those NTPC and NLC stations were above 90% and 80% respectively. Therefore, the

target availability for coal-based stations must be at least 95% and lignite base stations should be 85%.

CEA in their recommendations of Operational norms provided for MYT period 2014-19 the performances of NTPC and NLC stations as below-

Table: Availability* of Stations in percentage

Sl.No.	Stations	2008-09	2009-10	2010-11	2011-12	2012-13	Average
1	Bhilai		97.00	98.2	99.2	99.2	98.4
2	Singaurli	89.3	90.6	95.0	89.7	91.1	91.1
3	Rihand	95.7	92.5	92.5	93.6	90.0	92.9
4	Tanda	89.2	90.9	91.8	88.6	82.9	88.7
5	FGUTPP	91.7	94.3	94.7	93.5	95.2	93.9
6	Korba	92.2	94.6	90.3	82.9	94.9	91.0
7	Vindhyachal	92.3	93.0	94.5	91.8	93.2	93.0
8	Sipat	96.3	93.0	94.2	90.4	86.6	93.0
9	Ramagundan	93.6	93.7	92.3	95.5	87.1	92.4
10	Simhadri	94.7	94.5	94.2	96.4	92.8	94.5
11	Farakka	85.9	82.3	89.1	81.8	78.9	83.6
12	Kahalgaon	90.9	78.1	83.0	77.3	85.8	83.00
13	Talchar	93.2	90.7	92.2	90.5	93.8	92.1
14	TalcharSTPP	91.8	94.5	90.7	87.5	88.9	90.7
15	Badarpur	93.0	86.6	81.1	86.3	84.4	86.3
16	NCTPS Dadri	96.5	94.5	89.4	93.8	90.8	93.0
17	Indiragandhi				67.3	80.8	74.0
	Overall NTPC	92.4	91.3	91.4	88.6	89.2	90.0
18	Nayveli 1	68.1	88.1	85.5	87.6	87.6	83.4
19	Neyveli1-Exp	85	84.3	84.1	85.6	92.0	86.2
20	Neyveli-2-I	67.6	81.6	85.8	88.2	88.9	82.4
21	Neyveli-2-II	72.5	86.9	86.0	88.8	89.9	84.8
22	Barsingar					70.2	70.2
	Overall NLC	73.3	85.2	85.4	87.5	85.7	81.4

As may be seen that barring few instances, the availability for all the stations has been well above the normative availability. The instances of low availability have been mainly in stations where new units were commissioned during the specific year and could be due to lower availability for the new units initially. The availability of

stations had been lower during 2008-09 but improved considerably during the later years. Barsingsar TPS shows lower availability than the target of 75 %. Subsequent MYT period considerable amount spent on the units for R&M works. CEA in their report also observed that with normal practices of O&M NTPC and NLC could able to improve their plant availability considerably.

14 **Reg 34 and 36. O&M expenses and IWC:** The both components are provided on normative basis in the and must be trued up as per audited financial statements of the regulated entity. Multiyear tariff principles mandates that the expected tariff provided in the multiyear tariff must be trued up at the end of the tariff period and excess amount must be credited to the consumers' account along with the interest equivalent to bank rate O&M comprises of three components namely, salary, R&M expenses and A&G expenses. The tariff is provided for future and must be trued up according to the audited financial statements of the utilities after the period is over. Same must be carried out for IWC also. In case of IWC the central Commission while calculating the working capital considers receivables which includes depreciation and return on equity also. But these two components do not need any working capital. In fact, depreciation is the cost of capital pouring in the depreciation account of the utilities. RoE is the profit earn by the entities. Therefore, both these two components are should not be considered in receivables while calculating IWC. Truing up is a very important requirement in Multi Year Tariff. Tariff policy 2006 clearly stated that **"once the revenue requirements are established at the beginning of the control period, the Regulatory Commission should focus on regulation of outputs and not the input cost elements. At the end of the control period, a comprehensive review of performance may be undertaken"**. CERC to determine Tariff of the Interstate Transmission licensees and Generating companies of central governments under the principles prescribed under Section 62 of the EA 2003. Section 62(5) says that the tariff determines by the Commission is expected tariff for the future years and section 62(6) states that the tariff determines must be trued up by the Commission in the subsequent year/ years and the excess

amount already recovered by the generating companies or licensees are recoverable along with the bank interest rates without prejudice to any other liability incurred by the licensee or the generating companies. Accordingly, the MYT Regulations 2019 vide Regulation 13(2) the generating company or the transmission licensee, as the case may be, shall make an application, as per the Regulations for carrying out truing up exercise in respect of the generating station or a unit thereof or the transmission system or an element thereof by 30.11.2024. Truing up exercise of preceding years is must for determination of the future tariff.

- 15 **Depreciation Reg. 33:** Most of the Generating units of NTPC, NLC, NHPC, NEEPCO etc. have completed its useful life and still running efficiently. The stations over the years accumulated huge amount in their depreciation account. On the other hand thermal stations (gas based) such as Anta, Auraiya, Dadri, Gandhar and Kawas are operating at a very high cost @Rs.19.979, @Rs.19.769, @Rs.14.733, @Rs.12.597 and @Rs.18.402 respectively per Kwh during FY2022-23. These plants should not be operated in the interest of the consumers and to be permanently closed down and the depreciation reserve available should be utilized in other projects for improvement their efficiency. Similarly, Kayamkulam gas-based stations no generation but consumers are to pay the fixed cost. Till adequate gas linkage not available the station should be closed down and tariff should not be determined for all the above station on public interest.

- 16.Reg. 36. O&M expenses:** Explanatory memorandum says that the average O&M expenses of preceding MYT period normative O&M is escalated with average annual inflation rate of 5.89% to normalize the O&M expenses of each generating stations. The methodology adopted by the Commission is not in consonance of the tariff principles prescribed under 61(d) of the Act as it is not safeguarding the public interest rather allows recovering cost of electricity in an unreasonable manner by the utilities as it gives more benefits to the generating utilities. The Central Commission could have made

performance audit in all the generating stations based on audited financial reports for prudence check. The various unwanted expenditures such as advertisements and certain legal expenses are to be disallowed in A&G expenses. It has been observed that almost for each and every order by the Central commission the generating companies and transmission licensees went to the APTEL and also to the Supreme Court and spent hundreds of Crores of Rupees as legal expenses. No doubt every person has the right to approach the court but not at public expenses. Those costs are to borne by the utilities from their profit and not from the expenses of the public. In regard to O&M of transmission licensee also Commission could have made at least last four years truing up of MYT period 2019-24 and find out the actual expenditure for those periods and escalate for other two years. The transmission licensees are also challenge almost all orders of CERC before APTEL and the Supreme Court and incur huge legal expenses and pass on to the consumers as tariff. The Central Commission should disallow all such expenses under Section 61 (d) of the act. It is also fact that in a RTI reply vide ADMN-12038/3/2024-CERC/RTI cell dated 08.02.2024 it was stated that PGCIL earned revenue from consultancy & other income during FY2017-18,2018-19 as Rs.50.44 Cr and 15.02 Cr. Respectively. But from the audited Annual financial report for the corresponding years, it shows as Rs.662.18 Cr. and Rs.610.93 respectively. Comparison chart on consultancy and project management Income of PGCIL-

Rs.

in Crore

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
As provided by CERC	50.44	15.02	15.44	36.75	22.42	-

As per PGCIL Annual report	662.18	610.93	610.98	501.28	509.29	753.34
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There is huge variation in the statements of CERC and PGCIL is a serious matter of manipulations. PGCIL not only misled the Central Commission but also committing wrong doing to the consumers. The Central commission repealing sharing revenue from the telecom and other business Regulations 2007 Regulations and replaced it with a utility friendly 2020 regulations which indicates serious compromise. On public interest the truing up should be carried out since 01.01.2008 for both income from the Telecom business and income from the consultancy of projects & Management supervision and excess amount to be credited to consumers' account with carrying cost on transparent manner.

17.Reg. 59. Transit and Handling losses: Transit and Handling losses: In reference to the CAG report 36 of 2026 where CAG carried out a sample study on transit losses of 8 (eight) TPS under NTPC for assessment of transit loss through indirect method and found that ***“As per Fuel Supply Agreements (FSA), payment for the coal supplies was made as per weightment carried out at the delivery/loading point at mine end. The FSAs also provided for weightment at unloading point (power station) in order to ensure recalibration of weigh bridges at loading point. However, stations did not regularly weigh domestic coal, though in motion weigh bridges were installed in the stations. Due to this, stations lost an opportunity to cross verify the quantity of coal received and ascertain the resultant transit loss.”*** It indicates that huge amount of coal get surplus and the end consumers are paying excess amount to the generating companies. NTPC at that time of audit was operating 26 nos. of TPS. It was the

job of the Central Commission to carry out the performance audit of fuel of all the TPS under Central government in the line of CAG audit and provided norms of transit losses lesser than what is proposed. Moreover, due to Strick environmental norms bulk quantity of coal has been transit in closed wagon instead of open wagon. Therefore, transit losses reduce drastically. The norms must be reviewed and lesser efficient norms are to be provided.

18.Regulation 60: Gross calorific value of primary fuel: CAG in their performance audit also worked out the difference in energy charges considering the 'as received' and 'as fired' stage for the same period (October 2012 to September 2013). It was seen that during this period, Energy Charge Rate (ECR) worked out on 'as fired' basis was higher than 'as received' basis by `0.03 to `0.96 per unit of electricity for the different stations, as per details given below. Audit also worked out the difference in energy charges considering the 'as received' and 'as fired' stage for the same period (October 2012 to September 2013). It was seen that during this period, Energy Charge Rate (ECR) worked out on 'as fired' basis was higher than 'as received' basis by `0.03 to `0.96 per unit of electricity for the different stations, as per details given below:

Sl No.	Station name	Range of difference in ECR	Total impact Rs. (in crore)
1.	Dadri Stage- I	(-)0.06 -0.43	135.64
	Dadri Stage – II	(-)0.07 -0.46	165.06
2.	Badarpur	0.58 -0.96	324.73
3.	Korba Stage -I&II	0.05 -0.18	161.01
	Korba Stage – III	0.03 -0.16	32.65
4.	Vallur	0.06-0.45	58.25
5.	Sipat	0.04 -0.23	144.36
6.	Rihand Stage I	0.09 - 0.17	87.26
	Rihand Stage II	0.11 -0.21	121.90
	Rihand Stage III	0.05 -0.25	30.89
7	Talcher	0.09-0.11	31.97
8	Farakka I & II	0.17-0.38	110.23

	Farakka III	0.17 -0.38	36.38
Total			1440.33

The CAG audit carried out performance audit only in 8 nos. of NTPC stations and as per CERC norms it was found that only one year time Rs.1440.33 Crore was found excess realization from the consumers. It indicates how inefficient the CERC norms are. The Central Commission must carried out performance audit in all the thermal power stations of the all the Central government and private utilities whose tariff are determines by the Central Commission u/s 62 of the Act.

19.Chapter11: Computation of Capacity Charges and energy charges and incentives: incentives @75 paise at peak hours and @50 paise at off peak hours are very high for thermal generating units are very high. In one hand normative availabilities were reduced considerably and other the rate of incentives are increased is against the public interest and in favour of the utilities' interest which against the Section 61(d) of the Act. In many cases the rates are more than the fixed cost per kwh of certain stations. From the table given above on availability of power station it is observed that the thermal stations has been performing well above the normative availability provided in the draft regulations. Therefore, the Central Commission is urged to consider availability factor for incentive payment above normative operational availability as considered in case of Transmission licensees under draft Regulations 72. The incentive should be restricted maximum 10% of the tariff. As per regulation 81 the generating companies and transmission licensees on difference between normative and actual controllable parameters are shared 50:50 and similarly incentive amount should also be shared between, utilities and the beneficiaries.

20.More interestingly the Central Commission in its statutory advice to the Central government advised vide RA-10/6/2020 dated 15.10.2021 that ***"While the draft Rules at paragraph 1(a) and (c) have been put on the website of the Ministry of Power, the draft***

Rule at paragraph 1(b) has not been put on the website. It is requested that for greater transparency and probity, draft Rules may not only be put on the website for wide publicity and soliciting responses of wider stakeholders, but the responses received may also be disclosed on the website for stakeholders at large to appreciate the impact of such Rules.” But similar action is not seen in the action of the Central commission. E.g. The Central commission recently uploaded one Draft Central electricity Regulatory Commission (Appointment of Consultants) (Fourth Amendment) Regulations, 2023 inviting comments from the public/stakeholders. The regulations proposed that applicant should be retired person and it is objectionable on the ground that the amendment proposed was only to appoint the retired personnel from the Central Commission to extend the post-retirement benefits which may scarify the pre-retirement works in the central commission of those incumbents. I clearly mentioned also that ***It is learnt from the RTI reply from the Central commission that the amendments were made only to provide source that some retired senior officers re-appointed in different posts as consultants immediately after their superannuation without completion of their mandatory cooling period of 2(two) years after retirement as per central government rules. As those persons are on contractual basis and not covered under any central government rule but deal many sensitive files without having any accountability, ostensibly to provide biases and anti-consumer decisions also severely compromises the role of impartiality of the central commission. There is no dearth of talent in the regulatory parlance and creating some sorts of institutional memory, such type of post-retirement appointments should be avoided to the extent possible. It is the duty of the Central regulator to develop young regulators who will take the Country’s electricity sector forward, otherwise the***

main objective of the reform in the electricity industry would be completely defeated due to shortage of man power. More interestingly in the organizational chart it is not found where those persons appointed on contractual basis under the CERC (Appointment of Consultants) Regulations, 2008 are fitted into. The proposed draft amendments in the Regulations would make the situation further worse and under the coverage of subordinate statute as proposed in the proposed draft amendment Regulation, the illegal practice of appointment in collusion would strengthen further. This dangerous practice of appointment in the Central Commission is going on over the years in the Central Commission must be stopped not only on public interest but also national interest. It is perceived that an appointment syndicate is operating in the Commission. In this.

Further undersigned referred the report of the standing committee of the parliament (30th Report) ***“The Committee find that given the functions of the Regulatory Commissions to transform the electricity sector, the constitution of a Board was enshrined in the Act itself to make these Commissions the proper bodies with adequate powers to develop and regulate the sector. However, over the years it has been found that the spirit of the Act has not been carried in the right perspective. Most of the Regulatory Commissions have become the refuge for the superannuated but influential officials. Their primary objective is to remain in employment rather than making any meaningful contribution with regard to the activities of the Commissions in the pursuit of their objectives. Hence these bodies have lost sheen and the authority, which they were designed to represent. In the process they have also lost the autonomy, which the Act has provided them for functional purposes. Had these Commissions acted as mandated under the Act, there would have been hardly any justification for languishing electricity***

sector in the Country. The Committee is inclined to infer that Regulatory Commissions have squarely failed in performing their assigned duties. The Committee, therefore, recommend that with a view to revolutionize the Sector it has become imperative to recast these Commissions at Board level. These establishments should not become the sanctuaries for senior citizens to secure sinecure positions without any accountability and stakes.” The undersigned further said that it further indicates that by way of this draft amendments the Central Commission made opportunities for the retired persons for re-employment contrary to the serious observations by the highest authority of the Parliament committee for making the Central Commission over crowded with senior citizens is not only unacceptable but also desist from such action. Despite of all objections the Central Commission notified the amendments Regulations not considering the objections. The comments of the stake holders are also not uploaded in the CERC web-site. It is proper that for transparency all the comments of the draft Regulations are to be uploaded in the web-site but the Central Commission fails to bring transparency by uploading those comments in their own house.

21.The Central Commission is urged to consider of the above comments while making final draft of the MYT Petition 2024.

Thanking you

Yours faithfully

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