Comments/Suggestions from Power Foundation of India (PFI) on the

Draft *Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024*

1) PFI is a Policy Research and Advocacy entity, a registered society under the aegis of the Ministry of Power, Government of India, and supported by twelve leading Central Power Sector Organisations, to undertake evidence based policy research and facilitate informed decision making by the Regulators, Ministry and stakeholders concerned with the Power Sector. It is led by Director General Shri Sanjiv Nandan Sahai (Former Secretary in Ministry of Power, Government of India).

2) Central Electricity Regulatory Commission (CERC) has sought comments / suggestions from various stakeholders on Draft *CERC (Terms and Conditions of Tariff) Regulations, 2024.* PFI has reviewed and analysed the said draft Regulations, and welcomes the initiatives or modifications in the Draft Regulations related to:

   a) Provision of Interim Tariff up to ninety per cent (90%) of the tariff claimed in case of new generating stations or transmission system during the First hearing of the application. This will avoid Regulatory Overburden and improve cash-flow of utilities.

   b) Quantum of Rs. 20 lakh defined first time under the head of Capital spares to be considered in Operation and maintenance which will provide Regulatory clarity to utilities.

   c) Provision of Carrying Cost: Existing Tariff Regulations, 2019 does not have provision of Carrying Cost to the utilities for filing Petitions before or after CoD. The provision of Carrying Cost in draft 2024 Regulations will prompt utilities to file Petitions within 90 days of Date of Commercial Operation (CoD).

   d) Promotion of Hydro Power Plants: New incentive for Run of River (RoR) hydro stations, Increase in Return on Equity by 0.5% for specific Hydro Power Plants, New Provision for Additional Capitalisation for expenditure incurred towards developing Local Infrastructure in the vicinity of the Hydro Power Plant.

   e) Promotion of Renewable Energy: Additional capitalisation beyond Original Scope for works required towards Biomass Handling System to enable Biomass Co-Firing.

f) Reduction in front loading of Fixed Cost by increasing Depreciation period from existing 12 years to 15 years and remaining spread over balance useful life.

g) Reduction in SHR, based on actuals, which will reduce the generation cost. Our analysis demonstrates that for capacity of 840 MW (4X210 MW) reduction in SHR from 2430 kCal/kWh to 2400 kCal/kWh will lead to reduction of Generation Cost by Rs. 0.05/kWh translating to Rs. 30 Crore reduction of cost to end consumers (considering Aux: 8.5%, GCV: 3824kCal/kg, LPPF: 5613 Rs./MT)

h) In cases where there is a liability with respect to capital works on account of award of arbitration having principal amount along with interest payment, only the principal amount that has been paid is suggested to be capitalized and interest compensating for delay in payment shall be reimbursed at actuals in instalments. The said move will safeguard consumer from tariff shock due to huge impact in AFC on account of interest.

i) Public Procurement through Competitive Bidding: Cost of Assets form the basis of tariff and therefore insertion of new provision related to procurement of equipments, work and services through a transparent process of competitive bidding by utilities is appreciable.

j) Additional O&M expenses stipulated upfront at start of Control period that it should not be more than 5% of normative O&M expenses for the year will provide well defined trajectory to utilities.

3) As sought, the comments / suggestions of PFI on the said draft Regulations are as follows:

A. <u>MODIFICATION IN REGULATION 17</u>

a) Earlier CERC vide it's draft Notification dated 10/09/2023 sought comments/suggestions from stakeholders on *CERC (Terms & Conditions of Tariff) (Fourth Amendment) Regulations, 2023* wherein it was mentioned that Regulation 17 of Principal Regulations shall be omitted, quoted as follows:

*"17. **Special Provisions for Tariff for Thermal Generating Station which have Completed 25 Years of Operation from Date of Commercial Operation:** (1) In respect*

of a thermal generating station that has completed 25 years of operation from the date of commercial operation, the generating company and the beneficiary may agree on an arrangement, including provisions for target availability and incentive, where in addition to the energy charge, capacity charges determined under these regulations shall also be recovered based on scheduled generation.

(2) The beneficiary shall have the first right of refusal and upon its refusal to enter into an arrangement as above, the generating company shall be free to sell the electricity generated from such station in a manner as it deems fit."

b) Post issuance of said Draft Notification by CERC, MoP, GoI vide its letter dated 11/09/2023 withdrew its Guidelines dated 22/03/2021 and clarification dated 5/07/2021 regarding DISCOMs continuing to withdraw power after completion of the term of PPA. The spirit of Regulation 17 was turned into Guidelines dated 22/03/2021 by MoP, GoI which enabled DISCOMs to either continue with or exit from PPAs after completion of the term of PPA and to allow flexibility to the Generators to sell power in any mode after exit from such PPAs.

c) Later, the said Guidelines were superseded by Scheme issued by MoP on 20/04/2023 for Creation of Common Pool of those plants whose PPAs have expired.

d) It is noted that existing Draft Regulation 17 and MoP scheme for creation of Common Pool post expiry of PPA are not synchronous.

e) Draft Regulation 17 stipulates that *(1) In respect of a thermal generating station that has completed 25 years of operation from the date of commercial operation, the generating company and the beneficiary* ***may agree on an arrangement****, including provisions for target availability and incentive, where in addition to the energy charge, capacity charges determined under these regulations shall also be recovered based on scheduled generation.*

f) However, creation of Common Pool as mentioned in MoP (GoI) letter dated 20/04/2023 stipulates *A Central sector Genco-wise Common Pool of thermal generating stations (Coal and gas-based) which have completed the terms of their earlier PPAs shall be created.* ***As and when any Station of the Generating Company completes its PPA period, the same shall be automatically added to the pool.*** *Further, the plants/capacity which have already completed their PPA period but have already signed fresh PPAs post the expiry of the original PPA shall be excluded from the pool. In future all Central Generating capacity which complete their PPA tenures would be added to the pool.*

g) From above it may be noted that Draft Regulation 17 stipulates the Generating Company and the Beneficiary may **agree on an arrangement** post 25 years of operation whereas MoP guideline stipulate as and when any Station of the Generating Company completes its PPA period, the same shall be **automatically added to the pool**.

h) Accordingly, CERC may consider modification of Regulation 17 that post 25 years of PPA if an arrangement is not entered between Generating Company and the Beneficiary to continue further then such Generating Company will get added to the Common Pool.

B. EFFICIENCY FACTOR IN OPERATION AND MAINTENANCE EXPENSES

a) CERC has projected O&M Expenses for the Control Period based on the past Actual Expenses with escalation rate, relevant extract of explanatory memorandum is as follows:

" 15.6.3 The Commission, based on the actual O&M expenses for FY 2018-19 to FY 2022-23 (for FY 2017-18 to FY 2021-22 for stations not having FY 2022-23 data), has re-computed the O&M expenses for FY 2020-21 (FY 2019-20 for stations not having FY 2022-23 data) by taking average of five-year O&M expenses after escalating annual normalised O&M expenses by 3.22% per annum for coal based and gas based generating stations till FY 2023-24. O&M expenses, thus computed for FY 2023-24, have been escalated further considering an escalation rate of 5.89% per annum to arrive at the O&M expenses for FY 2024-25 to FY 2028- 29.

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Table 15: Projected O&M expenses for 200/210/250 MW Series Thermal Stations

(INR Lakh per MW)

Generating Stations	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29
	Actuals					Derived	Projected				
Dadri Coal Stage 1	28.46	31.14	32.05	32.99	32.99	34.67	36.71	38.88	41.17	43.60	46.16
Unchahar TPP	30.64	31.95	32.89	33.86	31.99	35.49	37.58	39.79	42.14	44.62	47.25
Ramagundam Stage 1	30.57	30.10	30.99	31.90	31.10	34.02	36.02	38.14	40.39	42.77	45.29
Korba Stage 1	34.72	35.18	36.21	37.28	35.90	39.43	41.76	44.22	46.83	49.58	52.51
Kahalgaon Stage 1	31.58	33.17	34.15	35.15	36.67	37.55	39.76	42.11	44.59	47.22	50.00
Faraaka I	37.31	39.28	40.43	41.62	38.77	43.42	45.98	48.69	51.56	54.60	57.82
Kanti Bijli	32.87	35.66	36.71	37.79	48.25	42.07	44.55	47.18	49.96	52.90	56.02
Chandrapura Unit 7-8	22.45	27.03	27.83	28.64	22.68	29.20	29.96	31.72	33.59	35.57	37.67
NLC TPS - II	36.13	36.33	37.39	38.49	38.65	41.13	43.56	46.12	48.84	51.72	54.77
Average	**31.64**	**33.32**	**34.29**	**35.30**	**35.22**	**37.44**	**39.54**	**41.87**	**44.34**	**46.95**	**49.72**

b) It is noted from above table that past actual O&M expenses along-with escalation rate only forms the basis of projected O&M expenses for next Control Period and no consideration is provided to improvement in Efficiency / Performance of Utilities. It is suggested that performance-based approach based on the efficient operations of utilities should be factored in O&M expenses, detailed in subsequent paragraphs.

c) It is suggested that an Efficiency Factor, in percentage, benchmarked on the performance of most efficient utilities may be incorporated for calculating normative O&M Expenses because Normative O&M Expenses are derived from past actual O&M Expenses with inflation factor. Various SERCs in Generation, Transmission and Distribution Sector are already following the Concept of Efficiency factor in O&M Expenses.

d) The concept of Efficiency Factor has also been upheld by Hon'ble APTEL in its judgement dated 31/05/2011 in Appeal No. 52 of 2008, as follows:

"60. The last issue is erroneous computation of efficiency factor.

…

64. Since O&M expenses of the Appellant were compared with the similar urban distribution companies in other States, the Commission found the expenses of the Appellant were on the higher side and therefore MYT Regulations were framed to bring the requisite efficiency in the system. According to the Commission, the Commission is of the opinion that O &M expenses trajectory for the Control Period shall be decided on the basis of annual efficiency improvement factor and as such O&M cost of the Appellant is on the higher side….

65. In view of the above reasoning's, the State Commission was constrained from allowing them to continue to operate in such a manner and pass on the higher costs to the consumers. ***The increase in the O&M cost is supplemented by the increase in the efficiency level and cost of saving/cost of reductions/other economies being available to the Appellant. Therefore, there is no merit in this contention raised by the Appellant.***

66. The Learned Counsel for the Appellant has relied on the findings of the Tribunal in its judgment dated 29.9.2010 in Appeal No. 28 of 2008 in the matter of Delhi Transco Ltd. vs. DERC and Others wherein in paragraph 25 of the judgment the Tribunal set aside the order of the State Commission in respect of efficiency factor for Delhi Transco decided by the State Commission on ad-hoc basis without any benchmarking or any analysis and identification of area of efficiency. However, in the present case the State Commission has compared the O&M expenses of the Appellant with other utilities and given a reasoned order. Thus the findings of the Tribunal in Appeal No. 28 of 2008 will not apply to the present case. Accordingly, this issue is answered as against the Appellant.

e) **Suggested Mechanism for Efficiency Factor:** The Generating Companies and Transmission Licensees are expected to be Efficient in their Operations and reduce beyond the provided normative O&M Expenses. The saving over normative O&M expenses upto 1% may be passed towards the beneficiaries and any savings over normative O&M expenses above 1% may be shared equally between the Generating Company and beneficiaries, as follows:

Rs. Cr.

Particulars	UoM	Amount
O&M Expenses as per CERC Norms	A	100
Actual O&M Expense as per Audited Accounts	B	95
Difference in Normative O&M and Actual O&M Expenses	C=A-B	5
Reduction to be passed on to the Beneficiary @ 1% of Normative O&M Expenses	D=1% OF A	1
Incentive to be shared equally between Beneficiary and GENCO / TRANSCO	E=A-D-B	4
Incentive retained by GENCO / TRANSCO	F=E/2	2
Incentive passed on to Beneficiaries	G=E/2+D	3

C. ALLOWANCE OF DE-COMMISSIONG COST

a) Draft Tariff Regulations, 2024 has for the first time stipulated the principles in Regulation itself that in case of De-commissioning of a generating station or unit thereof, or a transmission system including communication systems or element thereof after it is certified by CEA, the unrecovered depreciable value may be allowed to be recovered on a case-to-case basis after duly adjusting the actual salvage value post disposal of such project. However, it is suggested that separate provisions for De-commissioning *"before useful life" and "after useful life"* to be mentioned. Further, salvage value should also factor de-commissioning cost and any loss or gain on account of de-commissioning should be to utilities account.

D. NO RELAXATION IN NAPAF FOR LIGNITE FIRED GENERATING STATIONS USING CFBC TECHNOLOGY AND GENERATING STATIONS BASED ON COAL REJECTS

a) It is noted that CERC has relaxed following parameters in Draft Tariff Regulations, 2024:

i) Normative Annual Plant Availability Factor (NAPAF) for Lignite fired Generating Stations using Circulatory Fluidized Bed Combustion (CFBC) Technology and Generating stations based on coal rejects has been relaxed as follows:

Particulars	CERC Tariff Regulations, 2019	CERC Draft Tariff Regulations, 2024
First Three years from the date of commercial operation	**NAPAF** – 75%	**NAPAF** – 68.50%
For next year after completion of three years of the date of commercial operation	**NAPAF** – 80%	**NAPAF** – 75%

b) It is noted from CERC Explanatory Memorandum that the average availability during FY 2018-19 to FY 2022-23 for most of the stations of NTPC was above 90% and also for DVC stations the actual performance levels were higher than the norms specified by CERC. With regards to Lignite based generating stations for NLC, the actual availability of all the stations is more than the norms, except for NLC TPS-II Expansion, NLC BTPS and NLC NNTP.

c) As mentioned above, actual availability of generating stations of NTPC, DVC and NLC is higher than the norms and recovery of Fixed Cost is linked to NAPAF. PAF can be improved through better O&M practices which again is based on actuals with no efficiency factor.

d) Accordingly, it is suggested that revision in NAPAF may not be considered.

E. NO RELAXATION IN NAPLF FOR COAL AND LIGNITE BASED GENERATING STATIONS COMPLETING 30 YEARS FROM COD

a) In the Tariff Regulations, 2009, CERC introduced an alternative provision in the form of Special Allowance, in lieu of Renovation & Modernisation (R&M) for coal/lignite-based thermal power stations which enabled such stations to meet the requirement of expenses relating to R&M on completion of 25 years of useful life without resetting of capital base. The said provision of Special Allowance, which forms part of annual fixed cost, continued in Tariff Regulations, 2014 and 2019.

b) In the current draft Tariff Regulations, 2024, Normative Annual Plant Load Factor (NAPLF) for Incentive has been relaxed from existing 85% to 80% for Coal and Lignite based generating stations completing 30 years from COD as on 31/03/2024.

c) Since, Special Allowance in the draft Regulations have been increased from existing Rs. 9.5 lakh per MW per year to Rs 10.75 lakh per MW per year, therefore relaxation in NAPLF from existing 85% to 80% for Coal and Lignite based generating stations completing 30 years from CoD as on 31/03/2024 may not be provided.

F. NO CHANGE IN INCENTIVE FOR PEAK HOURS GENERATION

a) Peak Hours incentive has been increased in draft Tariff Regulations from existing 65 paise/ kWh to 75 paise/ kWh.

b) It is noted that ECR of the Generators u/s 62 is in the approximate range of Rs. 1.50/kWh to Rs. 4.50/kWh. Further, their despatch during different hours depends upon the requestions made by the States. Therefore, flat incentive over and above should not be provided rather it should be linked to 10% of ECR with capping of 65 paise/ kWh. Also, Plant Load Factor (PLF) of Thermal Stations have increased 56% (FY 2019-20), 63% (FY 2020-21), 69% (FY 2021-22) and 75% (FY 2022-23) which means they are operating better due to increased demand resulting into better cash flows.

In view of above, it is suggested that existing incentive to be retained.

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