Comments on Draft Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 for the tariff period from 1.4.2024 to 31.3.2029

Some Important Legal provisions

1.The Electricity Act 2003 under section 61 outlines the guiding factors to be taken into account while determining the terms and conditions of tariff determination which includes factors that would encourage which would encourage competition, efficiency, economical use of the resources, good performance and optimum investments and also safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner.

2.Tariff Policy envisages that the tariff of all new generation and transmission projects of company owned or controlled by the Central Government shall continue to be determined on the basis of competitive bidding as per the Tariff Policy notified on 6 thJanuary, 2006 unless otherwise specified by the Central Government on case to case basis.Tariff Policy further contains following provisions:

Power stations are required to be available and ready to dispatch at all times. Notwithstanding any provision contained in the Power Purchase Agreement (PPA), in order to ensure better utilization of un-requisitioned generating capacity of generating stations, based on regulated tariff under Section 62 of the Electricity Act 2003, the procurer shall communicate, at least twenty four hours before 00.00 hours of the day when the power and quantum thereof is not requisitioned by it enabling the generating stations to sell the same in the market in consonance with laid down policy of Central Government in this regard. The developer and the procurers signing the PPA would share the gains realized from sale, if any, of such un-requisitioned power in market in the ratio of 50:50, if not already provided in the PPA. Such gain will be calculated as the difference between selling price of such power and fuel charge. It should, however, be ensured that such merchant sale does not result in adverse impact on the original beneficiary(ies) including in the form of higher average energy charge vis-à-vis the energy charge payable without the merchant sale. For the projects under section 63

of the Act, the methodology for such sale may be decided by the Appropriate Commission on mutually agreed terms between procurer and generator or unless already specified in the PPA.

5.11(f) Operating Norms Suitable performance norms of operations together with incentives and disincentives would need to be evolved along with appropriate arrangement for sharing the gains of efficient operations with the consumers. Except for the cases referred to in para 5.11(h)(2), the operating parameters in tariffs should be at "normative levels" only and not at "lower of normative and actuals". This is essential to encourage better operating performance. The norms should be efficient, relatable to past performance, capable of achievement and progressively reflecting increased efficiencies and may also take into consideration the latest technological advancements, fuel, vintage of equipments, nature of operations, level of service to be provided to consumers etc. Continued and proven inefficiency must be controlled and penalized.

Key aspects governing Tariff determination

1.The retail tariff is likely to see more steeper rise mainly on account various reasons like increase in transmission charges, increasing Renewable Purchase Obligations, implementation of Revised Emission Standard, expenditure on account of flexible operation of generating stations etc.How impact of this to be neutralized or made less severe.

2. Containing retail tariff to meet one of the objectives of Tariff Policy which is ensuring availability of electricity to consumers at reasonable and competitive rates has been a serious challenge.How to contain the sharp increase of retail tariff.

3.As per the report (submitted in 2021) of Working Group formed by Forum of Regulator the competitively discovered tariff remains significantly lower than that of regulated tariff. This gap needs to be addressed while formulating the Tariff Regulations.

4.How to attract investment in the sector while containing the retail tariff to affordable and competitive level.

Comments/Suggestions of draft Regulations

Regulation 2 Scope and extent of application:

Most of the power generating stations whose tariff is determined under Tariff regulations(under section 62 of the Act) usually gets delayed by many years which have detrimental effects on power portfolio of beneficiaries ultimately resulting into increased retail tariff of consumers and sub optimal utilization and performance of resources (generating stations).In order to mitigate such effects and also to encourage efficiency in carrying out better assessment and decide a realistic and achievable timeline of various milestones associated with commissioning of generation project it becomes essential that generating stations gets commissioned as per scheduled commissioning date indicated in the Investment approval.

In other words realistic assessment of scheduled commercial operation of a generating station and its timely completion would help in achieving objective of Tariff Policy 2016 namely availability of electricity to consumers at reasonable and competitive rates. It is also relevant to note that unlike generating stations whose tariff is determined under section 62 of the Electricity Act,2003 instances of such delay in commissioning is not so common in generating stations whose tariff is determined under section 63.Such difference in efficiency in commissioning could be probably due to presence of more appropriate compensation clauses in PPAs (as compared to one in Tariff regulations) for dealing with delayed commissioning scenario for generating stations governed by section 63 of the Act. Therefore, Hon'ble Commission may consider not determining tariff under Tariff regulations without consent from beneficiaries of those generating stations whose commissioning has been delayed. Accordingly, addition of following second proviso may be considered:

Provided further that fresh consent of beneficiaries for determination of tariff under these regulations would be required if COD of any generating station or unit thereof gets delayed beyond scheduled commercial operation date as per the investment approval.

Definition 3(88) ***Useful life*** may be revised as per following

(a) Coal/Lignite based thermal generating station----30 years
(b) Gas/Liquid fuel based thermal generating station-----30 years
(c) AC and DC sub-station-------30 years
(d) Gas Insulated Substation (GIS)-----30 years

Rationale: So many generating stations are already satisfactorily operating for more than 25 years. Therefore, useful life may be revised as above which would result into optimum utilization of resources, efficiency in design and operation, reasonable and competitive consumers' tariff. The overall tariff of thermal generating stations are likely to see a more steep rise in coming years mainly on account of implementation of Revised Emission Standards and Expenditure required to enable flexible operation of the generating station at lower loads.

Thus, the reduction in tariff by increasing the Useful life would lessen the severity of rapidly increasing retail tariff of end consumers mainly attributable to steep rise in transmission charges, increasing Renewable Purchase Obligations, implementation of Revised Emission Standard, expenditure on account of flexible operation of generating stations etc. It can't be denied that for overall interest of the power sector it is equally critical that retail tariff of electricity consumers does not rise to a level which is unaffordable to the consumers.

Regulation 17 : Special Provisions for Tariff for Thermal Generating Station which have Completed 25 Years of Operation from Date of Commercial Operation

Capacity charge as determined under Regulation 62is linked to actual availability and normative availability as such more clarity on how such capacity charges would be linked with scheduled generation would further help in implementation of Regulation 17.

***30 (3)Return on equity RoE** of projects achieving CoD on or after 01st April 2024 may be revised as follows*

Transmission projects 14%

Thermal generating stations 14.5%

Above revised rate of return on equity would yield a reasonable return at par with other sector and also This would be in line with the recommendations of Working Group (WG) formed by Forum Regulators inter alia to analyse and evolve measures towards reduction or at least containment of retail tariff. The WG recognizing that in the entire value chain, transmission business has the lowest risk advised in its report for immediate need of reviewing RoE of Transmission companies. This would also help in arriving at a generation and transmission tariff comparable with one discovered through competitive routes in accordance with section 63 of the Electricity Act,2003.

*34(a).***Interest on working capital: for Coal based/Lignite fired thermal generating stations**

Receivables equivalent to 45 days of capacity charges and energy charges for the sale of electricity calculated on the normative annual plant availability factor already covers other expenses mentioned under (i) to (v) and (vii) like cost of coal/lignite for 10/20 days, advance payment for thirty days towards cost of coal, cost of secondary fuel for two months etc. As such if for arriving at working capital requirement those items under (i) to (v) and (vii) is added in capital requirement corresponding to 45 days receivable this would tantamount to allowance of working capital requirement for more than 45 days which may translate into for more than 60 days based on actual generation.

It is apposite to note that the Tariff regulations under regulation 80 proposes for recovery of LPSC charges in accordance with LPSC Rules 2022 which contains more stringent measures against defaulting beneficiaries as also recovery of LPSC after 45 days from the defaulting beneficiaries as a much higher rate of actual cost of financing. It is also critical to highlight that the generating stations have not been able to maintain sufficient coal stock as per the norms leaving their beneficiaries in a situation where they need to either go for panic buying at a exorbitantly high rates or resorting to load shedding.

Moreover actual PLF of generating stations remains considerably less than the Normative Availability which further significantly reduces actual working capital requirement on account of

reduced requirement of fuel stock. Thus working capital requirement arrived based on normative availability as per item (vi) equivalent to receivablefor 45 days itself allows additional working capital of many weeks over and above 45 days if it is computed based on actual generation/PLF.
The above referred WG formed by FOR had also recommended for need of reviewing norms of interest on working capital
Therefore in light of the above, Hon'ble CERC may consider allowing interest on working capital requirement corresponding to only for 45 days.

62 Computation and Payment of Capacity Charge for Thermal Generating Stations
Peak and off Peak hours
Keeping into consideration that in most of the months actual peak hours sustains for more than 04 hours and also benefit associated with more availability of power during peak hours, peak hours of 06 hrs (instead of 04 hrs) linked with 30% AFC (instead of 20% AFC) seems more appropriate in formula for capacity charges under Regulation 62 (2) .Consequently balance 70% of AFC would be linked with 18 hours of off-peak hours.
Incentive under Regulation 62(5) corresponding to scheduled generation in excess of ex-bus energy in excess of Normative Annual Plant Load Factor (NAPLF)
As benefit of volatility of exchange price is also available to buyer where prices become very less than that of tariff of generating stations (whose tariff is determined under Tariff regulations) the reason of upward revising the incentive does not seem cogent one particularly when there is no corresponding provisions for disincentive in case of scheduled generation is less than NAPLF. The tariff Policy provides for provisions of both Incentive and disincentive for encouraging efficiency and operational efficiency improvement.
Therefore appropriate provision of disincentive for less scheduled generation than NAPLF may be incorporated in the Regulation
62(7) The applicability of 62(7) needs clarification as the regulation is proposed to be made effective from 1st April 2024 and before that Tariff regulations 2019 shall remain enforce and hence sentence starting with "Till that date……(impliedly period before 1st April 2024) creates confusion and needs clarification.
Regulation 70 NAPAF
Historically most of the thermal generating stations have already been operating at much higher availability than normative availability of 85% as can be seen from figures of actual availability tabulated in Table 43 of Explanatory Memorandum issued by Hon'ble CERC.
As such keeping Normative availability of 85% much below actual level which has been continued for last many years now goes against the provisions under section 61 of the Act wherein factors which would encourage competition, efficiency, economical use of the resources, good performance and optimum investments have been mandated to be guiding factors for specifying terms and conditions of determination of Tariff.
Further Tariff policy 2016 provides that the operating parameters in tariffs should be at "normative levels" only and not at "lower of normative and actuals". This is essential to encourage better operating performance. The norms should be efficient, relatable to past performance, capable of achievement and progressively reflecting increased efficiencies and may also take into consideration the latest technological advancements, fuel, vintage of equipments, nature of operations, level of service to be provided to consumers etc. Continued and proven inefficiency must be controlled and penalized
Therefore normative availability may be revised to 90% which would not be much below the actual level of availability that has been maintained by most of the generating stations for many years.

Other norms of operation GSHR, Specific fuel oil consumption Auxiliary Energy consumption
In consideration of the above explanation and need for encouraging operational efficiency Hon'ble Commission may consider reviewing the other norms GSHR, Specific fuel oil consumption Auxiliary Energy consumption

Regulation 72 NATAF
Keeping NATAF at level much below actually achieved level by transmission system effectively discourages efficiency in operation and thus keeping into consideration the object of Act particularly envisaged under section 61 and the Tariff Policy, NATAF may revised to a level which actually encourages efficiency in operation

73. Auxiliary Energy Consumption
In consideration of the above explanation norms for Auxiliary Energy consumption may be revised so as to encourage efficiency in operation

Disincentivising frequent revision of DC

The frequent DC revision and forced outages of thermal generating stations have very adverse effect on overall power sector as it not only force DISCOMs to procure power at exorbitantly high prices but many times lead to an unmanageable challenges of Load-generation balancing particularly when power even at maximum permissible rates are not available at power exchanges. In recent past impact of such frequent revisions has been more pronounced where on account of DC revision (to zero) by generating stations (mostly on account of forced outages) on many instances DISCOMs had to resort to load shedding in peak hours as power deficit quantum resulted due to forced outages of generating stations could not be purchased from power exchanges due to non availability of power. Moreover even if deficit quantum is purchased it would be at unreasonably high price ultimately resulting in passing on to end consumers in the form of higher tariff.
Tariff Policy 2016 under Para 6.2 provides following:
…….Power stations are required to be available and ready to dispatch at all times. Notwithstanding any provision contained in the Power Purchase Agreement (PPA), in order to ensure better utilization of un-requisitioned generating capacity of generating stations, based on regulated tariff under Section 62 of the Electricity Act 2003, the procurer shall communicate, at least twenty four hours before 00.00 hours of the day when the power and quantum thereof is not requisitioned by it enabling the generating stations to sell the same in the market in consonance with laid down policy of Central Government in this regard…..
Regulations 47 (2) and 49(10) IEGC 2023 provides for power by generating stations to their beneficiaries even in case of DC revision in case of Unit shutdown and forced outages respectively. However, subsequently hon'ble CERC vide its order dated 30.09.2023 (passed in Petition-14/SM/2023) effectively omitted 47(2) and reasoning of the same does not seem consistent with object of the IEGC regulations as well as above said provisions under Tariff Policy 2016 (para 6.2).
Therefore, keeping into consideration the adverse effect of frequent revisions of DC on load generation balancing, retail tariff of consumers and sector as a whole it is critical that such revision is disincentivized appropriately. Accordingly suitable provision may be added in Tariff Regulations

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