Expert Views are personal by Prof. Sudarshan Kumar Babu Valluru Electrical Engineering Dept. Delhi Technological University

'Comments / Suggestions /Objections on Draft Central Electricity Regulatory Commission (Deviation Settlement Mechanism and other related matters) Regulations, 2024'

Submitted by
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1.In order to have load generation balance, in 2009, the Commission has notified unscheduled interchange regulations, wherein, the utilities were to adhere their actual injections / drawls are equal to their schedules, incentivized for supporting the grid and disincentivized for burdening the grid. Subsequently, to further tighten the deviations and avoid any undue gain by any entity through deliberate deviations, in 2014, Deviation Settlement Mechanism Regulations were notified, which restricted deviations. Thereafter, in 2022, the Commission has notified Deviation Settlement Mechanism Regulations, 2022, wherein, it was mentioned that maintaining grid frequency is purely role of grid operator and grid connected utilities shall strictly adhere to schedule, independent of grid frequency. Now, the Commission has published draft Deviation Settlement Regulations, 2024, wherein, it proposes frequency linked penalties for deviation. In this regard, it is to mention that understanding of any regulations and its implementation in real time requires sufficient time, efforts and resources. However, complete change in any regulations not only lead the all efforts made go into vain but also create confusion in minds of utilities and uncertainty in market, particularly, renewable energy sector. In this context, it is also to mention that in 2022, many utilities have expressed their concern on delinking frequency, but, the Commission has not agreed and went ahead, however, now proposing frequency linked penalty for deviations. Therefore, it is requested to notify the regulations after thorough deliberations and practical feasibility.

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- 2.In order to meet the load generation mismatch, the regulations primarily relaying on ancillary services, however, the grid is growing enormously, the required quantum of ancillary services is increasing, which may not be available and on the other hand, the utilization of ancillary services is very rare, their cost is increasing exponentially (recently reached to Rs. 60 / kWh). In addition, the kick in and off of ancillary services is proposed to dealt by LDCs, the same may be invite commercial disputes among ancillary service providers and utilities paying the charges for the ancillary services. Further, in case, the planned ancillary service failed to kick in, the very purpose and efforts goes into vain. Therefore, mismatch in load generation balance shall be allowed to meet through decentralized deviations in injection / drawls, which support the grid. Thus, the consideration on ancillary services for load generation balance shall be last resort, after exploiting all possible options.
- **3.**In regards to Regulation 3 (x) i.e. Reference Charge Rate (RR), it is to mention that for the section 62 projects also, the Commission determined ECR for the purpose of computation of Interest on Working Capital and the same do not reflect actual cost of energy. Thus, the actual ECR, particularly block wise is known to generator only, the rate specified may be different from actual. Therefore, monthly ECR of station may be considered as RR.
- **4.**In regards to Regulations 3 (x) and 7, it is noted that while the rate considered for generating entities is Reference Charge Rate (RR), the rate for beneficiaries considered as Normal Rate (NR), however, these two are independent and there is no correlation. The same only create enormous corpus to support unwarranted ancillary service. It is requested to consider one rate for both generators as well as beneficiaries, if not a multiplication factor may be considered.
- **5.**In regards to regulation 7 i.e. Normal Rate of Charge for Deviations, wherein, 1/3 weightage has been given to ACP of DAM, ACP of RTM and Ancillary Service Charge, it is to mention that ancillary services are pre-identified but not

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based on competitive bidding and in the recent times, the cost went upto Rs. 60 / kWh, linking the Normal Rate to ancillary service is undesired at this stage (till robust and suitable quantum is established) or weightage shall be made less than 10 %. Accordingly, the regulation 7 may be modified.

6.In regards to regulation 8, wherein, certain deviations are allowed to various utilities, it is to mention that as different entities are provided with different deviations, the deviation amount will not be a zero sum for normal deviations. Therefore, necessary adjustment in rates shall be considered, so that under these deviations, the net amount recovered and ancillary services required is ZERO.

7.In regards to regulation 8 (1)(i), wherein, f = 50.00 Hz, the both under injection and over injection by seller are provided with RR rate. However, the same may lead to gaming by an entity in terms of under injection from one station and over injection from another station. Therefore, the same may be modified.

8.In regards regulation 8(1)(ii) for under injection during frequency from 49.9 to 50.0 Hz and payable by seller upto 150 % RR, it is to mention that frequency less than a limit may be 49.97 may be called for ancillary service by Grid operator and the cost is much higher than RR. Thus, inspite the generator at faulty, it is paying lower penalty, the beneficiaries have to pay higher charges interms of NR.

9.In regards to regulation 9 (7), it is to mention that though the draft regulations consider ACP instead of MCP i.e. the entities in congestion areas shall highly adhere to schedules, the proposed regulation provides for adjustment of surplus amount of one region with another region. Thus, the same is contradictory. Thus, either it shall be linked to MCP instead of ACP, if not, amount of one region shall not be adjusted with other regions, else it will jeopardize the genuine efforts.

10.In order to have stable operation of grid, the time lag between grid parameters and response of machine / demand, to avoid unwarranted hunting etc, the frequency band of 49.99 to 50.01 HZ may be considered and the penalties may be levied beyond the same.