

Comments on the Central Electricity Regulatory Commission (Ancillary Services) Regulations, 2021

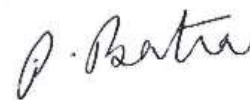
1. CERC has taken out path-breaking Regulations on competitively bid ancillary services, which also includes energy storage and demand response. This is likely to encourage setting up of energy storage and demand response at competitive prices, both directly and through aggregators.
2. It is mentioned in Clause 7 (1) that the Secondary Reserve Ancillary Service (SRAS) should respond to the signal within 30 seconds and providing the entire SRAS capacity obligation within fifteen (15) minutes. This means that the capacity obligation can be operational as late as 15 minutes. An important step of responding within these 15 minutes has got left out. The Primary Reserve Ancillary Service through governor action acts quickly, but in case of coal based stations, can sustain only for 5 minutes. Therefore, there is no ancillary service, other than for hydro stations, which would be responding between 5 and 15 minutes. It is therefore recommended that a Primary Reserve Ancillary Service, which again can be obtained through competitive bidding, should be included in this Regulation. Pumped storage hydro power plant, electrochemical batteries and demand response would be most effective in this intra-15 minute period.

The UK, recognizing this quick response requirement for the grid, called for bids from quick acting ancillary services (called Enhanced Frequency Response) for 200 MW in 2016. A total of 201 MW was awarded for a period of four years, and all the service providers who won were electrochemical batteries. The condition was that all were to respond and deliver full capacity in under one second. There was also a pay for performance clause, which is present in the Draft CERC Regulations also. However, the payment was made for the commitment charge, an average of 9.44 British pounds per MWh. **The details of the same are attached for reference.** The commitment charge in these draft regulations is very low or non-existent.

3. In Clause 6 (1), it is mentioned that the Nodal Agency, i.e. NLDC shall, in coordination with RLDCs and SLDCs, estimate the quantum of requirement of SRAS and TRAS. It is suggested that the quantum of

requirement of Primary Reserve Ancillary service should also be estimated by the NLDC, since NLDC gets data of the granularity of 1 minute. It can therefore estimate the quantum of Primary Reserve Ancillary service required.

4. The **method** for estimating the quantum of all types of ancillary services (i.e. Primary, Secondary, Tertiary) should be approved by CEA/CERC, to ensure checks and balances.
5. It is mentioned in Par 9 that SRAS would be chosen from among SRAS Providers willing to participate in SRAS, and they would be required to provide standing consent to the Nodal Agency for participation. It is not sure, if any service provider would come forward only for this service, since there is no commitment charge that is being paid to it. The only extra money is the incentive per unit of generation, ranging from 10 paisa to 40 paisa per unit. There may therefore be times, when there is no SRAS available. We will have to see if this is desirable.
6. It is mentioned in Para 8(1) that one of the condition of operation of SRAS is Area Control Error (ACE) of the region deviating from zero (0) and going beyond the minimum threshold limit of ± 10 MW. This implies that the SRAS would be deployed Region-wise, as is also mentioned in the Regulations. This would be useful if there is transmission constraint between Regions. If not, this would lead to inefficient procurement of SRAS. This should be ascertained, before this condition is stipulated.



Pankaj Batra,
Project Director,
IRADe & Ex
Chairperson, CEA.

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