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July 02, 2021

Shri Sanoj Kumar Jha

Secretary, Central Electricity Regulatory Commission

Ministry of Power

Government of India

Subject: Industry Inputs on Draft Ancillary Services Regulations, 2021

Dear Mr. Jha,

Greetings from the U.S. - India Strategic Partnership Forum (USISPF)!

As you may be aware, USISPF is a non-profit organization focused on strengthening business relations between the U.S. and India along with enhancing the U.S.-India strategic relationship. On behalf of our Board, and our member companies, please know that we are committed to lend you and your administration any form of support in these trying times.

As per the notification RA-14026(11)/3/2019-CERC. dated 29th May 2021, issued by your office, in exercise of the powers conferred by relevant clauses of the Electricity Act, 2003 (36 of 2003), we wish to submit for the CERC's considerations inputs from the power sector on the proposed Draft Ancillary Services Regulations, 2021. You will find detailed inputs in the Annexure attached with the letter.

Please note that USISPF has developed these inputs after detailed deliberations with the key stakeholders of the power sector in India. We believe that these inputs will be crucial to enabling efficiency in procurement of ancillary services while ensuring safety and security of the grid.

We would welcome a discussion on these inputs between the Commission and the industry, should that be of use. If your office needs further information or clarification on these suggestions, please reach out to my colleague Mr Bhuwan Mehta, Senior Manager of Energy and Infrastructure Division at USISPF, on +91 9099641176 or bmehta@usispf.org..

Thank you in advance for your favorable consideration of this request.

Sincerely,

Dr. Mukesh Aghi President & CEO

Q/ NK

US-India Strategic Partnership Forum

Annexure(USISPF Representation)-Industry response on draft Ancillary Services Regulations, 2021

I. Primary Reserves Ancillary Services (PRAS)

- a. The Draft paper does not outline details about how PRAS would be met, what would be the required size of procurement and the compensation mechanism for such a service. It would be advantageous to adopt a market mechanism for primary reserve as well.
- b. Including primary reserve into a similar market mechanism will lead to market efficiencies resulting in lower overall system procurement for such reserves. With limited speed requirements and only market mechanism around SRAS and TRAS, the efficiencies will not be achieved.
- c. A market for primary reserve will ensure the best technology is procured for the task to be done. Globally, markets such as PJM and Ireland have recognized the first responders on the system need to be compensated higher and that this will enable the most efficient resources to be deployed.
- d. Creating a mechanism for different technologies to participate in this market will ensure higher performing assets are deployed on the grid that will further enhance the grid as more variable renewable energy (VRE) is added
- e. With this context, it is recommended that a similar market mechanism be included for Primary reserves as well.

II. Response of PRAS sources

- a. Under Clause 7 (Eligibility of an SRAS provider), it is mentioned that the SRAS provider should be capable of responding to SRAS signal within 30 seconds. It is requested if the regulatory commission could provide more clarity on the rationale of this requirement, which would also help understand the required time of response under PRAS such that the SRAS steps in to support.
- b. This would be helpful in building faster responding assets, which could be a very effective tool to the grid operators even in the secondary market, to prepare for the level of VRE being added to grid so effectively by the Indian Government and Power Industry.

III. Performance incentive for SRAS

- a. As provided in Clause 12-(3), the pay for performance for SRAS is a very progressive approach. It would be further helpful if details on determination of incentive structure and the speed of response/formula considered could be provided for a better understanding. Further, the structure can propose penalty for non-performance along with incentives for performance.
- b. It is humbly submitted that the effectiveness of the incentive structure will be fully utilized when it will be applied to PRAS as well and on linking with faster response times in PRAS and SRAS. Faster responses are achievable, and will provide benefits for grid stability with utilization of available commercial solutions.

IV. Roadmap for inclusion of other Ancillary Services

- a. The definition of "Ancillary Service", as mentioned in Clause 3-(1)-c, also includes services such as active power support for load following, reactive power support, black start services apart from Primary Reserve Ancillary Service, Secondary Reserve Ancillary Service, Tertiary Reserve Ancillary Service but the regulation has not mentioned about procurement of these services.
- **b.** As RE penetration and grid discipline requirement will increase, the need of markets for diverse ancillary services grow (example 2 second signals, faster response time etc). It is requested to include a roadmap of addition of new market structures and ancillary services, and share the result of analysis/studies for requirement of other ancillary services so that developers can plan accordingly. This will also help in cost optimization as assets like BESS can be adopted to serve new structures as well.

V. Impact on DSM

a. Successful procurement of ancillary services will result in lower deviations, more positive operations/less penalty for DISCOMS, more grid stability and less outages. To achieve this goal, the regulations should also focus on integrating faster response systems and increasing coordination around market clearing is required to ensure the right systems are bid into the market to support the grid

VI. Deviation and Ancillary Service Pool Account

a. The paper clearly highlights how payments to/from a pool will work for SRAS and TRAS up and down providers. However, more clarity is required on the workings of the overall market mechanism. It seems close to the causer-pay mechanism in Australia for Frequency Regulation, which ensures that systems causing deviation are paying into a Pool and from that pool, systems supporting deviation Up or Down are compensated. Further details on the overall market mechanism will enable clarity, to stakeholders and alignment.

VII. Demand response:

- a. "Demand Response" means variation in electricity consumption by end consumers or drawal by a control area, as per system requirement identified by the Nodal Agency. It is evident that DISCOMs will be playing this role, however it is requested that the mechanism for demand response be made clear in NLDC Detailed Procedure or through the Grid Code amendment.
- b. Further, DISCOMs may face difficulty in providing demand response based ancillary services considering the challenges in approval of compensation charges for demand response from state regulatory commissions, without a standard calculation guideline.

VIII. Commitment charges

- a. It is requested that a commitment charges' structure should also be put in place for SRAS, similar to the one proposed for TRAS, to promote adoption of new technologies and to bring efficiency to the market.
- b. Further, TRAS procurement can also be optimized if duration of service requirements are right sized and in set of tranches.
- c. Further, it is requested that the regulations provide more clarity on the estimation of commitment charges.
- d. TRAS-Up Provider shall receive commitment charges at the rate of ten percent of the MCP-Energy-Up-DAM or the MCP-Energy- Up-RTM, as the case may be, subject to the ceiling of 20 paise/kWh for the quantum of TRAS-Up cleared in the Day Ahead Market or the Real Time Market as the case may be, but not instructed to be despatched by the Nodal Agency. It is requested if clarity could be provided on the basis of 10% and ceiling of 20 paise/kWh. Further, the regulation should also clarify if the capacity scheduled for SRAS and TRAS can be also used for the purpose of DSM.

IX. Scope of regulations

a. As mentioned in Clause 4, These regulations shall be applicable to regional entities, including entities having energy storage resources and demand side resources qualified to provide Ancillary Services and other entities as provided in these regulations. The scope could be enlarged to have participation of State Generating stations and Private sector generating stations operating in the State. This may lead to competition in prices quoted.

X. Condition for activation and deployment of SRAS and TRAS

a. As mentioned in Clause(s) 8 and 15, it is requested that the condition for activation and deployment of SRAS and TRAS be included and clearly specified in the grid code.

XI. Un-requisitioned Surplus

a. It needs to be appreciated that all existing mechanisms such as revision of schedule by the Discoms, RRAS scheduling and generator participation in RTM are from the URS power of the available generating stations. As such, is is requested that identification of generating stations for providing ancillary services on day ahead basis or in real time should be based on confirmation of Discoms/Beneficiaries for not scheduling certain URS capacity.

XII. Repeal and Savings

a. Central Electricity Regulatory Commission (Ancillary Services Operations) Regulations, 2015 and all subsequent amendments thereof have been repealed and the same has got merged with this regulation. There is need of merging DSM regulations also with these regulations and doing away with separate frequency linked DSM Regulation.

XIII. Market sizing mechanism

a. To determine and plan potential of Ancillary service revenue streams, it is requested that clarity around how the market sizing is done, and how it will be conducted be established in the regulations. By establishing such a structure, investor/developers can assess the market better and reduce their merchant risk thereby promoting investments, creating efficient markets and lower overall cost to the system and population. Coordinated response between Primary Reserve, Secondary Reserve and Tertiary Reserve is also key to achieve an ideal system response

XIV. Miscellaneous

- a. The Draft regulations do not capture, if a BESS is used, how SOC mgmt. is expected to occur by the service provider or System operator.
- b. The role of Discoms is not very clear in these regulations except that they may offer to reduce demand against payment of Compensation. However, detailed mechanism for scheduling and dispatch should be specified with the amendment of Grid Code in due course.