

Date: 1st June 2015

To
The Joint Chief (Regulatory Affairs),
Central Electricity Regulatory Commission,
3rd and 4th Floor
Chanderlok Building
36, Janpath,
New Delhi 110 001.

Kind Attn.: Mr. Sushanta K Chatterjee

**Sub: Draft Central Electricity Regulatory Commission
(Ancillary Services Operations) Regulations, 2015.**

Dear Sir,

We commend the Hon'ble Commission for their effort in crystallizing the framework required for ancillary services which in the emerging power scenario of India is already an essential requirement. The Regulations in the right earnest are currently based at only the un-requisitioned surplus available in the existing power system.

We feel that though a welcome step the draft regulations lack completeness to cater to the varied needs of ancillary services and hence would like to present here our suggestions for the same. For the regulations to provide an enabling & transparent framework, balancing consumer interest and facilitating investment in the power sector, it is important that the regulations cater to all types of needs of reserves i.e. Primary, Secondary and Tertiary. The need for these different types of reserves will grow more prominent with the increasing amount of renewable generation in the system.

As rightly pointed out in the Explanatory Memorandum to the draft Regulations – Clause 2.2 "*.....Secondary control is absent by design in the Indian grid. Roadmap for introduction of secondary control in India needs to be devised at the earliest considering the 135 GW Peak load system operating as a single grid.....*". We urge the Honourable Commission to suitably amend the draft regulations so as to encourage secondary generation reserves in the power system which are capable of ensuring the grid stability by providing the Frequency and Voltage control ancillary services as well as act as a natural support to the renewable generation in the times of reduced or no generation and thus protect the transmission network from sudden variations in power flow.

The requirements for a power plant to qualify as secondary generation are –

- Fast start up and shut down capability with no impact on maintenance schedules

- Fast ramp up and down capability
- Black start capability
- Fuel flexibility
- Partial load operations without loss of efficiency

This can also be seen in the simulation study attached to the explanatory memorandum. It can be observed that –

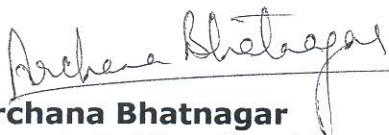
- 2706 MW were shut down, at 10:30 - 12:00 time block (i.e., 43rd to 49th time block), covering 6 time blocks
- 691 MW was kicked in at 56th (13:45 -14:00) to 59th (14:30-14:45) time block.
- The time gap between the shutting down of units at 12:00 hrs and starting of the URS (un-requisitioned supply) took almost 13 time blocks, i.e. 3 hours and 15 minutes.
- The savings depicted in the inferences by CERC indicate that, due to starting of URS of 691 MW in the 13th time block, at cost of Rs 48 Lakh, liabilities of beneficiaries reduced by Rs 87 Lakh.
- In this regard it is important to note that under such circumstances if secondary control is available which can respond in around 10 minutes, the lag in improvement of frequency can start either from first or second time block instead of after 13th time block and under such case, the monetary benefits will be manifold times as compared to the system in which territory control was used for improvement of system.

Thus, a slight alteration in the study by introducing dedicated secondary generation plants would ensure generation balancing as well as optimising the system operations and bring down the value of lost load.

Thanking you,

Yours faithfully

For **Wartsila India Pvt. Ltd.**



Archana Bhatnagar
Associate Vice President
Development and Financial Services

