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Sent: Wednesday, August 31, 2022 11:15:42 PM
Subject: Wartsila comments on Draft Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2022

Dear Sir/Madam,

Greetings of the day.

This is with reference to the CERC public notice No. L-1/265/2022/CERC dated [07 June 2022](#) for Draft Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2022.

Please find enclosed our comments on the draft consolidated in the excel sheet.

Thank you.

Best regards,

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WARTSILA Comments
NEW DELHI

No. L-1/265/2022/CERC

Sr No	Clause	Particulars	Definition	Wartsila Comments
1	Page 13/188; Sr no. 56		a) for all generating stations except solar photo voltaic, wind and hybrid stations, an electrical generator coupled to a prime mover within a power station together with all plant and apparatus at the power station which relate exclusively to operation of that turbo-generator	Engine Generator also needs to be consider along with Turbo-Generator
2	Page 17/188; Sr no. 83	Primary Reserve	means the maximum quantum of power which will immediately come into service through governor action of the generator in the event of sudden change in frequency. This reserve response shall start instantaneously and attain its peak in less than 30 seconds, and shall sustain upto 5 minutes	Instantaneously refers to how much time? Kindly specify time period.
3	Page 41/188; Point no 22		TRIAL RUN OF GENERATING UNIT	Trial run of Engine-Generator unit shall be included.
4	Page 46/188; Point no 24 (4)		Documents and Test Required for Gas Turbine based Generating Stations	Internal Combustion Technology (ICE) based generating station shall be included.
5	Page 49/188; Point no 26 (1)		DECLARATION BY GENERATING COMPANY AND TRANSMISSION LICENSEE	ICE Generating station shall be included
6	Page 64/188; Point no 30 (2)	FREQUENCY CONTROL AND RESERVES	The NLDC, RLDC and SLDC shall ensure that the grid frequency remains close to 50 Hz. and ensure that the frequency is restored within the allowable band of 49.95-50.05 Hz at the earliest	Kindly specify the time duration to restore the frequency.
7	Page 65/188; Point no 30 (5)	FREQUENCY CONTROL AND RESERVES	The reserves shall be operated as Ancillary Services, namely (a) Primary Reserve Ancillary Service (PRAS); (b) Secondary Reserve Ancillary Service (SRAS); (c) Tertiary Reserve Ancillary Service (TRAS); (d) Black Start Ancillary Services; and (e) Voltage Control Ancillary Services.	This should include Engine+BESS+EMS
8	Page 67/188; Table 4	PRIMARY RESPONSE OF VARIOUS TYPES OF GENERATING UNITS	Gas Turbine above 50 MW	Gas based should also include ICE generating technology
9	Page 100/188; Point no 40 (3) Table 9	TESTS REQUIRED FOR POWER SYSTEM ELEMENTS	Individual Unit of rating 100MW and above for Coal/lignite, 50MW and above gas turbine and 25 MW and above	ICE Generator technology shall be included.