Consortium for Electric Reliability Technology Solutions
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Participant Contact Information and Research Activities

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What is your working definition of a microgrid? How is it different from the following working definition?

> A microgrid is an integrated power delivery system consisting of interconnected loads and DER which, as an integrated system, can operate in parallel with the grid or in an intentional island mode. The integrated DER are capable of providing sufficient and continuous energy to a significant portion of the internal demand, and the microgrid possesses independent controls and can island and reconnect with minimal service disruption.

Looks good for a starter. IEEE SCC21 P1547.4 is developing a standard and will provide a standardized definition in time as the standard is developed.

Briefly describe your research activities on microgrids.

Please type your response here. NREL Technology Manager for DE at NREL and manage DOE's work on interconnection standards, technology development, testing, and partnerships for implementation.

Please note which of the following technical issues your research addresses (if any):

Intentional islanding and resynchronization	*Yes*
Protection within the microgrid	*Yes*
Voltage control within the microgrid	*Yes*
Frequency control within the microgrid during islanded	*Yes*

operation		
Fast load sharing among microsources (for load changes faster than the ramping rates of the prime movers)		*Yes*
Heat load matching and load prioritization		*Yes*
Economic dispatch of assets		*Yes*
Meeting environmental constraints		*Yes*
Other	*Please be specific:* micro-grid standardization, design, grid and load reliability, and testing	