



Consortium for Electric Reliability Technology Solutions
Berkeley 2005 Symposium on Microgrids
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Participant Contact Information and Research Activities

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<p>What is your working definition of a microgrid? How is it different from the following working definition?</p> <p>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.</p> <p><i>Our working definition is similar but with more emphasis on local environmental desires that will help us optimize the system configuration and operation.</i></p>							
<p>Briefly describe your research activities on microgrids.</p> <p><i>We are working on developing microgrid business models, investigating microgrid system controls, protections and optimizations.</i></p>							
<p>Please note which of the following technical issues your research addresses (if any):</p> <table><tr><td>Intentional islanding and resynchronization</td><td>Yes</td></tr><tr><td>Protection within the microgrid</td><td>Yes</td></tr><tr><td>Voltage control within the microgrid</td><td>Yes</td></tr></table>		Intentional islanding and resynchronization	Yes	Protection within the microgrid	Yes	Voltage control within the microgrid	Yes
Intentional islanding and resynchronization	Yes						
Protection within the microgrid	Yes						
Voltage control within the microgrid	Yes						

Frequency control within the microgrid during islanded operation	Yes
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	<i>Please be specific</i>