



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>Basically same as above. Tie line current should be minimized when a microgrid is operated even in parallel with the grid.</i></p>									
<p>Briefly describe your research activities on microgrids.</p> <p>Operation planning (economic dispatch) of a microgrid including renewable energy sources (PV, wind power).</p> <p>CO₂ impacts of operation of a microgrid.</p> <p>Market diffusion of DER including micro-CHPs</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><i>No</i></td></tr><tr><td>Protection within the microgrid</td><td><i>No</i></td></tr><tr><td>Voltage control within the microgrid</td><td><i>Yes</i></td></tr><tr><td>Frequency control within the microgrid during islanded</td><td><i>Yes</i></td></tr></table>		Intentional islanding and resynchronization	<i>No</i>	Protection within the microgrid	<i>No</i>	Voltage control within the microgrid	<i>Yes</i>	Frequency control within the microgrid during islanded	<i>Yes</i>
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operation	
Fast load sharing among microsources (for load changes faster than the ramping rates of the prime movers)	<i>No</i>
Heat load matching and load prioritization	<i>Yes</i>
Economic dispatch of assets	<i>Yes</i>
Meeting environmental constraints	<i>Yes</i>
Other	<i>Please be specific</i>