

Energy and Resources Group Spring 2009 Colloquium Series (ER295)

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Examining Energy Storage and its Alternatives in Sustainable Energy Systems

110 Barrows Hall / 4:00 p.m.

This lecture will provide an overview of several ongoing research projects, all of which touch on issues of energy storage and the variability of demand and renewable supply in energy systems. The talk will proceed in three parts: First, I will briefly cover my research on plug-in hybrid electric vehicle power management, at both the vehicle-level as well as the level of the power system. In the second and most detailed part of the talk, I will discuss the application of advanced metering infrastructure and electricity load control to the purpose facilitating the integration of wind energy to the electricity grid. Finally, I will discuss several ongoing efforts in the area of spatial analysis and optimization of distributed wind energy systems