

energy seminar series

Addressing global energy challenges in scale and complexity.



Designing a Sustainable Future: Simulating Next Generation Energy Systems

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Date: Thursday, April 19 at 12:30pm Location: ECEE 1B70

Abstract:

World energy systems are changing rapidly in the face of the global challenge of decarbonization. Power systems are also being disrupted with the addition of more distributed and variable renewable energy sources. The importance of the power system is also increasing as it is expected to play a central role in future energy systems integration, due to the rapidly falling costs of wind and solar power and its many connections to other energy systems. Since the power system is enormous in scale, has very long investment horizons, and stringent reliability requirements, changes to the system need to be thoroughly validated through computational simulations before being implemented in practice. This talk focuses on the challenges of renewables integration and the simulation methods being developed to help design future interconnected energy systems.

Bio:

Dr. Bri-Mathias Hodge received the B.S. degree from Carnegie Mellon University, the M.S. degree from Abo Akademi, in Finland, and the Ph.D. degree from Purdue University. He is currently the Manager of the Power System Design and Studies Group, National Renewable Energy Laboratory, and a Lecturer at CU Boulder.

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