Institute of Public Utilities Power Grid Course

### **IPUMSU**

MICHIGAN STATE UNIVERSITY | INSTITUTE OF PUBLIC UTILITIES Regulatory Research and Education 517.355.1876 | 517.355.1854 fax | ipu.msu.edu | ipu@msu.edu



# **IPU Grid School Course II:**

Supply-Side: Energy and Storage, Resource and System Planning, and Reliability and Security

April 8-10, 2025 - Live Online Learning

IPU Power Grid School covers the engineering and economics of the electric utility systems across the supply chain for power and its transformation, from generation to transmission to distribution.

## Program Agenda

All times are eastern standard time.

#### April 8 - Tuesday Generation and Storage

10:00-11:20 am 80 min.	Status and future of natural gas supply and infrastructure [Deupree]
11:40-1:00 pm 80 min.	Developing and permitting wind, solar, and storage [Loomis]
2:00-3:20 pm 80 min.	Flexibility, distributed energy resources, and virtual power plants [Anctil]
3:40-5:00 pm 80 min.	Risk assessment and physical cybersecurity [Ten]

#### April 9 - Wednesday Resource and System Planning

10:00-11:20 am 80 min.	Integrated resource planning, portfolios, and permitting [Wilson and Glick]
11:40-1:00 pm 80 min.	Transmission expansion, optimization, and coordination [Wiser and Heller]
2:00-3:20 pm 80 min.	Nuclear power renewal and small modular reactors [Thomas]
3:40-5:00 pm 80 min.	Grid modernization technologies and implementation [Lau]

#### April 10 - Thursday Reliability and Security

10:00-11:20 am 80 min.	Levelized cost vs. levelized value of energy resources [Meeusen]
11:40-1:00 pm 80 min.	Planning for decarbonization under a changing climate [Craig]
2:00-3:20 pm 80 min.	Sustainability, supply chains, and technology life cycles [Anctil]
3:40-5:00 pm 80 min.	Reliability and resilience standards and practices [Mitra]

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# IPU Power Grid Course II 2025: Program Faculty



Annick ANCTIL (anctilan@msu.edu)
Assoc. Professor, Civil and Environmental Engineering, MSU
Ph.D. Sustainability, Rochester Institute of Technology
www.linkedin.com/in/annick-anctil-9b024110/



Michael CRAIG (mtcraig@umich.edu)
Assistant Professor in Energy Systems, University of Michigan
PhD, Engineering and Public Policy, Carnegie Mellon University (2017)
seas.umich.edu/research/faculty/michael\_craig



Michael DEUPREE (michaeldeupree@acadianconsulting.com)
Senior Research Analyst, Acadian Consulting Group
M.A. Economics, The University of Kansas
www.acadianconsulting.com/michael-dupree



Devi GLICK (dglick@synapse-energy.com)
Senior Principle, Synapse Energy Economics
M.P.P. Public Policy, Natural Resources and the Environment, University of Michigan www.linkedin.com/in/devi-glick-b730b15/



Peter HELLER (peter.heller@brattle.com)
Energy Research Associate, The Brattle Group
M.S. Technology and Policy, Massachusetts Institute of Technology
www.linkedin.com/in/peter-heller/



Jessica LAU (jessica.k.lau@gmail.com)
Grid Strategy Consultant, Artful Pathways, LLC
M.S. Power Systems Management, Worcester Polytechnic Institute
www.linkedin.com/in/jessicaklau/



David LOOMIS (dave@strategiceconomic.com)
President, Strategic Economic Research, LLC
Ph.D. Economics Temple University
www.linkedin.com/in/david-g-loomis/

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Karl MEEUSEN (karl.meeusen@wartsila.com)
Director, Markets, Legislative and Regulatory Policy, Wartsila North America, Inc.
Ph.D. Agricultural, Environmental, and Development Econ., The Ohio State University www.linkedin.com/in/karl-meeusen-900036b8/



Joydeep MITRA (mitraj@msu.edu)
Professor, Electrical and Computer Engineering, MSU
Ph.D., Electrical Engineering, Texas A&M
www.egr.msu.edu/~mitraj/profile.html



Chee-Wooi TEN (cheewooi@gmail.com)
Professor, Electrical Engineering, Michigan Technological University
Ph.D. Electrical, Electronics and Communications Engineering, University College Dublin www.linkedin.com/in/chee-wooi-ten-785020207/



Stephen THOMAS (<u>Stephen.thomas@greenwich.ac.uk</u>)
Editor in Chief, Energy Policy, Emeritus Professor of Energy Policy, Univ. of Greenwich



Rachel WILSON (rachelwilson03@gmail.com)
M.S., Environmental Management, Law, Economics and Policy, Yale University www.linkedin.com/in/rachel-wilson-b1286ab0/



Ryan WISER (rhwiser@lbl.gov)
Senior Scientist, Lawrence Berkeley National Laboratory
Ph.D., Energy Resources, University of California, Berkeley
www.linkedin.com/in/ryanwiser/

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