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The Future of Electric Power in the U.S.

Public Access File

Committee Meeting 1 (03/04/19) Presentations to Committee

1. Department of Energy: Office of Electricity
   Michael Pesin, "NAS Study Goals and Office of Electricity Relevant Activities"
2. Department of Energy: Advanced Grid Research and Development
   Daniel Simmons & Steven Chalk, "Presentation to the National Academies Committee on Modernizing the U.S. Electricity System"
3. Department of Energy: Office of Cybersecurity, Energy Security, and Emergency Response
   Carol Hawk, "Cybersecurity for Energy Delivery Systems (CEDS) Division Overview"
4. Department of Energy: Office of Nuclear Energy
   Bradley Williams, "Nuclear Energy Overview"

Committee Meeting 2 (05/13/19) Presentations to Committee

5. PJM Interconnection
   Brian Fitzpatrick, "Gas Electric Coordination"
6. Midcontinent Independent System Operator
   Scott Wright, "Presentation to the National Academies Committee on Modernizing the U.S. Electricity System"
7. Carnegie Mellon Electricity Industry Center
   Jay Apt, Sinnott Murphy, Luke Lavin & Gerad Freeman, "Electric Power Generator Reliability and Natural Gas Reliability"
8. Tim Heidel, "Modernizing the U.S. Electricity System"
9. Department of Energy: Office of Electricity
   Joe Paladino, "Grid Modernization Considerations"

Committee Meeting 3 (08/14/19) Presentations to Committee

10. Tom Wilson, EPRI, "Future of Electric System"

Workshop: Computing, Communications, Cyber Resilience, and the Future of the U.S. Electric Power System (11/1/19) Presentations

11. Bill Sanders, University of Illinois, "Setting the Stage: Computing, Communications, and Cyber Resilience in the Grid"

12. Mike Howard, Electric Power Research Institute, "Differences Between GMD and HEMP E3"
13. John Kappenman, Storm Analysis Consultants, "Electric Grid Vulnerability to EMP and GMD"
14. Mark Lauby, North American Electric Reliability Corporation, "EMP and GMD Risk Mitigation"
15. Randy Horton, Electric Power Research Institute, "EPRI Electromagnetic Pulse Research"
16. Mark Adamiak, Adamiak Consulting, "The State of Cyber Security in US Utilities"
17. Tim Roxey, "Losing Faith in the Modern World"

Workshop: Computing, Communications, Cyber Resilience, and the Future of the U.S. Electric Power System (11/1/19) Responses and Accompanying Documents

18. Andy Bochman, Idaho National Laboratory- Public Comment
19. UTC- "About the Utilities Technology Council"
20. UTC- "Invisible Infrastructure: How Utility Telecommunications Networks Underpin the Grid"
21. UTC- "Why Do Utilities Need Communications Networks?"
22. UTC- "Why Utilities Need Access to Spectrum Issue Brief"
23. Statement of Joy Ditto, President and CEO, Utilities Technology Council before the Federal Energy Regulatory Commission, Annual Reliability Conference Docket No. AD19-13-000- Panel on "Managing Changes in Communications Technologies on the New Grid" June 27, 2019
24. Bruce Walker, Asst. Sec. DOE-OE, September 3, 2019 Letter to FCC Chairman Pai on the 6GHz spectrum band

Webinar: Improving Power Flow Models (01/15/20) Presentations to Committee

25. Eugene Litvinov, ISO New England, "Power Flow Application in Power Systems"
26. Larry Pileggi, Carnegie Mellon University "Robust and Comprehensive Power Flow for Future Smart Grids"
27. Amritanshu Pandey, Carnegie Mellon University "SUGAR – Examples and Applications"

Webinar: Grid Architectures from Theory to Practice (01/29/20) Presentations to Committee

28. Jeffrey Taft, Pacific Northwest National Laboratory, "Thinking About the Whole Grid: Grid Architecture"
29. Paul DeMartini, Newport Consulting Group , "Operational Coordination"

Workshop: Models to Inform Planning for the Future of Electric Power in the U.S. (02/03/20)
Presentations

30. John Weyant, Stanford University Energy Modeling Forum, "Modeling the Electricity Sector for Energy Policy and Strategy Analysis: An Overview of Models Used in Electric System Analysis and Planning"
31. David Daniels, Energy Information Agency, "Modeling the Future of the U.S. Electric Power System"
32. Dan Shawhan, Resources for the Future, "E4ST Modeling, and Some Suggestions Related to Power Sector Modeling"
33. John Bistline, Electric Power Research Institute, "Insights and Perspectives from EPRI's REGEN Model"
34. Bethany Frew, National Renewable Energy Laboratory, "Emerging Trends in Power System Planning Models"
35. John Larsen, Rhodium Group, "Modeling Economy-wide Deep Decarbonization"
36. Joe Eto, Lawrence Berkeley National Lab, "Models Used for Transmission Planning; Their Focus, Strengths, and Limitations for Various Purposes, and How They Can be Improved"
37. Thomas Overbye, PowerWorld, "Models to Inform Planning for the Future of Electric Power in the US: Some Fundamental Issues"
38. Amos Ang, Southern California Edison, "State of Modeling the Electric Grid"
39. Jason Fuller, Pacific Northwest National Lab, "Distribution Modeling: It's not just the grid anymore!"
40. Roger Dugan, Electric Power Research Institute , "Models for Distribution Planning; Strengths, Limitations and Improvements"
41. Aleksi Paaso, Commonwealth Edison, "ComEd's Advanced Distribution System Planning"
42. Colton Ching, Hawaiian Electric Company, "National Academies Workshop"
43. John Lee, Xcel Energy, "Distribution System Planning"
44. Jay Lim, Los Angeles Department of Water and Power, "Distribution Resource Plan"
45. James Barner, Los Angeles Department of Water and Power, "Los Angeles Department of Water and Power Overview"
46. Jaquelin Cochran, National Renewable Energy Laboratory, "The Los Angeles 100% Renewable Study (LA100)"
47. Fred Pickel, City of Los Angeles, "Exploring DWP Carbon Reduction"
48. John Grosh, Lawrence Livermore National Laboratory, "Overview of GMLC Planning Tools Research and the North American Resilience Model"

Please contact Rebecca DeBoer to request materials included on this list.