

Transmission Planning: Preparing the Grid to do Everything!

*(Resiliency & Reliability, Generation Fleet Transition, Job Creation & Economic Development,
Decarbonization & Renewables)*

A Northwestern Electricity Dialogue Webinar

Northwestern Pritzker School of Law

Tuesday, February 2, 2021

8:45 a.m. – 12:00 p.m. CDT

9:45 a.m. – 1:00 p.m. EDT

Times listed below are CDT.

8:45-9:00 a.m.

Opening Remarks

Michael Carrigan, Commissioner, Illinois Commerce Commission

9:00-9:30

Keynote Address —MISO’s Long-Range Transmission Planning Effort

Introduction: Julie Fedorchak, Commissioner, North Dakota Public Service Commission; OMS President

Jennifer Curran, Vice President, System Planning and Chief Compliance Officer, Midcontinent Independent System Operator (MISO)

9:30-10:45

Session One – Transmission Planning Perspectives: What is Needed and How Get It from Those Who Build, Operate and Depend on the Grid?

We expect a lot from our transmission grid. The grid must be reliable and robust; flexible and adaptable; accessible and safe; and deliver economic efficiency in the form of lower energy costs for consumers. Fortunately, by and large the grid serving the midcontinent has met these needs. But achieving this performance does not happen by accident...it takes planning and “seeing into the future”, as well as coordination across a diverse footprint. This panel of transmission operators and those dependent on the grid will explore what it takes for the transmission grid to meet today’s and tomorrow’s needs. Example questions: What are the needs (and why)? What is being done to meet them? How to deal with the uncertainties and unknowns of the future? How to meet or

balance the diverse and competing interests? How to move ideas from the planning process to energize lines?

Moderator: Aubrey Johnson, Executive Director, System Planning & Competitive Transmission, Midcontinent Independent System Operator (MISO)

Priti Patel, Vice President & Chief Transmission Officer, Great River Energy

Dan Kline, Director, Transmission Planning, Entergy Services, LLC

Brian Rybarik, Principal Program Manager, Cloud Operations + Innovation, Energy & Sustainability, Microsoft

Matt Pawlowski, Executive Director of Business Management and Regulatory Affairs, NextEra

10:45-12:00 p.m. **Session Two — Transmission Planning Perspectives: Thoughts on the Policy Drivers & Regulatory Processes from State Commissioners**

State utility regulatory commissioners have a dual role in the long-term transmission planning process. One role is as valuable contributors to the planning process, assisting in setting vision and goals. The other role is as managers of the regulatory review process and ultimately final decision makers. This panel builds on the previous panel by offering the insights and perspectives of state regulators on the transmission planning. Example questions: what are the expectations? What are the current and future needs of the transmission grid in the MISO footprint? How best to deal with the uncertainties of the rapidly changing electricity landscape and unknowns of the future? How to meet or balance the competing interests?

Moderator: Tony Clark, Senior Advisor, Wilkinson Barker, Knauer, LLP

Shelly Botkin, Commissioner, Public Utility Commission of Texas

Sarah Freeman, Commissioner, Indiana Utility Regulatory Commission

Dan Scripps, Commissioner, Michigan Public Service Commission

Ted J. Thomas, Commissioner, Arkansas Public Service Commission

12:00 p.m.

Adjourn

Participants (as of January 21, 2021)

1. **Shelly Botkin**, Commissioner, Public Utility Commission of Texas
2. **Michael Carrigan**, Commissioner, Illinois Commerce Commission
3. **Tony Clark**, Senior Advisor, Wilkinson Barker, Knauer, LLP
4. **Jennifer Curran**, Vice President, System Planning and Chief Compliance Officer, Midcontinent Independent System Operator (MISO)
5. **Julie Fedorchak**, Commissioner, North Dakota Public Service Commission; OMS President
6. **Sarah Freeman**, Commissioner, Indiana Utility Regulatory Commission
7. **Aubrey Johnson**, Executive Director, System Planning & Competitive Transmission, Midcontinent Independent System Operator (MISO)
8. **Dan Kline**, Director, Transmission Planning Energy Services, LLC
9. **Priti Patel**, Vice President & Chief Transmission Officer, Great River Energy
10. **Matt Pawlowski**, Executive Director of Business Management and Regulatory Affairs, NextEra
11. **Brian Rybarik**, Principal Program Manager, Cloud Operations + Innovation Energy & Sustainability, Microsoft
12. **Dan Scripps**, Commissioner, Michigan Public Service Commission
13. **Ted J. Thomas**, Commissioner, Arkansas Public Service Commission

Registrants (as of January 21, 2021)

1. **Ed Achaab**, Trans Asset Strategy, AEP
2. **Chad Allen**, Regional Director, MISO
3. **Ken Anderson**, Former PUCT Commissioner
4. **Megan Anderson**, Associate, Regulatory Assistance Project
5. **Alison Archer**, Regional Director, MISO
6. **Matthew Baier**, HPE
7. **Christina Baker**, Assistant Attorney General, Arkansas Attorney General's Office
8. **Jay Balasbas**, Commissioner, Washington Utilities and Transportation Commission
9. **Vicki Baldwin**, Shareholder, Parsons Behle & Latimer
10. **Alex Ballasiotes**, MBA Candidate, Kellogg School of Management
11. **Jackie Becker**, Director Transmission Portfolio Management, Planning and Project Controls, Ameren
12. **Stephen Bennett**, Manager, Regulatory and Legislative Affairs, PJM Interconnection
13. **Bryan Black**, COO, UAMPS
14. **Noel Black**, VP, Federal Regulatory Affairs, Southern Company
15. **Maria Bocanegra**, Commissioner, Illinois Commerce Commission
16. **Brandon Bowen**, Sr. Analyst, Indiana Utility Regulatory Commission
17. **Bev Bowlby**, Manager Regulatory Affairs, Ameren Illinois
18. **David Boyd**, Regulatory and Policy Strategist, AESL

19. **Elizabeth Brereton**, Associate, Snell & Wilmer
20. **Daryl Brown**, Executive Director - External Affairs - South Region, MISO
21. **Matthew Brown**, Associate General Counsel, Entergy Services, LLC
22. **David Brown**, Engineer, NJBPU
23. **Rich Brunt**, Sr. Analyst, Indiana Utility Regulatory Commission
24. **Denise Buffington**, Director Federal Regulatory Affairs, Evergy Companies
25. **Diane Burman**, Commissioner, New York Public Service Commission
26. **Phillip Casey**, Partner, Calfee
27. **Greg Chamberlain**, Regional Vice President, Xcel Energy
28. **Laura Chappelle**, President, Chappelle Consulting, LLC
29. **William Chiang**, Senior Manager, Accenture
30. **Emile Cordaro**, External Affairs Manager, AEP SWEPCO
31. **Sarah Cronin**, Commissioner's Assistant, Illinois Commerce Commission
32. **Jon DeCooman**, Public Utilities Engineer, Michigan Public Service Commission
33. **Jeff Dodd**, Senior Director - Transmission Policy & Stakeholder Relations, Ameren
34. **Nelli Doroshkin**, Regulatory Manager, Capital Power
35. **Maisha Earl**, Prin Regulatory Specialist, ComEd
36. **Matt Ellis**, Regional Transmission Program Manager, Great River Energy
37. **Linda Evers**, Chair - Energy Group, Stevend & Lee
38. **Jeff Ewart**, Deputy Director, Midwestern Governors Association
39. **Joe Fallah**, Policy Advisor, Illinois Commerce Commission
40. **David Fein**, Founder and President, Fein Solutions LLC
41. **Lynn Ferry-Nelson**, Director, SWEPCO
42. **Kristie Fiegen**, Commissioner, SD PUC
43. **Trevor Freberg**, Transmission Reliability Planning, ComEd
44. **John Fredericks**, MBA Student, Northwestern University
45. **Al Freeman**, Assistant to Division Director, Michigan Public Service Commission
46. **Edward Garvey**, Regulatory Strategist, AESL Consulting
47. **Paul Ghosh-Roy**, Assistant General Counsel, Long Island Power Authority
48. **Demetria Giannisis**, Managing Director, Institute for Sustainability and Energy at NU
49. **James Gignac**, Senior Midwest Energy Analyst, Union of Concerned Scientists
50. **Collin Gillespie**, Commissioner's Assistant, NM PRC
51. **Suzanne Glatz**, Dir, Strategic Initiatives and Interregional Planning, PJM Interconnection
52. **Katherine Goyette**, Hearing Officer/Counsel II, MA DPU
53. **Jonathan Griffin**, Regulatory Consultant Staff, Southwestern Electric Power Company
54. **Kevin Gunn**, Principal, Paladin Energy Strategies
55. **Chris Gunther**, Kellogg School of Management, Northwestern University
56. **Cynthia Hall**, Commissioner, NM PRC

57. **Deidre Hansen**, External Affairs Specialist, Indiana Utility Regulatory Commission
58. **James Harmening**, Director of Cybersecurity & Risk Management, Illinois Commerce Commission
59. **Marcus Hawkins**, Executive Director, OMS
60. **Christina Hayes**, VP, Federal Regulatory Affairs, BHE
61. **Pat Hayes**, Manager of Transmission Policy, LS Power
62. **Hunter Holman**, Staff Attorney, Utah Clean Energy
63. **Connor Hoppe**, Student, Kellogg School of Management, Northwestern University
64. **Jame Huang**, Project Specialist, Con Edison
65. **Kevin Huyler**, Director, National Grid
66. **Libby Jacobs**, President, The Jacobs Group LLC
67. **Brian Jeng**, MBA Student '22, Kellogg School of Management, Northwestern University
68. **Dan Katzenberger**, Sustainability Manager, Best Buy
69. **Christopher Kennedy**, Partner, Whitt Sturtevant LLP
70. **Ethan Kimbrel**, Commissioner, Illinois Commerce Commission
71. **Alexandra Klass**, Professor, University of Minnesota Law School
72. **Joshua Kmiec**, Director, ScottMadden, Inc.
73. **Phillip Kosanovich**, General Counsel and Ethics Officer, Illinois Commerce Commission
74. **Glenn Krassen**, Of Counsel, Bricker & Eckler LLP
75. **Jonghwan Kwon**, Energy Systems Engineer, Argonne National Lab
76. **Howie Li**, Student, Kellogg School of Management, Northwestern University
77. **Wei Chen Lin**, Policy Advisor - Cybersecurity & Risk Management. Illinois Commerce Commission
78. **Gabrielle Long**, Legal and Policy Advisor to Commissioner Kimbrel, Illinois Commerce Commission
79. **Richard Lozier**, Board Member, Utilities Board
80. **Ivy Lyn**, Director, State Regulatory Affairs, EEI
81. **Cristin Lyons**, Partner & Energy Practice Leader, ScottMadden, Inc.
82. **Sophia Markowska**, Market Associate, ICC
83. **Chris Martel**, Regulatory Consultant, SWEPCO
84. **Talina Mathews**, Commissioner, Kentucky Public Service Commission
85. **Richard Mathias**, Principal, Mathias Consulting
86. **Jessica Matthys**, MBA Student, Kellogg School of Management, Northwestern University
87. **Daryl Maxwell**, Department Manager, MB Hydro
88. **Janna McCardel**, Analyst, IURC
89. **Natalie McIntire**, Consultant, Clean Grid Alliance
90. **Theresa McMillan-Sepkoski**, Audit Specialist, Michigan Public Service Commission
91. **Valerie Means**, Commissioner, Minnesota Public Utilities Commission

92. **David Moeller**, Senior Attorney & Director of Regulatory Compliance, Minnesota Power
93. **Kenna Mulligan**, Analyst, Government Affairs, Invenergy
94. **Shasi Munukutla**, MBA Candidate, Kellogg School of Management, Northwestern University
95. **Stacey Murphree**, Regulatory Manager, CenterPoint Energy
96. **Jennifer Murphy**, Dir. of Energy Policy, NARUC
97. **Bob Nelson**, Consumer Counsel, Montana Consumer Counsel
98. **Daniel Nilsson Sjolander**, MBA Candidate, Kellogg School of Management, Northwestern University
99. **Kenny Nishimura**, MBA Candidate, Kellogg School of Management, Northwestern University
100. **Erin O'Connell-Diaz**, President, FutureFWD, Inc.
101. **Sadzi Oliva**, Commissioner, Illinois Commerce Commission
102. **Uma Outka**, Professor of Law/Assoc. Dean for Faculty, Univ. of Kansas School of Law
103. **Nikodem Pancewicz**, Student, Northwestern University
104. **Katie Papadimitriou**, Deputy Executive Director – Policy, ICC
105. **Tom Petersen**, Director - Marketing & Communications, ITC
106. **Bennett Peterson**, MSES Candidate, Northwestern University MSES
107. **Matt Prorok**, Sr Policy Manager, Great Plains Institute for Sustainable Development
108. **Kristine Raper**, Commissioner, Idaho PUC
109. **Jay Rasmussen**, RTO Activities Manager, Duke Energy
110. **John Ratnaswamy**, The Law Office of John Ratnaswamy, LLC
111. **Ryann Reagan**, Aide to the Commissioner, NJBPU
112. **Ann Rendahl**, Commissioner, Washington State Utilities and Transportation Commission
113. **Ashley Renkor**, Legal and Policy Advisor, Illinois Commerce Commission
114. **Jack Roback**, Trading Operations, BP
115. **Kerstin Rock**, Manager Policy & Analytics, PacifiCorp
116. **Mike Saer**, Transmission Strategist, Great River Energy
117. **Danny Samin**, Student, Kellogg School of Management, Northwestern University
118. **Mary Schroeder**, Principal, Stephenson Schroeder Ltd.
119. **Matthew Schuerger**, Commissioner, Minnesota Public Utilities Commission
120. **Jeremy Schwartz**, Senior Pricing Analyst, OGE Energy Corp
121. **Doug Scott**, Vice President, Great Plains Institute
122. **Brice Sheriff**, Director Regulatory Affairs, Ameren Illinois
123. **Katie Sieben**, Chair, MN Public Utilities Commission
124. **Alison Silverstein**, Consultant, Alison Silverstein Consulting
125. **Beth Soholt**, Executive Director, Clean Grid Alliance
126. **James Sorrels**, AEP Regulatory RTO Manager, American Electric Power
127. **Rick Starkweather**, Partner, ScottMadden, Inc.

128. **Alex Steinwald**, Kellogg School of Management, Northwestern University
129. **Elizabeth Stephens**, Regulatory Consultant, AEP/SWEPCO
130. **Tyler Stoff**, Director of Regulatory Affairs, American Council on Renewable Energy
131. **Joe Sullivan**, Commissioner, MN Public Utilities Commission
132. **Letha Tawney**, Commissioner, Oregon PUC
133. **Mark Thompson**, Commissioner, Oregon Public Utility Commission
134. **Jeremy Thompson**, Key Account Project Manager, Xcel Energy
135. **Brian Tulloh**, Executive Director, External Affairs North Region, MISO - Midcontinent Independent System Operator
136. **Justin Vickers**, Staff Attorney, Environmental Law and Policy Center
137. **Juile Voeck**, Senior Director, Legislative & Regulatory Affairs, NextEra Energy Resources
138. **Kealie Vogel**, Policy Advisor, Illinois Commerce Commission
139. **Jason Weiers**, Manager, Delivery Planning, Otter Tail Power Company
140. **Carolyn Wetterlin**, Senior Manager, RTO Policy. Xcel Energy (Northern States Power Company)
141. **Carrie K. Zalewski**, Chairman, Illinois Commerce Commission