



# Multi-Value Transmission Projects and Lessons for Transmission Planning

### A Northwestern Electricity Dialogue Webinar

Northwestern Pritzker School of Law

Tuesday, October 26, 2021 8:45 a.m. – 12:00 p.m. CDT 9:45 a.m. – 1:00 p.m. EDT Times listed below are CDT.

There is growing recognition that more transmission is needed throughout the country to enable the transition of the generation fleet, allow for interconnection of renewables, preserve reliability, enhance resilience, and of course to allow for the lowest cost delivered electricity. On June 17, 2021, the FERC announced, with NARUC, the creation of a joint federal-state task force on electric transmission to find a way to promote, encourage, and encourage transmission development.

This Dialogue will address the transmission issues from multiple angles. It starts with a Big Picture, national perspective; then moves to a review of the MVP Transmission process from key participants and the experience and lessons they learned from being part of the at successful effort. It closes with a discussion among regulators coping with today's transmission issues.

In the summer of 2004, a group of utilities in the Upper Midwest came together to promote transmission development. They called themselves CapX2020 for Capacity Expansion Needed by 2020. On September 18, 2008, the governors of Iowa, Minnesota, North Dakota, South Dakota, and Wisconsin collectively announced a joint transmission planning effort designed to promote regional electric transmission investment and cost sharing. They called it the Upper Midwest Transmission Development Initiative (UMTDI) whose goal, according to then-Minnesota Governor Tim Pawlenty, was to "identify wind generation resources, transmission projects and infrastructure needed to support those resources in a cost-effective manner...and...determine a reasonable allocation for the costs of the region and will lead to the development of a concrete plan or tariff proposal for the Midwest Independent Transmission System Operator (MISO)."

On July 15, 2010, MISO filed its MVP Transmission tariff with FERC. That filing was both the culmination of the CapX2020 and UMTDI transmission planning processes, combined with the arduous OMS-led Cost Allocation and Regional Planning (CARP) effort. That MISO tariff facilitated roughly \$7 Billion of new transmission investment in 17 transmission projects throughout the Midwest.

8:45-9:00 a.m. **Welcome** 

Carrie Zalewski, Chair, Illinois Commerce Commission

9:00-10:00 Keynote Addresses

Moderator: Carrie Zalewski, Chair, Illinois Commerce Commission

- Richard Glick, Chair, Federal Energy Regulatory Commission
- **Philip D. Moeller**, Executive Vice President, Business Operations Group and Regulatory Affairs, Edison Electric Institute (EEI)

### 10:00-11:00 Session One — MVPs: Lessons Learned from A Transmission Planning Success Story

This Panel will describe the good, bad, and ugly of the process that led to creation of the Multi-Value Transmission Projects in the MISO footprint from people who were intimately involved in that multiyear process.

**Moderator: David Boyd**, Regulatory and Policy Strategist, AESL Consulting (*Minnesota PUC 2007 – 2015*)

Eric J. Callisto, Partner, Michael Best & Friedrich LLP (Wisconsin PSC 2008 – 2015)

**Tony Clark**, Senior Advisor, Wilkinson Barker Knauer LLP (North Dakota PSC 2001 – 2012; FERC 2012 – 2016)

**Valerie Lemmie**, Director of Exploratory Research, Kettering Foundation (*PUC of Ohio 2006 – 2011*)

## 11:00-12:00 p.m. Session Two — That Was Then; This Is Now: Can the MVP Lessons Be Applied to Meet Today's Transmission Needs?

This panel will feature regulators who are currently struggling with meeting present and future transmission needs and will discuss how the lessons of the MVP process are applicable (or not) to today's situation.

**Moderator: Krista Tanner**, SVP and Chief Business Unit Office, ITC Holdings (*Iowa Utility Board 2007 – 2011*)

Andrew J. French, Chairperson, Kansas Corporation Commission Kristine Raper, Commissioner, Idaho Public Utilities Commission Dan Scripps, Chair, Michigan Public Service Commission

12:00 p.m. **Adjourn** 

#### Participants (as of October 26, 2021)

- 1. David Boyd, Regulatory and Policy Strategist, AESL Consulting
- 2. Eric J. Callisto, Partner, Michael Best & Friedrich LLP
- 3. Tony Clark, Senior Advisor, Wilkinson Barker Knauer LLP
- 4. Andrew J. French, Chairperson, Kansas Corporation Commission
- 5. Richard Glick, Chair, Federal Energy Regulatory Commission
- 6. Valerie Lemmie, Director of Exploratory Research, Kettering Foundation
- 7. **Phil Moeller**, Executive Vice President, Edison Electric Institute
- 8. Dan Scripps, Chair, Michigan Public Service Commission
- 9. Kristine Raper, Commissioner, Idaho Public Utilities Commission
- 10. Krista Tanner, SVP and Chief Business Unit Office, ITC Holdings
- 11. Carrie Zalewski, Chair, Illinois Commerce Commission

#### Registrants (as of October 26, 2021)

- 1. Ed Achaab, Asset Strategy, AEP
- 2. Jared Alholinna, Leader, Economic Transmission Planning, Great River Energy
- 3. Kelsey Allen, Lead Engineer, Southwest Power Pool
- 4. Heather Anderson, Staff Attorney, SC Senate
- 5. Kenneth Anderson, Former PUCT Commissioner
- 6. Pedram Arani, FERC CAISO ANALYST, PG&E
- 7. Alison Archer, Regional Director, MISO
- 8. Kelly Aves, Legal and Policy Advisor, Illinois Commerce Commission
- 9. Vicki Baldwin, Shareholder, Parsons Behle & Latimer
- 10. Kim Ballard, Senior Analyst, Indiana Utility Regulatory Commission
- 11. William Barkasy, Rate Analyst, New Jersey Board of Public Utilities
- 12. James Bartridge, Program and Policy Specialist, California Energy Commission
- 13. Mark Bender, Advisor, Public Service Commission of Wisconsin
- 14. Stephen Bennett, Manager, Regulatory & Legislative Affairs, PJM
- 15. Adam Benshoff, VP, Regulatory Affairs, EEI
- 16. **Deborah Birgen**, Vice-President, Legislative and Governmental Relations, Missouri River Energy Services
- 17. Scott Bolton, SVP, Transmission Development, PacifiCorp
- 18. David Borden, Senior Energy Industry Analyst, Federal Energy Regulatory Commission
- 19. Brandon Bowen, Senior Analyst, Indiana Utility Regulatory Commission
- 20. Bev Bowlby, Manager Regulatory Affairs, Ameren Illinois
- 21. Kate Bowman, Renewable Energy Program Manager, Utah Clean Energy
- 22. Joe Bowring, President, Monitoring Analytics
- 23. Tim Brennan, Senior Fellow, Resources for the Future
- 24. Daryl Brown, Executive Director External Affairs South Region, MISO-Little Rock
- 25. David Brown, Engineer, NJBPU
- 26. Rich Brunt, Sr. Analyst, Indiana Utility Regulatory Commission
- 27. Denise Buffington, Director Federal Regulatory Affairs, Evergy Companies
- 28. Ven Bujimalla, Deputy General Counsel, IUB
- 29. Kim Burton, Chief of Staff and Legal Advisor to Chairman Silvey, Missouri PSC
- 30. Colin Byers, Senior Campaign Coordinator, Union of Concerned Scientists
- 31. Tanya Capellan, Director ORMD, Illinois Commerce Commission
- 32. Michael Carrigan, Commissioner, Illinois Commerce Commission
- 33. Phillip Casey, Partner, Calfee
- 34. Ricardo Charles, Energy Industry Analyst, FERC

- 35. Theresa Christian, Sr. Corp. Strategy Manager, Exelon
- 36. Julie Clark, Attorney, Clark Energy Law
- 37. Maida Coleman, Commissioner, Missouri Public Service Commission
- 38. Emile Cordaro, External Affairs Manager, aep swepco
- 39. David Crawford, Of Counsel, Betts & Holt LLP
- 40. James Critchfield, Program Manager, US EPA
- 41. Sarah Cronin, Commissioner Assistant, ICC
- 42. Richard Dahl, Director of Transmission Services, Missouri River Energy Services
- 43. Jeff Danielson, Central States Director, American Clean Power Association
- 44. Eric Dearmont, Director, Ameren
- 45. Megan Decker, Commission Chair, Oregon PUC
- 46. Scott Deffenderfer, Principal Engineer, Ameren
- 47. Joseph DeLosa, Bureau Chief, Federal and Regional Policy, New Jersey Board of Public Utilities
- 48. Jeff Dodd, Senior Director Transmission Policy & Stakeholder Relations, Ameren
- 49. Jeremiah Doner, Director, Economic and Policy Planning, MISO
- 50. Brian Drumm, Director, Regional Policy, ITC
- 51. Scott Drzycimski, Director Public Affairs, ITC Midwest
- 52. Maisha Earl, Regulatory Affairs Manager, ComEd
- 53. Eric Eisenman, Director, FERC & ISO Relations, Pacific Gas & Electric Company
- 54. Matt Ellis, Regional Transmission Program Manager, Great River Energy
- 55. Abigail Emery, Paralegal, Kansas Corporation Commission
- 56. Robert Endris, Associate General Counsel, Otter Tail Power Company
- 57. Christine Ericson, Federal Energy Counsel, Illinois Commerce Commission
- 58. Linda Evers, Shareholder, Stevens & Lee
- 59. Jeff Ewart, Deputy Director, Midwestern Governors Association
- 60. Joseph Fallah, Policy Advisor, Illinois Commerce Commission
- 61. John Feeley, Staff Attorney ICC, Illinois Commerce Commission
- 62. Neal A. Fitch, Sr. Director, Regulatory Affairs, NRG Energy, Inc.
- 63. Trevor Freberg, Transmission Reliability Planning Engineer, ComEd
- 64. Al Freeman, Assistant to Division Director, Michigan Public Service Commission
- 65. Edward Garvey, Regulatory Strategist, AESL Consulting
- 66. Larry Gasteiger, Executive Director, WIRES
- 67. Bruce Gerhardson, VP Regulatory Affairs, Otter Tail Power Company
- 68. Glenda Gibson, Manager, Regulatory Compliance, NorthWestern Energy
- 69. James Gignac, Senior Midwest Energy Analyst, Union of Concerned Scientists
- 70. Suzanne Glatz, Director, Strategic Initiatives and Interregional Planning, PJM Interconnection
- 71. Moinica Gonzalez, Assistant General Counsel Operations & Planning, ISO New England Inc.
- 72. Katherine Goyette, Counsel, MA DPU
- 73. **Justin Grady**, Chief of Revenue Requirements, Cost of Service and Finance, Kansas Corporation Commission
- 74. Jordan Graham, Policy Advisor, Illinois Commerce Commission
- 75. **Ryan Granholm**, Staff Attorney, Illinois Commerce Commission
- 76. Richard Griffin, Associate, Latham & Watkins
- 77. Emma Guilfoil, Senior Analyst, ScottMadden Inc.
- 78. Justin Gundlach, Senior Attorney, Institute for Policy Integrity at NYU School of Law
- 79. Glenn Haake, Special Counsel, New York Power Authority
- 80. Daniel Hall, Central Region Senior Director, Electricity and Transmission Policy, ACPA
- 81. Neil Hammer, GM, Transmission Development & Policy, MidAmerican Energy Company
- 82. James Harmening, Director of Cybersecurity and Risk Management, Illinois Commerce Commssion

- 83. Matt Harris, Lead Assistant General Counsel, Xcel Energy Services Inc.
- 84. Marcus Hawkins, Executive Director, OMS
- 85. Christina Hayes, VP, Fed Reg Affairs, BHE
- 86. Pat Hayes, Manager of Transmission Policy, LS Power
- 87. Ryan Heater, Chief of Staff, Indiana Utility Regulatory Commission
- 88. Stacie Hebert, Manager, FERC/RTO Policy, Otter Tail Power Company
- 89. Erik Heinle, APC, DC OPC
- 90. Jessica Hendricks, State Policy Director, The Alliance for Affordable Energy
- 91. Mary-Anna Holden, Commissioner, NJ Board of Public Utilities
- 92. Cynthia Holland, Assistant General Counsel, Exelon
- 93. Amber Housholder, Regulatory Affairs Manager, Evergy
- 94. Cullen Howe, Senior Attorney, NRDC
- 95. Tyler Huebner, Commissioner, Public Service Commission of Wisconsin
- 96. Kevin Huyler, Director, National Grid
- 97. Brian Isom, Research Manager, The Center for Growth and Opportunity
- 98. Diana James, Regulatory Conslt, SWEPCO
- 99. Bonnie Janssen, Manager, Energy Markets, Michigan Public Service Commission
- 100. **Graham Jesmer**, Regulatory Counsel, ISO New England
- 101. **Jared Jevons**, Litigation Counsel, Kansas Corporation Commission
- 102. **David Johnston**, Chief Technical Advisor, Indiana Utility Regulatory Commission
- 103. **Philip Jones**, Executive Director, Alliance for Transportation Electrification
- 104. **Ben Kaldunski**, Public Policy Analyst, Public Service Commission of Wisconsin
- 105. **Christopher Kennedy**, Partner, Whitt Sturtevant LLP
- 106. **Brad Klein**, Senior Attorney, ELPC
- 107. Mark Klein, Chief Operating Officer, Broad Reach Power LLC
- 108. **Joshua Kmiec**, Director, ScottMadden, Inc.
- 109. **Ryan Kohler**, Director, Office of Regional Markets, Public Service Commission of Wisconsin
- 110. **Jonghwan Kwon**, Energy Systems Engineer, Argonne National Laboratory
- 111. Clay Layson, Assistant Attorney General, AR Attorney General's Office
- 112. **Matt Lecar**, Principal, PG&E
- 113. **Brett Leopold**, President, ITC Great Plains
- 114. **Wei Chen Lin**, Policy Advisor Cybersecurity & Risk Management, Illinois Commerce Commission
- 115. **Shelby Linton Keddie**, Sr. Director, State Energy and Regulatory Policy, EEI
- 116. **Nicole Luckey**, Senior Vice President, Regulatory Affairs, Invenergy LLC
- 117. **Ivy Lyn**, Director, State Regulatory Affairs, EEI
- 118. **Kavita Maini**, Principal, Midwest Industrial Customers
- 119. **Sophia Markowska**, market Associate, ICC
- 120. Chris Martel, Regulatory Consultant, SWEPCO
- 121. **James Martin**, Student, Kellogg School of Management, Northwestern University
- 122. Carly Masenthin, Litigation Counsel, Kansas Corporation Commission
- 123. Rodney Massman, Asst Gen Counsel, MOPSC
- 124. **Daryl Maxwell**, Department Manager, Manitoba Hydro
- 125. **Ann McCabe**, US Program Director and Principal, Regulatory Assistance Project (Providence, RI)
- 126. **Janna McCardel**, Analyst, Indiana Utility Regulatory Commission
- 127. **Jeff McClanahan**, Director Utilities Division, Kansas Corporation Commission
- 128. Kate McCormick, Assistant Director, Policy, Illinois Commerce Commission
- 129. **Natalie McIntire**, Consultant, Clean Grid Alliance
- 130. **Sri Medicherla**, Engineer, NJ BPU

- 131. **Scott Miller**, Executive Director, Western Power Trading Forum
- 132. **John Miller**, Energy Industry Analyst, Federal Energy Regulatory Commission
- 133. **David Moeller**, Senior Attorney & Director of Regulatory Compliance, ALLETE
- 134. **Sonia Morgan**, Rate Manager, AEP-SWEPCO
- 135. Meagan Morley, Staff Attorney, Office of General Counsel, Illinois Commerce Commission
- 136. **Lindsay Mouw**, Policy Associate, Center for Rural Affairs
- 137. **Tony Mugera**, Economist, Illinois Commerce Commission
- 138. **Jennifer Murphy**, Dir. of Energy Policy, NARUC
- 139. Neeharika Naik-Dhungel, Program Manager, U.S. EPA
- 140. **Chris Nelson**, Commissioner, SD PUC
- 141. Liam Noailles, Manager, Federal Regulatory Affairs, Xcel Energy Inc.
- 142. Ellen Nowak, Commissioner, Public Service Commission of Wisconsin
- 143. **Stacy Nowak**, Utility Analyst, Indiana Utility Regulatory Commission
- 144. **Erin O'Connell-Diaz**, President, FutureFWD, Inc.
- 145. Kim O'Guinn, Commissioner, Arkansas Public Service Commission
- 146. **Matthew Olsen**, Mgr, Regulatory Proceedings and Compliance, Otter Tail Power Co.
- 147. **Christopher Oprysk**, environmental engineer, NJ BPU
- 148. **Katie Otterbeck**, Associate Attorney, Wilkinson Barker Knauer
- 149. **Nikodem Pancewicz**, Student, Northwestern University
- 150. **Katie Papadimitriu**, Deputy ED-Policy, ICC
- 151. Lopa Parikh, Senior Director, EEI
- 152. **Rushi Patel**, Sr. Analyst, Metroplex Energy
- 153. Matt Pawlowski, Executive Director Business Management, NextEra Energy Resources, LLC
- 154. **Audrey Penner**, Market Access, Manitoba Hydro
- 155. Katherine Peretick, Commissioner, Michigan Public Service Commission
- 156. **Tom Petersen**, Director Marketing & Communications, ITC
- 157. **Bennett Peterson**, Consultant, Guidehouse
- 158. **Matt Prorok**, Sr Policy Manager, Great Plains Institute
- 159. **Tetyana Rabczak**, Chairman Legal Advisor, Illinois Commerce Commission
- 160. **Steve Rakow**, Analyst Coordinator, Minnesota Department of Commerce
- 161. **Christopher Randall**, Director, Federal Regulatory Affairs, EEI
- 162. **Jay Rasmussen**, Wholesale Markets and Transmission Policy Senior Manager, Duke Energy
- 163. **John Ratnaswamy**, Member, The Law Office of John Ratnaswamy, LLC
- 164. **Kolton Ray**, Illinois Commerce Commission
- 165. **Ryann Reagan**, Aide to the Commissioner, NJBPU
- 166. Ann Rendahl, Commissioner, Washington Utilities and Transportation Commission
- 167. **Ashley Renkor**, Commissioner's Assistant, Illinois Commerce Commission
- 168. **Jeff Ripp**, Director, Regulatory Strategy & Solutions, Alliant Energy
- 169. **Jack Roback**, Low Carbon and Sustainability Strategy Lead, bp
- 170. **Tom Rutigliano**, Sr. Advocate, NRDC
- 171. **Mike Saer**, Transmission Policy Program Manager, Great River Energy
- 172. Susan Satter, Chief, Public Utilities Bureau, Ofc Illinois Attorney General
- 173. **David Schmitt**, Legal Specialist, New Jersey Board of Public Utilities
- 174. **Jeremy Schwartz**, Lead Pricing Analyst, Oklahoma Gas & Electric Company
- 175. **Doug Scott**, Vice President, Great Plains Institute
- 176. **Brian Selinger**, Energy Team Leader, Iowa Economic Development Authority Iowa Energy Office
- 177. **Bridget Sheehan**, Staff Attorney, Illinois Commerce Commission
- 178. **Katie Sieben**, Chair, MN Public Utilities Commission
- 179. **Drew Siebenaler**, Manager, Regional Transmission Planning and Analytics, Xcel Energy

- 180. **Jay Skabo**, VP Elec Supply, MDU
- 181. **Ben Sloan**, Director of Regulatory Affairs, OMS
- 182. **Robert Snook**, Assistant Attorney General, Connecticut Department of Energy and Environmental Protection
- 183. **Beth Soholt**, Executive Director, Clean Grid Alliance
- 184. **Regina Speed-Bost**, Founder and Managing Partner, SB Law, PLLC
- 185. **David Spence**, Professor, University of Texas
- 186. **Andrea Spring**, Staff, FERC
- 187. **Priya Sreedharan**, Program Director, GridLab
- 188. **Elizabeth Stephens**, Regulatory Consultant, AEP/SWEPCO
- 189. **Marina Stever**, Energy Policy Analyst, State of Missouri
- 190. **Justin Stewart**, Ameren
- 191. **Tyler Stoff**, Director of Regulatory Affairs, American Council on Renewable Energy
- 192. **Dylan Stupca**, Supervisor T&D Studies, Otter Tail Power Company
- 193. Chris Sturgill, Director, ScottMadden, Inc.
- 194. **Haibin Sun**, Director, Transmission, Exelon
- 195. **Heather Svenson**, RTO Strategy Manager, PSEG
- 196. **Simon Tanapat-Andre**, Engineer, Manitoba Hydro
- 197. **Justin Tate**, Commissioner, Arkansas PSC
- 198. **Robert Taylor**, Manager, Transmission Strategy, Exelon Utilities
- 199. **Dusky Terry**, President, ITC Midwest
- 200. **Rob Threlkeld**, Global Manager Energy Strategy, General Motors
- 201. Ahmed Tijani, Project Manager (Renewable Energy), Sterling Bank Plc
- 202. Henry Tilghman, Principal, Tilghman Associates
- 203. **Beth Trombold**, Commissioner, Public Utilities Commission of Ohio
- 204. **Brian Tulloh**, Executive Director, External Affairs North Region, MISO
- 205. William VanderLaan, Economic Analyst, Illinois Commerce Commission
- 206. **Justin Vickers**, Staff Attorney, ELPC
- 207. **Julie Voeck**, Senior Director, Legislative and Regulatory Affairs, NextEra Energy Resources
- 208. **John Wachtler**, Energy Director, Minnesota Department of commerce
- 209. **Michael Watkins**, Strategic Advisor, Seattle City Light
- 210. **Quentin Watkins**, Manager, ScottMadden, Inc.
- 211. **Jason Weiers**, Manager, Delivery Planning, Otter Tail Power Company
- 212. **Carolyn Wetterlin**, Senior Manager, RTO Policy, Xcel Energy (Northern States Power Company)
- 213. **Rebecca West**, Research Associate, Illinois Commerce Commission
- 214. **Simon Whitelocke**, President, ITC Michigan, ITC
- 215. Andy Witmeier, Director Resource Utilization, MISO
- 216. **Hannah Wiseman**, Professor, Penn State Law--University Park
- 217. **Jeremi Wofford**, Sr. RTO Policy Specialist, Ameren
- 218. **Lynn Wolters**, Rates Analyst, Otter Tail Power
- 219. Leet Wood, Analyst, Edison Electric Institute
- 220. **John Wright**, Assistant Attorney General, CT Attorney General
- 221. **Kevin Yearington**, Electric Inspector Supervisor, Iowa Utilities Board
- 222. **Ryan Young**, Project Manager, State of Iowa Energy Office
- 223. Michelle Zaccagnino, Sr. Manager, State Regulatory Policy, Edison ElectricInstitute