

Resource Adequacy in the West: Evolution and Growth in a Period of Transition

A Northwestern Electricity Dialogue Webinar

Northwestern Pritzker School of Law

Friday, December 11, 2020

8:45 a.m. - 12:00 p.m. PST

10:45 a.m. - 2:00 p.m. CST

Times listed below are CST.

Resource Adequacy has historically been assured by a load serving entity's demonstration that it owns or controls adequate generation to reliably meet peak demand, plus a margin, on its peak day. For many, not all, that would be a hot summer day. Regions with shared resource adequacy programs enjoy improved system reliability at reduced cost as the risk of system failure is lessened through mutual support. Regional resource adequacy programs also have the potential to assist with ensuring state energy policy goals are integrated with resource adequacy requirements. While geographically broad resource adequacy constructs are common in RTO/ISO environments, it is not the norm in the west outside California. However, regional resource adequacy has become one of the most pressing topics of discussion in the west as the region works to assure reliability in times of great change in the generation resource mix. This webinar will explore the dialogue among stakeholders as well as the regulatory issues associated with the evolving vision of regional resource adequacy in the west. What are the necessary components of a resource adequacy program, who administers such a program, how are participants held to their obligations, and how would the program impact utilities and customers?

10:45-11:00 a.m.

Welcome

- **Elizabeth Kronk Warner**, Dean, S.J. Quinney College of Law, University of Utah
- **Thad LeVar**, Commission Chair, Utah Public Service Commission

11:00-11:30

Opening Keynote

- **Elliot Mainzer**, President and Chief Executive Officer, California Independent System Operator (ISO)

11:30-12:45

Session One — How might Resource Adequacy Transform in the West?

The changing generation mix has prompted discussions about resource adequacy across the country to continue to support reliable and resilient service. In the west there are active discussions about issues related to a common definition of resource adequacy as it would be applied to a large geographic footprint. The topic has emerged as a high priority for WECC as well as for states and related stakeholder groups. How might resource adequacy change in the future? Who will manage a new resource adequacy program and how? How will differences among utility business models be addressed? Will a new construct be compatible the existing regime in California?

- **Moderator: Jordan White**, Vice President of Strategic Engagement and Deputy General Counsel, WECC
- **Brad Albert**, Vice President, Resource Management, APS (Desert SW)
- **Sarah Edmonds**, Director of Transmission Services & Reliability, Portland General Electric
- **Jennifer Gardner**, Consultant, Envision Energy, LLC
- **Mark Holman**, Managing Director, Powerex

12:45-2:00 p.m.

Session Two — State Response

States in the west have established a variety of economic and energy policy positions that are increasingly aligned directionally but differ in the details of implementation. How will states address issues of reliability and resilience as they manage evolution of their generation portfolio and decarbonization goals? How will states work together to achieve their policy goals while ensuring reliable and cost-effective service? A broader set of common resource adequacy principles and metrics can be cost-effective, but will they be accepted? How will the significant differences between investor owned and public utilities be accommodated?

- **Moderator: Susan Ackerman**, Chief Energy Officer, Eugene Water & Electric Board
- **Megan Decker**, Chair, Oregon Public Utility Commission
- **Kara Fornstrom**, Chairman, Wyoming Public Service Commission
- **Thad LeVar**, Commission Chair, Utah Public Service Commission
- **Kristine Raper**, Commissioner, Idaho Public Utilities Commission

Participants (as of December 14, 2020)

1. **Susan Ackerman**, Chief Energy Officer, Eugene Water & Electric Board
2. **Brad Albert**, Vice President, Resource Management, APS (Desert SW)
3. **Megan Decker**, Chair, Oregon Public Utility Commission
4. **Sarah Edmonds**, Director of Transmission Services & Reliability, Portland General Electric
5. **Kara Fornstrom**, Chairman, Wyoming Public Service Commission

6. **Jennifer Gardner**, Consultant, Envision Energy, LLC
7. **Mark Holman**, Managing Director, Powerex
8. **Thad LeVar**, Commission Chair, Utah Public Service Commission
9. **Elliot Mainzer**, President and Chief Executive Officer, California Independent System Operator (ISO)
10. **Kristine Raper**, Commissioner, Idaho Public Utilities Commission
11. **Elizabeth Kronk Warner**, Dean, S.J. Quinney College of Law, University of Utah
12. **Jordan White**, Vice President of Strategic Engagement and Deputy General Counsel, WECC

Registrants (as of December 14, 2020)

1. **Mark Alder**, Regulatory Project Manager, PacifiCorp
2. **Grant Anderson**, Regulatory Analyst, Idaho Power
3. **Ken Anderson**, former PUCT Commissioner
4. **Alison Archer**, Regional Director- State Regulatory Affairs, MISO
5. **Vicki Baldwin**, Shareholder, PB&L
6. **Lee Baxter**, Senior Program Coordinator, U.S. Department of the Interior
7. **Janice Beecher**, Director, IPU, Michigan State University
8. **Matthew Beltz**, Director Origination, EDF Renewables
9. **Carrie Bentley**, CEO, Gridwell Consulting
10. **Mike Bernard**, Independent
11. **Anders Bisgard**, Director, WECC Interconnection, Avangrid Renewables
12. **Noel Black**, Vice President, Federal Legislative Affairs, Southern Company
13. **Pam Bonrud**, Director Government & Regulatory Affairs, NorthWestern Energy
14. **Corey Bonsall**, Senior Engineer, Rio Tinto Kennecott
15. **Shelly Botkin**, Commissioner, Public Utility Commission of Texas
16. **Kate Bowman**, Renewable Energy Program Manager, Utah Clean Energy
17. **David Boyd**, Regulatory and Policy Strategist, AESL Consulting
18. **Erin Bragg**, Independent
19. **Elizabeth Brereton**, Attorney, Snell & Wilmer L.L.P.
20. **Cameron Brooks**, President, E9 Insight
21. **Kelcey Brown**, VP, Energy Supply Management, PacifiCorp
22. **Rich Brunt**, Sr. Analyst, Indiana Utility Regulatory Commission
23. **Tony Clark**, Sr. Advisor, Wilkinson Barker Knauer
24. **Sarah Cronin**, Commissioner's Assistant, Illinois Commerce Commission
25. **Stacey Crowley**, Vice President External and Customer Affairs, California ISO
26. **Nelli Doroshkin**, Capital Power
27. **Denise Dragoo**, Partner, Snell & Wilmer L.L.P.

28. **Terri Eaton**, Sr. Director Federal Regulatory Affairs, Xcel Energy
29. **Shannon Ellsworth**, Community Development Manager, Sunrise Engineering
30. **Steven Ferrey**, Professor, University of Suffolk Law School
31. **Neal Fitch**, Sr. Director, Regulatory Affairs, NRG Energy, Inc.
32. **Maury Galbraith**, Executive Director, Western Interstate Energy Board
33. **Edward Garvey**, Regulatory Strategist, AESL Consulting
34. **Orijit Ghoshal**, Director, Regulatory Affairs, Invenergy
35. **Michael Giberson**, Assoc Prof of Practice, Texas Tech University
36. **Paul Goralski**, Senior Regulatory Analyst, Idaho Power
37. **Trevor Gruwell**, S.J. Quinney College of Law, University of Utah
38. **Kevin Gunn**, Principal, Paladin Energy Strategies
39. **Marcus Hawkins**, Executive Director, Organization of MISO States
40. **Christina Hayes**, Vice President, BHE
41. **Pat Hayes**, Manager of Transmission Policy, LS Power
42. **Sophie Hayes**, Senior Staff Attorney, Western Resource Advocates
43. **Tom Haymaker**, Manager, Energy Planning, Clark Public Utilities
44. **Jeff Henderson**, Associate Director - Marketing, Communications, and Education
Institute for Sustainability and Energy at Northwestern (ISEN)
45. **Hunter Holman**, Staff Attorney, Utah Clean Energy
46. **Stan Holmes**, Utah Sierra Club's Utah Needs Clean Energy and Equity Task Force
47. **Callie Hood**, Program & Legal Assistant, Western Resource Advocates
48. **Jame Huang**, Energy Markets Policy Group, Con Edison
49. **Gene Jones**, Independent
50. **Philip Jones**, Executive Director, Alliance for Transportation Electrification (ATE)
51. **Travis Kavulla**, Vice President, Regulatory Affairs, NRG Energy Inc.
52. **Christopher Kennedy**, Partner, Whitt Sturtevant LLP
53. **Scott Kinney**, Director Power Supply, Avista Corp
54. **Mark Klein**, Chief Operating Officer, Broad Reach Power LLC
55. **Connor Klosterman**, Policy Analyst, Western Electricity Coordinating Council
56. **Colleen Konetzke**, Kellogg School of Management, Northwestern University
57. **Jonghwan Kwon**, Energy Systems Engineer, Argonne National Lab
58. **Matthew Larson**, Partner, Wilkinson Barker Knauer
59. **Matt Lecar**, Principal, PG&E
60. **Virginia Lee**, Law Office of Virginia Curtis Lee
61. **Kelly Lefler**, Senior Advisor, Office of Nuclear Energy, U.S. Department of Energy (DOE)
62. **Wei Chen Lin**, Policy Advisor - Cybersecurity & Risk Management, Illinois Commerce
Commission
63. **Etta Lockey**, Vice President, PacifiCorp
64. **Gary Luke**, Deputy Attorney General, Idaho Office of Attorney General
65. **Robin Lunt**, Chief Strategy Officer, Guzman Energy
66. **Ivy Lyn**, Director, State Regulatory Affairs, EEI

67. **Gene Marini**, Senior Originator, (PSCo) Xcel Energy
68. **Sophia Markowska**, Office of Retail Market Development, Illinois Commerce Commission
69. **Jessica Matthys**, Kellogg School of Management, Northwestern University
70. **Natalie McIntire**, Consultant
71. **Emily McKay**, University of Utah
72. **Theresa McMillan-Sepkoski**, Audit Specialist, Michigan Public Service Commission
73. **Jena Merl**, Advisor, Illinois Commerce Commission
74. **Michael Miller**, Associate, Wilkinson Barker Knauer
75. **Scott Miller**, Executive Director, Western Power Trading Forum
76. **Jeff Morris**, Senior Director State Government Relations, Schneider Electric North America
77. **Jennifer Murphy**, Dir. of Energy Policy, NARUC
78. **Megan Mustoe**, Attorney
79. **Bob Nelson**, Consumer Counsel, Montana Consumer Counsel
80. **Ann Neville**, Northern Mtns Regional Director, The Nature Conservancy Utah
81. **David Nimkin**, Independent
82. **Kelley Noe**, Regulatory Analyst, Idaho Power
83. **Anthony O'Donnell**, Commissioner, Montana Public Service Commission
84. **Megan O'Reilly**, Regulatory Assistance Project
85. **Alexander Ovodenko**, Energy Industry Analyst, Federal Energy Regulatory Commission
86. **Katie Papadimitriou**, Deputy Executive Director – Policy, Illinois Commerce Commission
87. **Bennett Peterson**, Northwestern University
88. **Bob Peterson**, Project Manager
89. **Mike Pezone**, Principal, ISO & FERC Relations - Regulatory Affairs, Pacific Gas and Electric Company
90. **Marji Philips**, VP, Wholesale Market Policy, LS Power
91. **H. Dennis Piercey**, Independent
92. **Bob Pruitt**, Attorney, Lawyurt LLC
93. **Tetyana Rabczak**, Legal Advisor to Chairman, Illinois Commerce Commission
94. **Jay Rasmussen**, RTO Activities Manager, Duke Energy
95. **John Ratnaswamy**, Attorney, The Law Office of John Ratnaswamy, LLC
96. **Victoria Ravenscroft**, Sr. Mngr. Policy & External Affairs, WECC
97. **Kirk Robinson**, Executive Director, Western Wildlife Conservancy
98. **Michael Robinson**, Commissioner, Wyoming Public Service Commission
99. **John Russell**, Attorney
100. **Brian Rybarik**, Program Manager, Microsoft Corporation
101. **Steve Sands**, Director - Energy Strategy, Rio Tinto Kennecott
102. **Cameron Schilling**, Vice President of Market Strategies and Regulatory Affairs, National Hydropower Association
103. **Nick Schou**, Utah Government Affairs Manager, Western Resource Advocates
104. **Patrick Shea**, President
105. **Jessica Shipley**, Senior Associate, Regulatory Assistance Project

106. **Lucas Smith**, Student, Northwestern University
107. **Shinjini Srivastava**, Kellogg School of Management, Northwestern University
108. **Tyler Stoff**, Director of Regulatory Affairs, American Council on Renewable Energy
109. **Gregory Thompson**, Associate Dean, J. Willard Marriott Library, University of Utah
110. **Mark Thompson**, Commissioner, Oregon Public Utility Commission
111. **Mary Throne**, Deputy Chair, Wyoming Public Service Commission
112. **Brian Tulloh**, Executive Director, External Affairs North Region, MISO
113. **Julie Voeck**, Senior Director, Legislative & Regulatory Affairs, NextEra Energy Resources
114. **Josh Walter**, Supervising Strategic Advisor, Seattle City Light
115. **Steven Weissman**, UC Berkeley Goldman School of Public Policy
116. **Carolyn Wetterlin**, Senior Manager, Regional. Transmission Policy, Xcel Energy (Northern States Power Company)
117. **Jennifer Whitlock**, Attorney, Sloan & Sloan
118. **Alison Williams**, Regulatory Policy & Strategy Advisor, Idaho Power
119. **Dan Williams**, Director - Market IQ West, Customized Energy Solutions
120. **Kevin Wright**, Forest Supervisor, U.S. Forest Service