

MINUTES
BOARD OF DIRECTORS PUBLIC MEETING
WYOMING INFRASTRUCTURE AUTHORITY

May 10, 2011
Little America
Cheyenne, Wyoming

I. Welcoming Remarks and Introductions

Lloyd Drain, Executive Director of the Wyoming Infrastructure Authority gave the welcoming remarks and introductions of the WIA Board members, State elected Officials and the sponsors for the reception and the luncheon.

II. Roll-call, Establish Quorum

Chairman Mike Easley called the meeting of the WIA Board of Directors to order at 8:45 a.m. May 10, 2011, at Little America in Cheyenne, Wyoming. Other Board members present included J.M. Shafer, Kyle White, Bryce Freeman and Bret Jones.

III. Approve Agenda

Kyle made a motion to approve the agenda. Bryce Freeman seconded that motion. The motion was approved by unanimous assent.

IV. Presentations

Gestamp Worthington Wind Steel - Wind Tower Manufacturing Facility in Cheyenne:

Bob Jensen, CEO, Wyoming Business Council discussed the Business Council's efforts to attract new business to our State and introduced John H. McConnell, Manager of Development, Worthington Industries; Josh Oakes, Wind Project Lead, Worthington Energy Group; and Dan Guerttman, Vice President, Granite Peak Development. John provided an overview on Worthington's emerging efforts in the energy market. Josh updated on the new turbine tower manufacturing facility to be located in the Swan Ranch Rail Park south of Cheyenne. Dan provided an overview of the Swan Ranch.

See the posted presentation at: <http://wyia.org/newsworthy/presentations-wias-board-meeting-held-in-cheyenne-wy-may-10-2011/>

An Examination of the Benefits of Geographical Diversity of Renewable Energy between WY and CA and other Market Areas:

Jonathan Naughton, Ph.D., Director, University of Wyoming's Wind Energy Research Center has been commissioned by the WIA to examine the diversity of wind between Wyoming and California's connected wind resources. In addition, Jonathan reported on the diversity between Wyoming and Colorado's connected wind resources.

See the posted presentation at: <http://wyia.org/newsworthy/presentations-wias-board-meeting-held-in-cheyenne-wy-may-10-2011/>

The Value of Transmission as an Enabler to Aggregate Diverse Variable Renewable Resources: A Study Using MORE Power:

Randy Allis, Ph.D., Manager, Atmospheric Effects, Northrop Grumman Information Systems provided an overview of MORE Power and show various examples of its use to support the renewable energy community, both solar and wind. These examples include the benefits of site diversity in maximizing useable power and minimizing ramping as well as the value of long distance transmission expansion as an enabler to aggregate wind power. MORE Power is a game changing and disruptive technology used to address quantitatively the inherent variability in natural resources such as wind and solar. This technology has been leveraged from a US government space to ground laser communications application developed by Randy's group and applied to the renewable industry.

See the posted presentation at: <http://wyia.org/newsworthy/presentations-wias-board-meeting-held-in-cheyenne-wy-may-10-2011/>

Addressing the Variability of Wyoming Wind with Quick-Start Natural Gas-Fired Equipment, a Case Study: Dennis Finn, General Sales Manager, Wärtsilä North America provided approaches to firming 3,000 MW of Wyoming wind generation serving the marketplace.

See the posted presentation at: <http://wyia.org/newsworthy/presentations-wias-board-meeting-held-in-cheyenne-wy-may-10-2011/>

Washington DC Update:

Tom Dennis, Executive Vice President, Cassidy & Associates provided an update on issues impacting energy relative to Congress and the Obama Administration. In addition, Tom shared his perspective on the California market.

Keynote Address:

We are pleased to have as our keynote speaker, Karen Wayland, Director of International and U.S. Climate Change Policy, Nature Conservancy, Washington D.C. who discussed her organization's initiatives with comments on Wyoming.

Impact of Recent federal Regulations and Guidelines and other issues regarding the Permitting and Siting of Transmission & Generation:

A panel comprised of representatives from those companies which are on the front-lines of the permitting and siting process, **Jennifer Rouda, Principal Transmission Planner, Ecology and Environmental Inc** moderating. Each panel member provided a brief overview of their respective companies; their perspective on recent policy out of Washington DC including Wild Lands, Land-based generation development guidelines, Eagle guidelines and the Migratory Bird Protection Act; and some closing suggestions to both developers and state & federal agencies as to mitigating the cost and timing of the permitting process. Panel members include:

See the posted presentation at: <http://wyia.org/newsworthy/presentations-wias-board-meeting-held-in-cheyenne-wy-may-10-2011/>

- 1) **Randy Palmer, Principal & COO, EPG**
- 2) **Steve Negri, Senior Wildlife Scientist, TetraTech**
- 3) **Ginger Melms, Sr. Project Manager, Terracon**
- 4) **Floyd Robertson, Project Manager, Ecology and Environmental Inc**
- 5) **Rick Harness, Certified Wildlife Biologist, EDM**

RES Americas' on Wind Energy and Transmission:

Jerry Vaninetti, Sr. VP, RES Americas provided an overview of RES Americas and its perspective on the transmission-related aspects of renewable energy development, including interconnections, genties, merchant transmission, FERC policy reforms, and RTOs.

See the posted presentation at: <http://wyia.org/newsworthy/presentations-wias-board-meeting-held-in-cheyenne-wy-may-10-2011/>

Bureau of Reclamation's Report on Hydro Activity in Wyoming and the West:

Kerry McCalman, Acting Senior Advisor, Hydropower, U.S. Bureau of Reclamation presented the results of a recent study which identifies 70 small hydro projects in the West for possible development. In addition, Kerry addressed the recent Reclamation and DOE Funding Opportunity Announcement for development of small hydro and pumped storage.

See the posted presentation at: <http://wyia.org/newsworthy/presentations-wias-board-meeting-held-in-cheyenne-wy-may-10-2011/>

Pump Storage Development in Wyoming:

Matthew Shapiro, CEO, Gridflex Energy presented the results of a study combining Wheatland/Chugwater wind with a proposed pumped storage hydro facility and the resulting benefits, including creation of firm capacity wind, a home for off-peak power, and transmission savings.

See the posted presentation at: <http://wyia.org/newsworthy/presentations-wias-board-meeting-held-in-cheyenne-wy-may-10-2011/>

V. New Business

No new business was conducted.

VI. Public Comment Opportunity

No public comment was offered.

VII. Adjournment

J.M. made a motion to adjourn the meeting. Bryce seconded that motion. Motion passed and the meeting was adjourned at 3:10 p.m.