

Meeting 3/02

26 June 2002

Not for general publication

Meeting called to order at 1 p.m. in Room 111 at the Department of Environmental Quality (Metcalf Building Office) in Helena.

Present: Chris Borton (in the chair), Roy Nollkamper, Georgia Brensdal, Kathi Montgomery, Chris Daum, Logan Bryce, Jenni Bryce, John Walden, Mark Hines, Tim Ranf, Jerry Spencer, Gail Snow, Kathy Hadley, Mikey Strickland, LuMarie Strickland, Pat Judge, Dave Ryan, Bob Anderson, Jim Tracy.

Apologies: Marla McCombie, Dan Healy, Tony Boniface

Minutes: Minutes of the April 2002, meeting were read and approved.

Treasurer's Report: Chris Daum reported that the MREA account had \$2,879.34.

Old Business:

- A. Members made arrangements for MREA's participation in the 2002 Sustainability July 13 in Livingston. MREA earlier agreed to co-sponsor the fair at a cost of \$1,000. The theme for the Sustainability Fair 2002 was Shining a Light on Sustainable Choices. Chris Borton and Jim Tracy volunteered to set up a wind tower and turbine at the fair. Logan and Jenni Bryce of Pine Ridge Products offered to loan the tower and turbine for the day to MREA. Others who agreed to staff the MREA booth at the fair included Gail Snow, Mike and LuMarie Strickland, Jenni Bryce and Chris Daum.
- B. Kathi Montgomery and Georgia Brensdal of the Montana Department of Environmental Quality reported on the Alternative Energy Loan Program established by the 57th Montana Legislature in Senate Bill 506. The loan program aims to provide a financing option to Montana homeowners and small businesses to install alternative energy systems that generate energy for their own use. Net metering is allowed.

Montgomery reported that information on the loan program is available on the DEQ's Energize Montana website: www.energizemontana.com. Montanans can add their names to the loan availability notification list by calling Montgomery at 444-6778 or by e-mail: kmontgomery@state.mt.us.

Loans can be made up to a maximum of \$10,000 (subject to available funds), and must be repaid within five years. It is anticipated the interest rate will be 4 percent to 5 percent, Montgomery said. She said DEQ was still working out terms with a financing company to administer the loans. The program is funded by air quality penalties collected by the Department of Environmental Quality.

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- C. Chris Borton and Marla McCombie are continuing to develop criteria for an annual MREA Renewable Energy Award that will recognize an individual or group for contributions to renewable energy in Montana.
- D. Kathy Hadley, executive director of NCAT, asked MREA to participate in a renewable energy event sponsored by AERO (Alternative Energy Resource Organization) in December 2002. Several members agreed to participate as expert panelists or as exhibitors.
- E. Sondra Hines of Community Works in Helena reported on plans for the first annual Renewable Energy Camp, July 15-19, in Helena. Tim Ranf and Jerry Spencer volunteered to help at the camp.
- F. Roy Nollkamper, manager of Member Services at Glacier Electric Cooperative in Cut Bank and Browning, solicited MREA volunteers to participate in Co-op Day at the State Fair in Great Falls on Aug. 6. Logan Bryce and John Walden volunteered to represent MREA at the event.

New Business:

- A. At the suggestion of Dave Ryan, MREA agreed to cancel its post office box and accept mail at Ryan's home address, 2910 Floral Blvd., in Butte. Members also approved the printing of 500 copies of a new brochure to reflect the change of address. Most copies of the previous printing had been distributed.
- B. Public Service Commissioner Bob Anderson explained his opinion in the commission's decision to reject a proposal from NorthWestern Energy to buy 150 megawatts of wind generation from Montana Wind Harness to serve default supply loads. **(See the attached relevant pages from the PSC order and Anderson's concurrent opinion.)**
- C. Dave Ryan reported on NorthWestern energy's proposal to create a "green certificates" program, as mandated by the Legislature, through Bonneville Power Administration and the Montana Electricity Buying Cooperative. The Montana Electricity Buying Cooperative plans to offer Northwestern customers a green power choice. Proceeds will be used to develop new renewables in Montana. Ryan noted that NorthWestern had agreed to let homeowners with net-metered solar and wind electric systems retain the green tags for their systems. For an explanation of the program, visit the Montana Environment Information Center website: http://www.meic.org/Green_Tags.html
- D. Georgia Brensdaal described a State Energy Office Representatives Meeting she attended in Colorado.
- E. Mark Hines and John Walden reported on the AWEA Wind Power 2002 Conference and Exhibition they attended in Portland.

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- F. Mark Hines used a slide presentation to report on his visit to the Stateline Wind Energy Center near the Washington-Oregon border.
- G. Jim Tracy reported that the Montana Million Solar Roofs Partnership had received the MSR Best Progress Award for the Denver Region of the U.S. Department of Energy. The Denver region comprises eight states.

The meeting adjourned at 3:30 p.m.

NEXT MREA MEETING: Wednesday, October 9, 2002, 1 to 4 p.m. at the Montana Department of Environmental Quality in Helena.

— END —

PSC DOCKET NO. D2001.10.144, ORDER NO. 6382d

Montana Wind Harness (MWH)

On June 8, 2001, NWE issued a request for proposals to construct up to 150 MW of wind generation located in Montana, the energy production of which would be purchased by NWE to serve default supply loads. NWE-5. Bidders were asked to respond by June 28, 2001. On July 10, 2001, NWE selected four bidders for a “short list.” The short-list bidders were invited to meet with management on either August 6 or August 7. Mr. Pascoe, one of an undefined group of ultimate decision-makers, did not attend the management presentations. TR 148. Following these management presentations. NWE asked the short-list bidders for additional information and final offers by August 17. Response to PSC-036. Certain NWE staff presented senior management with a “Wind Power Recommendation” on August 31, 2001. At least one staff person, Dave Ryan, recommended that NWE select both Dysgen and Navitas, each for one-half of 150 MW. TR 764. Senior management did not make its decision on August 31, but rather “a day or two after.” TR 154. By DOCKET NO. D2001.10.144, ORDER NO. 6382d 38 September 5, NWE had reached an agreement in principle with MWH for 150 MW for a flat price of \$31.65/MWh, a reduction of about 8% from MWH’s flat price “final offer” provided on August 17. Response to PSC-037.

NWE asserted that the MWH resource would provide diversity, competition for incumbent Montana generators, an enhanced tax base, renewable energy using Montana resources and Montana jobs. With respect to Montana jobs, NWE indicated that NORDEX USA had committed to build a turbine assembly plant in Montana in return for receiving the wind turbine order from MWH. NWE-5, p. 3. The assembly plant would create an additional 35 – 50 Montana jobs.

NWE stated that the economic development aspect of the MWH resource was not a factor in the decision to choose MWH, yet NWE’s response to PSC 36(c) suggests that one of the requirements for the selecting MWH was that the NORDEX plant be located in Montana.

NWE generally followed industry accepted procurement practices with respect to exploring wind power products and prices and collecting offers from various potential producers. The Commission is somewhat concerned that the initial RFP did not identify site diversity as an attribute, a factor which NWE ultimately weighed heavily in the decision process. Further, the Commission is concerned that the analysis

of offers and the negotiation process were inadequate. The basis of NWE's selection of MWH is particularly obscure. The record is devoid of any documentation of management's reasoning and judgment following the recommendation it received on August 31, 2001. Such documentation is critical to understanding the selection of MWH and NWE should have thoroughly described the exercise of senior management's judgment in the supplemental wind testimony filed in December 2001.

As it stands, the record is unclear whether NWE considered a combination of price and site diversity as the primary criteria in selecting MWH, TR 762, or price as the singular primary criteria. TR 473: 16-17, NWE-5, p. 2. However, NWE apparently did not consider site diversity critical enough to explicitly ask for it in the June RFP. In fact, NWE did not ask the short-list bidders to address site diversity in their final proposals following management presentations. Response to PSC-36, TR 350, NWE Late-Filed Exhibit 3. MWH's bids offered on August 17 were not the lowest and other bidders and/or combinations of bidders with lower bids would have yielded site diversity. Response to PSC-36, TR 476. Based on the record, the Commission cannot confirm NWE's contention that selecting the lowest cost bidder(s) would have resulted in all 150 MW at one location since NWE did not attempt to negotiate with such bidder(s) on this point. NWE acknowledged that other bidders offered multiple sites and that it did not thoroughly analyze DOCKET NO. D2001.10.144, ORDER NO. 6382d 39 whether 150 MW is the optimal amount of wind to include in the portfolio. TR 142. NWE did not clearly articulate the tradeoffs between price, project size, site diversity, experience, transmission access and other key wind attributes, and did not document how senior management weighed the tradeoffs in reaching its decision to select MWH for future procurement.

At the time NWE chose MWH to fill the wind component of the portfolio MWH was not an experienced wind developer and NWE appears not to have conducted adequate due diligence on MWH's ability to finance the project or follow through with its development if selected. See Data Request Response PSC-36(c), TR 217, 223 226. Based on information supplied in response to MCC-11, NWE specifically asked short-list bidders to provide evidence of their ability to finance the projects. NWE also spent considerable time after it had selected MWH trying to get comfortable with MWH's ability to finance the project. Data Request Response MCC-11; TR 222-223. Furthermore, the record suggests that MWH may have taken liberties with some of the information provided in its bid offers. TR 884-885, 202-203.

Record information on NWE's judgment in selecting MWH is scant. NWE's Application shed little to no light on how senior management reached its decision to choose MWH following the August 31 recommendation. Vague and sometimes conflicting testimony from NWE witnesses during the technical hearing did not correct this fundamental flaw in the Application. According to the August 31, 2001 Wind Power Recommendation to NWE management political "muscle" was considered. Mr. Pascoe explained the term political muscle as meaning local knowledge. TR 148- 149. Regardless of the plausibility of Mr. Pascoe's definition, the Commission cannot determine how these attributes were applied or weighed by senior management. The Commission cannot determine precisely when NWE decided site diversity was important nor how site diversity was weighed relative to price, project size, experience, creditworthiness and other attributes. Mr. Ryan's testimony regarding his specific recommendation is troubling. The record suggests that senior management was likely aware of Mr. Ryan's recommendation. Mr. Pascoe testified several times that the August 31, 2001 Wind Power Recommendation was discussed at one or more meetings along with various facets of the short list proposals. TR 153, 154, 211. When asked

specifically whether his recommendation "was ultimately selected by the NWE," Mr. Ryan simply stated "no."

Mr. Ryan's overall testimony suggests he was careful to answer questions accurately. See for example the question and answer on page 762, lines 12-19. The Commission is confident that if Mr. Ryan had made his recommendation to someone other than the ultimate decision makers at NWE, he would have so stated in his answer. Mr. Ryan was obviously a key member of the staff DOCKET NO. D2001.10.144, ORDER NO. 6382d 40 working to develop the wind component of the portfolio. The Commission is concerned by NWE's apparent failure to document management's consideration of Mr. Ryan's recommendation and the factors that led senior management to discount Mr. Ryan's recommendation in favor of the MWH alternative. NWE did not provide a reasoned explanation of why it pursued negotiations with only one bidder, particularly in light of Mr. Ryan's recommendation. Without such information the Commission does not have a basis for concluding that NWE acted reasonably in selecting MWH for future procurement. NWE's selection of MWH, in particular, illustrates how Management judgment is relevant to prudence, as well as the importance of thoroughly documenting the exercise of judgment.

GENERAL COMMENTS ON ECONOMIC DEVELOPMENT AND NEW ELECTRICITY GENERATION IN MONTANA

The Montana Public Service Commission was created in 1913 as a Progressive Era response to the conclusion that public utilities are natural monopolies whose rates and services should be regulated in the public interest. § 69-1-102, MCA; James Joseph Lopach, *The Montana Public Service Commission: A Study in Administrative Decision-Making* (1973), pp. 1-21 (Ph.D. dissertation, University of Notre Dame) (on file with UMI Dissertation Information Service). The Commission's most basic task – in 1913 and today – is to ensure that public utilities "furnish reasonably adequate service and facilities" at a price that is "reasonable and just." § 69-3-201, MCA. The fundamental goal of the Commission in this docket is to make decisions that will result in just and reasonable rates.

The Commission has been encouraged in this docket to make decisions that will promote economic development. The following exchange occurred at hearing:

- (ROWE) Q: Do you have an opinion as to what the one best thing that could be done as part of the portfolio might be to promote economic development?
- (HINES) A: Well, I think that 290,000 customers having very affordable rates is a real foundation for economic development.

TR 88. The Commission believes that the greatest contribution it can make to economic development is to focus on setting just and reasonable rates.

The Commission has also been encouraged in this docket to make decisions that will promote the construction of new electricity generation in Montana. The idea is that new generation will create both retail and wholesale competition, causing both migration to customer choice and lower default supply rates. The Commission strongly supports competitive electricity generation markets. Additionally, the Legislature has recognized the importance of new generation development in Montana. § 17-6-701-705, MCA. New generation projects may be a reasonable source of reliable, cost-effective electricity supply for default supply customers. NWE may consider whether emerging

technological advances that come with new generation may benefit Montana's environment. NWE should analyze opportunities to procure reliable, cost-effective electricity supplies from new generation projects as part of its on-going default supply planning, management and procurement process. Prudently incurred costs related to electricity procured from new generation projects are fully recoverable in rates. The Commission will evaluate the prudence with which NWE procures electricity supplies from new generation projects consistent with evaluations of other electricity supplies. In planning, managing and procuring default electricity supplies, NWE should evaluate the structure of relevant geographic and product markets for wholesale electricity supplies and the potential risks default supply customers face with a default portfolio dominated by contracts with existing, in-state generators.

CONCURRING OPINION OF COMMISSIONER ANDERSON

Docket No. D2001.10.144

The Commission has issued an excellent order. It acutely analyzes the statutes and reaches logical legal conclusions. It expresses a proper understanding of the scope of the case. It makes sound findings based on the record. To the Commission's order, I respectfully add these opinions.

Risk

It is the duty of Northwestern Energy (NWE), the distribution utility and default supplier, to procure electricity supply for default customers. The Commission's order resists placing the risk of that procurement on the default customers. It gives NWE guidance with respect to future procurements and cost recovery.

The Commission has found that the PPL and Duke contracts were acquired in accordance with industry accepted procurement practices. These contracts, along with QFs and Milltown will meet 59% of the default supply winter peak load and 93% of annual energy requirements. Short term, the remainder must be met in the open market and a portion of that could be acquired through new resources which could come on line in a year or two. NWE and/or its default customers will be exposed to a significant amount of market risk, at least short term.

NWE's strategy for meeting the demand shown on its default load duration curve¹ will require sophisticated analysis to minimize risk.² It will require a good understanding of, among other things: new generating resources proposed in Montana and their timing and likelihood of coming on line; Pacific Northwest hydroelectric conditions (e.g. river flows, snowpack, reservoir levels, and generator constraints); western U.S. wholesale market trends, especially in California; customer response to price increases; and national and regional policy development.

An electricity supply portfolio has many risks due to: fuel price increases and volatility, weather, economic cycles, regional disruptions (e.g. the California-driven price spikes and blackouts of 2000-2001), new technology, new environmental regulations, customer bypass, and more. The financial literature is replete with techniques for analyzing and managing risk.² There is little or no evidence on the record that NWE applied these tools to the default portfolio. In the future, NWE, as well as the Consumer Counsel and the Commission, should use them.

After the tragic events of September 11, 2001 in New York City and Washington DC, national security has been a high-priority national issue. Central station generators and high voltage transmission lines are more vulnerable to terrorist attacks than are small-scale, distributed generation, which needs little transmission. This is an element of risk that is new (or newly recognized) to this country.

The Commission's order has properly reminded NWE that IRP principles should apply to default supply procurement. Application of these principles will help to minimize risk and demonstrate that the procurement process was prudent.

To Rebid or Not to Rebid

Parties disagreed sharply on whether or not NWE should rebid new generation projects.

NWE and the successful bidders argued it shouldn't. They said rebidding would harm the market by creating uncertainty, that it would dampen the willingness of prospective developers to participate.

Unsuccessful bidders said, to the contrary, the market has been seriously damaged by the flawed process NWE used and prospective developers lack the confidence in the fairness of the process required for future participation.

The Commission's order observes many serious shortcomings in NWE's procurement process, but stopped short of advising NWE what to do. The order leaves it to NWE to decide.

The Commission could provide clearer guidance. I believe the market has been damaged as a result of NWE's flawed process and there is a need to restore confidence through a new process that would conform with the principles in the Commission's order.

If NWE were to quickly go out for bids for new generation resources, it could not only restore the efficacy of the default supply procurement process, it could also minimize the risk of exposure to the short term market.

Coal-fired Generation

NWE has stressed the need for diversity in its portfolio. The Commission agrees and in its order has correctly asserted the principle that diversity is important in the overall supply mix, not the new additions to it.

Montana electricity generation is heavily dependent on coal (56% of a core portfolio consisting of the PPL, Duke, and QF contracts). Adding coal-fired generation would decrease diversity, not increase it.

Reducing diversity of the overall supply mix through additions of new coal resources raises corollary environmental quality concerns. Not only is coal combustion a major source of criteria pollutant emissions, it produces the most carbon dioxide (CO₂) per unit of electricity generation of all the options presented.

The science and reality of climate change and human-induced CO₂'s contribution to it are no longer in doubt.³ The only questions are: how much, how fast, and where will temperatures increase and what will be the effects on world (and Montana) natural and managed ecosystems?

Adding coal to the resource mix would increase the exposure of the Montana environment and economy to climate change and expose the project developers, and perhaps NWE and its default customers, to the risk of future CO₂ emission controls or mitigation.

The Commission's IRP rules require that resource selection should take environmental externalities into account.

Wind Development

NWE is to be commended for including 150 MW of wind generation in the proposed portfolio. Montana has an outstanding wind resource. Development of this resource has been frustrated heretofore by transmission constraints which limit wind

generators' access to west coast markets. But, if the power is dedicated to Montana customers, these issues are avoided or minimized.

With the federal production tax credit and the internalization of environmental externalities, wind generation is very economical compared with other resources. It would also add diversity to the resource mix, increase competition in the wholesale market, avoid the environmental effects of fossil fuel-fired generators, and be resilient to terrorism because of its dispersed nature. Montana can lead by demonstrating the viability of this resource and stimulate a new industry in Montana.

RESPECTFULLY SUBMITTED this 21st day of June, 2002.

Bob Anderson
Commissioner, District 3

¹ Pascoe, W.A. 2002. Rebuttal testimony Exhibit WAP__6. February.

² See, e.g.: Fabozzi, F.J. and P.L. Bernstein. 1998. Streetwise—The best of the Journal of Portfolio Management. Princeton Univ. Press.; Korn, R. 1997. Optimal portfolios. World Scientific.; Bernstein, P.L. 1998. Against the gods—The remarkable story of risk. Wiley.; Bouchard, J.-P. & M. Potters. 2000. Theory of financial risks—From statistical physics to risk management. Cambridge Univ. Press.

³ United States of America. 2002. U.S. Climate Action Report—2002, The United States of America's third national communication under the United Nations framework convention on climate change.; O'Neill, B.C. & M. Oppenheimer. 2002. Dangerous climate impacts and the Kyoto Protocol. Science. June 14.; see also <http://www.epa.gov/globalwarming/>; for Montanaspecific effects, see this 1997 report: <http://www.epa.gov/globalwarming/impacts/stateimp/montana/index.html>.