

Minutes of the Montana Renewable Energy Association
Quarterly Meeting, January 10, 2007
Helena -- MT DEQ, 1100 Last Chance Gulch

Present: (6 of 9 board members present, 5 required for a quorum)

Chris Borton (Sage Mountain Center), Vice President and Board Member
Chris Daum (Oasis Montana), Treasurer and Board Member
Patrick Judge (MEIC), Secretary and Board Member
 had proxy from Dave Ryan (President and Board Member)
Steven Aagenes (InSolar), Board Member
Dirk Ellis (StrawHouse), Board Member
Kathi Montgomery (DEQ), Board Member
Georgia Brensdal (DEQ)
Tim Ranf (Pioneer Technical Services)
Tom Bishop (Sunelco)
Jason Isbell (Solar Montana)
Jackson Isbell (Solar Montana)
Orion Thornton (Independent Power Systems)
Sean Micken (Independent Power Systems)
Matt Elsaesser (SAVE Foundation)
John Campbell (NorthWestern Energy)
John Jones (Highmark Media)
Don Clark (City of Helena)
Mark Fitzwater (City of Helena)

Patrick Judge noted that at least some people, like the Stricklands, do not have an email address. He promised to do a better job in the future making sure they receive non-electronic meeting notices.

Call to Order: Vice President Chris Borton called the meeting to order at 12:07 pm. He led a round of introductions.

Minutes: Chris Daum moved that the minutes of the October 11, 2006 meeting be approved, and Tim Ranf seconded. The motion passed unanimously.

Board and Officer Elections: Tom Bishop moved that the board of directors for 2007 be the same as they were for 2006. Chris Daum seconded the motion, and the motion passed unanimously. Patrick Judge moved that the officers for 2007 be the same as they were for 2006. Chris Borton seconded the motion, and the motion passed unanimously.

Treasurer's Report: Chris Daum reported that at the end of 2006, MREA had \$6,314.13 in its bank account. There have been two checks written since that time (one to SAVE and one to the US Postal Service), and the balance as of January 10, 2007 is \$6,625.13. At the end of 2006, MREA had 40 members. As of January 10, 2007 fourteen members had paid their 2007 dues (memberships received after October have been credited to 2007). According to Chris, the membership has been basically holding constant / growing at a modest rate.

Legislative Report: Patrick Judge gave an overview of the legislative session which just began, and discussed a number of specific bills and bill draft requests of interest to MREA members. He also distributed an "Energy Update" article, and information about the MREA bill tracking "preference list" system. He will be in frequent contact with MREA members about upcoming hearings. Kathi Montgomery gave feedback on how to improve LC 1609, which was requested by Senator Kaufmann to establish a conservation revolving loan program. Kathi also mentioned that there is one geothermal project in the list of proposals for Renewable Resource funding in HB 6. These grants are worth up to \$100,000, but more typically go to water infrastructure projects. Patrick thinks this program should be explored as an important potential source of funding for future renewable energy projects. In the 2003 session, SB 83 (Roush, D-Cut Bank) passed to clarify that renewable energy projects ARE eligible for renewable resource grants and loans.

USB Report: John Campbell reported that NorthWestern Energy closed out 2006 with an unexpected surplus of USB money that needed to be allocated. In December, the Renewable Energy Advisory Committee gave feedback in support of John's recommendations for a number of additional projects. Since that time, the company came into even more funding. (There was discussion on how NWE prepares the budget for the year, and what variables affect the final numbers. This year, fewer people signed up for LIEAP than expected – gas prices were lower than expected.) John gave a following summary of the USB renewable energy projects funded this year:

First half of the year

- 1) Helena High / RMDC low-income housing project -- PV
- 2) Great Falls wind projects – 10 kw and 2 kw
Wind is funded at \$2 / Watt, with a limit of \$10,000
(The company is looking for more wind projects.)
- 3) Helena area Farm in the Dell pole-mounted PV project
- 4) 5 kw solar PV project for a Butte environmental consulting business
- 5) NCAT Energy Star construction and education project, including 1 kW PV systems
- 6) Display for the PV system at the Bert Mooney airport in Butte
- 7) More fire station PV projects – Laurel area
- 8) Billings community center PV
- 9) Food bank PV in Butte, Billings, Havre
- 10) a round of residential PV rebates through dealers

Second half of the year

- 1) A second round of residential PV rebates
- 2) 20 kw Jacobs wind machine near Helena
- 3) Stirling Engine at the Helena wastewater treatment plant
- 4) Fire station PV in Belt
- 5) Havre city hall PV

Supplemental projects

- 1) Forest service PV project near Ennis

- 2) Lewis and Clark Interpretative Center PV project in Great Falls
- 3) A third round of residential PV rebates

John also mentioned that NWE would like to see more projects in Billings and Great Falls, and will be putting advertising dollars into those markets.

There was a long discussion of the USB program in general. According to John, NWE receives about \$9 million in USB electric funds each year, but that the large industrial customers are allowed to "self-direct" their funds on internal projects, which amount to about \$3 million. That leaves the effective total at around \$6 million. (John also pointed out that if a new industrial comes onto the system, it increases the overall figure -- the \$9 million -- but not the \$6 million in available funds. The low income minimum percentage is calculated off of the larger number, so the net effect is fewer available funds for renewable energy.)

There was also discussion of the company's proposed gas Demand Side Management program (DSM is just a fancy term for conservation). They have hired KEMA to do a comprehensive assessment of the gas conservation potential on their system, much like the study performed a couple of years ago on the electric side. (That study identified 100 average megawatts of cost-effective conservation with an average cost of less than 2 cents per kwh -- that resource is now being acquired at about 5 aMW per year through electric default supply rates). Most of the gas conservation will be acquired through natural gas commodity rates, although there is some overlap with USB-type projects. John sees a lot of potential for hogfuel / cogen projects like the one proposed for Western Montana College. At that location, steam from the heating system (hogfuel boiler) will be used to generate electricity.

Safety and Certification Report: John Jones and John Campbell led an extensive discussion on the topic of safety training and licensing for renewable energy installers. NorthWestern Energy sponsored a one-day conference on the topic in Butte last December, which was well attended by MREA members. At the conference, attendees received two thick binders of safety and other information, much of which will be available on a new website being established by John Jones, with USB funding help from John Campbell.

John Jones reported that OSHA is very willing to assist with "low cost and no cost training" through their education branch. The issue of safety is paramount. And while the renewable energy industry in Montana so far has a very clean record, it is important to continue to make safety a top priority and to do so using a more formal training and certification process. There have been a number of serious accidents and deaths recently in Montana, involving either electricity or falls.

NABCEP Certification: The NABCEP (The North American Board of Certified Energy Practitioners) program has some very positive elements to it, but John Jones emphasized that according to state law, the Montana Electrical Board (Montana Department of Labor) is the **ONLY** entity that can issue a valid license to do electrical work. Currently, a full-time electrician is needed on staff for pulling or splicing wire, running conduit, working with control panels, etc. -- the exception being "plug and play" type systems. (*note that the MREA secretary is NOT an attorney, and all such reports pertaining to legal or other requirements or

recommendations should be confirmed independently) Homeowners are still allowed to perform their own electrical work on their own homes. Some NABCEB classes may count toward state licensing, but it does not substitute for a state license. Also, John J. thinks it is a bit thin on safety. And the trades don't like it, because there is "not enough structure".

John Jones reported on a meeting he had the previous day with IBEW Local 44 representatives Dan Flynn and Keith Allen. IBEW is affiliated with the National Electrical Contractors Association, which has been doing some interesting things lately including the "Leading the Way to a Greener America" publication. IBEW has been monitoring the renewable energy activity in Montana closely, and feels that the industry needs to continue working with licensed electricians like Eagle Electric (in Helena). They have the following hierarchy of preferences for those doing the work:

- 1) unionized and licensed electrician – if not that, then . . .
- 2) licensed electrician
- 3) non-licensed people doing electrical work – this is the least acceptable option in their view

They also described a complaint that had been filed against the Horsehoe Bend project in Great Falls, for not having used licensed electricians for the installation of the wind turbines. IBEW is also soon-to-be well represented on the 5 member state electrical board. John Jones thinks everyone is waiting to see how California resolves these issues, a state where renewables are a \$3 billion industry.

MREA members expressed a willingness to meet with IBEW, and to establish a reasonable licensing program. But the members also expressed frustration if the effort was to require masters electrician status for everyone in the industry, which is unnecessary and impractical. It takes four years of apprenticeship to reach that status, and there are very few opportunities for doing so while doing renewable energy work in Montana. Tony Boniface is the only master electrician among MREA members, and he is only allowed to apprentice one person at a time. Completion of a two-year electrical training program at Helena College of Technology does not count toward the four year apprenticeship.

John Jones had the following suggestions for the group:

- 1) Work collaboratively with OSHA -- in fact, you could go well beyond what the electrical trades currently do with safety, especially for some of activities RE installers routinely engage in that electricians typically do not -- fall protection, for example, and "crane" operation
- 2) Develop training and educational materials on these topics
- 3) Look into formalizing that process as a certification program. Patrick Judge thought that if a program were developed over the next couple years, it could be presented to the 2009 legislature for its consideration. This would be an industry specific license. It was reported that Oregon has something similar.

John Campbell closed by emphasizing that NorthWestern will comply with the spirit and letter of any law that passes. In order to qualify for USB funds, a would have to have the appropriate license. He thought that some a certification system would be beneficial in protecting the industry from "fly by night" type operators. Safety training and certification are critically important for protecting the health and well being of installers, customers, utility workers, and others -- and also help protect the good name of the industry.

Envirothon Report: Kathi Montgomery announced the upcoming Envirothon for high school

students, to be held April 23-24 in Lewistown. The program brings students together to solve a “problem” over the course of two days. This year’s topic will be alternative energy, and they are currently looking for judges and other resources. There was agreement among the MREA members that this would be a good event for the solar trailer (and also the bicycle generator owned by Steve Hicks of White Sulpher Springs). Judges are only needed on the 24th. For more information, contact Kathi at kmontgomery@mt.gov

City of Helena Wastewater Treatment Plant Report: Don Clark and Mark Fitzwater reported on the city's plan to use a 55 kw Stirling Engine to use methane captured from the wastewater treatment process to generate electricity. A Stirling Engine is a highly efficient external combustion engine. Unlike an internal combustion engine or gas turbine, an external combustion engine does not require as much gas cleaning. At the Helena plant, methane is already being burned in the boiler to heat the digesters and part of the facility. Producing electricity will make this a cogen project. The engine needs to be operational by December 1 to qualify for its USB grant. Helena is currently using only half of its wastewater treatment capacity, but the community is growing rapidly. Hence, the project will be “stubbed in” for a second engine. The plant engineers have many additional ideas for efficiency and renewable energy, including solar thermal heating and biodiesel. The MREA members thanked them for their presentation, and commended them for their vision.

Other Reports: There was a short discussion that several of Montana's rural electric cooperatives have been becoming "greener" with respect to renewable energy projects and green power programs (Ravalli, Hill, Vigilante, etc.). This trend is reflected in the recent issues of Rural Montana. Others contest this assertion, at least when it comes to USB expenditures.

Next Meeting Date: The next meeting will be held in Helena on Wednesday, April 11 at 12:00 pm -- unless rescheduled to accomodate legislative hearings.

Adjournment: The meeting was adjourned at 3:04 pm, with Chris Daum making the motion and Kathi Montgomery seconding it.

These Minutes were prepared by Patrick Judge, Secretary.