

Minutes of the Montana Renewable Energy Association
Quarterly Meeting, January 9, 2008
New Bozeman Library, 626 E. Main St.

Note: Bold text indicates action items that require follow-up.

Present: (7 of 9 board members present, 5 required for a quorum)

Dave Ryan (NCAT, Butte), Acting President and Board Member
Chris Borton (Sage Mountain Center, Whitehall), Acting Vice Pres. and Board Member
Patrick Judge (MEIC, Helena), Acting Secretary and Board Member
Steven Aagenes (In-Solar, Helena), Board Member
Kathi Montgomery (MT DEQ, Helena), Board Member
Conor Darby (Independent Power Systems, Bozeman), Board Member
Tom Bishop (Sunelco, Victor), Board Member
Mickey Strickland (Dearborn Solar Electric, Cascade)
Lu Strickland (Dearborn Solar Electric, Cascade)
Dan Kenworthy (Kenworthy Electric, Sheridan, MT)
Sean Micken (Western Community Energy, Bozeman)
Orion Thornton (Independent Power Systems, Bozeman)
Rip Hamilton (Solar Plexus, Missoula)
John Jones (Highmark Media, East Helena)
John Campbell (NorthWestern Energy, Butte)
Jason Schmidt (Phanes Solar, Helena)
Sam Hall (Student, Missoula COT)
George Snow (Sun Power Plus)
Gail Snow (Sun Power Plus)
Todd Hoitsma (Liquid Solar Systems, Bozeman)
Georgia Brensdaal (MT DEQ, Helena)
Paul Farley (groSolar, Bozeman)
Jason Isbell (Solar Montana, Helena)
Jack Isbell (Solar Montana, Helena)
Troy Petermann

Call to Order: President Dave Ryan called the meeting to order at 12:47 pm. He led a round of introductions. Dave indicated that he appreciates the effort people make to travel to the meetings.

Minutes: Patrick Judge moved that the minutes of the October 10, 2007 meeting be approved with slight non-substantive edits for spelling, etc. Chris Borton seconded. The motion passed unanimously.

Treasurer's Report: Dave Ryan delivered the Treasurer's report on behalf of Chris Daum, who could not attend. Dave reported that MREA had \$4,775.57 in its bank account as of December 31, 2007. The organization has 44 members who have paid their 2007 dues. 2008 memberships are starting to roll in, and Dave collected some more checks at the meeting.

Board and Officer Elections: Patrick Judge announced the results of the board election,

congratulating the 2008 board members who are as follows (in alphabetical order):

Steven Aagenes

Tom Bishop

Chris Borton

Conor Darby

Chris Daum

Dirk Ellis

Patrick Judge

Kathi Montgomery

Dave Ryan

Patrick reported that 21 of the organization's 43 members had cast votes, and that ten other board members had received votes. He encouraged those and other members who might be interested in serving to 1) be sure to be current on their dues, 2) be sure to attend meetings, and 3) let others know of their interest in serving.

Kathi Montgomery suggested that the officer elections be conducted electronically. Dave Ryan asked if there were any objections. There were no objections, and Patrick Judge agreed to conduct the election. ***See Addendum below.**

Website Report: Dave Ryan encouraged the members to keep the website up-to-date. The website is maintained by Cathy Svejksky at NCAT. MREA is willing to pay more for the service if necessary. The minutes from the 2007, 2006, and 2005 meetings have all been posted.

Cathy's contact information is:

cathyS@ncat.org, 406/494-4572

Kathi Montgomery promised to review and update the list of dealers.

OSHA Update: Conor Darby summarized the history of MREA's relationship with OSHA, which was formalized by a signing ceremony earlier today. **Photos of the signing will be posted to the website and / or the listserve. Dave Ryan will send out a news release to various media outlets.** John Jones reported that for the first year of the (three-year) agreement, he will be helping facilitate the paperwork and other requirements. If the members need him to continue to do that into the future, he will be available. But he thought that once people got used to it, they would not find it difficult. He reminded members of the interactive web-log ("blog"), which can be accessed here:

www.montanareinstallers.com

OSHA will begin by trying to establish trends, which they will do with use of the forms people provide. Chris Borton reported that they are interested in anything beyond "first-aid."

Dave Ryan said this is a historic agreement, as it is the first-ever for a renewable energy advocacy group. Jones said that it will be used as a model for this trade craft.

Conor Darby noted that we have a subcommittee that was charged to manage this process. He noted that participation isn't mandatory for MREA members, but encouraged the members to take part (for their benefit, and the benefit of the industry). He also indicated that we should be reaching out to non-MREA members. **Dave asked John Jones and the subcommittee to develop a schedule for the trainings and other action items that need to happen within the next two months, and to report back to him within 2 weeks.** He said that Mike Foreman will try to attend our meetings. Kathi Montgomery noted that this is a good time of year for trainings.

John Campbell offered to host trainings at NWE's facilities in Butte. He encouraged everyone to attend the trainings.

A rather lengthy discussion ensued regarding the overall objectives of the OSHA agreement, and the long-term vision of MREA. Dave Ryan stated that the objective was to provide safety training and education, to build credibility and professionalism, and to protect the industry. MREA may wish to advocate for some type of certification or licensing program. **Paul Farley, Rip Hamilton, and Patrick Judge offered to research standards and requirements that exist in other states.**

Interconnection Report: Dave Ryan reported on the recent hearing held by the Montana Public Service Commission to gather information on whether it should adopt the IEEE 1547 Interconnection Standard. Dave said it took IEEE twelve years to develop this safety standard, and that a broad stakeholders group was involved. He noted that this is not the same as the UL listing for inverters, nor is it the IEEE 519 Power Quality standard. He reported that at the hearing, NWE (Dan Munson & John Carmegy) and Jason Keyes (of the Wilson Sonsini law firm, Seattle office, at the request of Chuck Magraw, Natural Resources Defense Council and Renewable Northwest Project) supported the standard, while MDU and IBEW opposed them (IBEW with written comments). Dave noted that in California alone, there are over 30,000 net-metered systems (ranging from 85 watts to 185 kW, with an average similar to ours at 2.5 kW), and that there hasn't been any problems. Dave also noted that if linemen follow standard utility safety procedures, they are totally protected from any backfeed scenario "the 'open' is not at the generator, it's where you're working" -- once you create the open and you ground the line, you are protected. In addition, net-metered systems are highly regulated, and have redundant systems to prevent any such scenario. 'The far bigger risk is that someone plugs a Honda generator into their wall socket.' Dave said that MDU's objections were more along the lines that they already had standards that they felt were stronger. Dave felt that uniformity was desirable, and that the robust IEEE process probably produced a pretty desirable outcome. Dave reported that the PSC did not take any immediate action.

Helena Building Permit Issue: Patrick Judge wanted to follow-up on the October discussion concerning Helena's expensive requirements for installing renewable energy projects. He read the following email that was sent to him by Dirk Ellis: " I spoke with Kim Mack the City of Helena's Senior Plans Examiner about how to go about changing the fee structure for the permitting of renewable energy projects. She in turn spoke with her boss Brandt Salo, Chief Building Official. **He suggested that we write a letter outlining our ideas and he would carry it up the line.** My impression is that his involvement would increase the likely hood of success and possibly speed up the process." Patrick also reported that the City Commission has voted to establish a Climate Change Task Force. The task force will have 9 members, who will likely be appointed by Mayor Jim Smith on January 21st. MREA members pointed out that the process is not only expensive, but cumbersome, with a 2-4 week waiting period, a desire for you to hire an engineer, etc. Todd Hoitsma noted that in certain areas of town, the City of Bozeman also requires a "Certificate of Appropriateness" which is mostly a visual standard (and which caused a significant delay for the Arby's project). There was a short discussion of creative financing strategies to reduce or eliminate the up-front cost of systems, such as the mechanism recently implemented by the City of Berkeley.

Other Announcements: Chris Borton announced that the 2008 Livingston Sustainability Fair would take place on July 12th in Sacagawea Park. Those who attended last year thought this was a preferable location to the depot. Approximately 3,500 people attended last year's event. MREA's trailer now has tilt-up solar panels, but at the Butte Sustainability Fest the circuit breaker flipped off. While NCAT will likely host its Sustainability Fest again this summer, it has not yet committed to it. It was also suggested that MREA participate in the second annual Festival of the Wind in Harlowton.

Chris Borton suggested that the group have a "State of the State" type discussion at the April meeting (perhaps at lunch), where installers could update each other on trends, what works, what doesn't, etc. Chris reported that his Kyocera 120s had failed, but that the customer service rep. was very accommodating. Tom Bishop reported that prior to the Kyocera problem, the industry used to have a "2 in 10,000" failure rate. Kyocera is repairing some of the panels, and replacing others (sometimes with the Kyocera 130s, which have the same frame size). The panels have a 25 year warranty, and Kyocera is also covering installation costs.

Chris reported that Sage Mountain has now finished its NWE USB-sponsored lecture series, and he estimated at 75% increase in attendance and overflow crowds in some locations.

John Campbell gave an update on the latest round of NWE USB renewable energy grants, which included about \$300,000 in RE projects and educational programs, including:

- a large-scale solar PV installation in Billings (the state's largest)
- Helena vocational education building project with solar PV (like last year)
- 14 additional residential solar PV projects for the dealer / installers
- the imminent release of a solar thermal guidebook (previously funded)
- John Jones' work to help facilitate the OSHA partnership
- 6.5 kW solar PV system for a Missoula Credit Union that will be LEED certified
- solar PV for Wildlife Rehabilitation Center in Helena (with good internet visibility)

(this may be funded with 2008 dollars)

John described how NWE is looking for a variety of projects, but that it is not a R&D program. Some of the previous projects include a Stirling Engine at the Helena wastewater treatment plant and a reciprocating steam engine for a sawmill. John is personally interested in wood gasification technology.

Kathi Montgomery reported that the Alternative Energy Revolving Loan Program continues to grow, but that it had its first two defaults in 2007 (bankruptcy). **She asked for assistance if anyone knows of a good appraiser with renewable energy experience, and she may be looking for expert testimony from some of MREA's members as to the valuation of recently-installed panels.** A short discussion on the topic ensued. Kathi further reported that she believes the 5% interest rate will again be approved for 2008. The program has loaned over \$1 million and has had roughly 70 loans go out, with some creative applications (one disabled Veteran is generating electricity for his "off the grid" home with biodiesel and small hydro). Kathi also mentioned that the Governor is interested in installing solar electric panels at the Executive Residence, but is pursuing conservation measures first. Dave Ryan reported that he helped identify a blown fuse on the inverter at the Capitol Complex. Rip Hamilton reported that the Sunnyboy inverters are seeing a very high failure rate (mostly the 1800 model, but also the 2500).

Kathi reported that the Harvesting Clean Energy Conference will be held in Portland this month, and that the deadline for early registration (and reduced rates) was THIS FRIDAY. She also announced that the 2009 conference would be in Montana (possibly Missoula), and she is putting

together a steering committee, **If any MREA members are interested in serving, please contact her. Typically, there is a wind track and a biofuels track, but if someone wants to initiate a solar track this might be a good time.** She is hoping that the Governor will be available to present the clean energy awards.

Speaking of awards, Kathi moved that MREA honor former chairperson Marla McCombie, by presenting her the clean energy award (the award was given only once before, to former PSC member and MREA member Bob Anderson). Lu Strickland and Steven Aagenes seconded the motion, and it passed unanimously. **Chris Borton volunteered to prepare the plaque in time for the April meeting.**

Sean Micken reported that he is now working for Western Community Energy, and that WCE is the state facilitator for NREL's new Wind for Schools project. The project will focus on five states over the next 3 years. They will be installing Skystream 1.8 kW machines and using a curriculum developed by the National Energy Education Development Project (www.need.org). They have applied for USB funding through NWE, and will be looking for similar support from MDU and McCone Electric Co-op. (Note that MDU's non-low income USB funds have traditionally been allocated by DEQ. It was also mentioned that MDU has a new commercial scale wind project operating at Baker.) They are also looking for in-kind contributions of any type from companies, foundations, and individuals. The schools they have identified in Montana are:

- Cascade
- Stanford
- Livingston
- Fairfield
- Circle

The Colleges of Technology were suggested as a possible resource. **Jason Isbell volunteered to help out.** Sean mentioned that they are also working with the MSU Mechanical & Industrial Engineering Program, which is looking at creating a sub-department focusing on wind energy. WCE is hoping to rely on MSU students for some help on the installations.

Other than the test machine located at Logan and Jenni Bryce's home, the group was not aware of any Skystreams in operation in Montana. Rip Hamilton mentioned that they have rather large concrete footings. Southwest Wind will be providing the turbines at wholesale, but will be offering their standard 5 year warranty. A project in Bozeman will likely be the first. **Sean will notify the group about the date.**

Other Business: Patrick Judge agreed to send out the MREA email list to confirm addresses. There was a short discussion about electricity units, and how best to convey the concepts to the public. It was noted that the average Montana electricity customer uses 750 kwh per month = 9000 kwh per year. Because there are 8760 hours in a year, this comes out to almost exactly 1 average kilowatt per household. So it's safe to say that one average megawatt of generation provides enough energy for 1000 households. It's an easy number to use, and accurate! When talking about wind turbines (or really any real-world generation source), however, the capacity factor must be included (i.e. a 1 MW wind turbine will only supply about 330 average kilowatts, thereby supplying enough energy for only about 330 households).

Adjournment: The meeting was adjourned at 4:00 pm. The next meeting will take place on Wednesday, April 9th in Great Falls. **Mark Gray will hopefully attend.** Exact time and place

will be determined later. Possibly, it will be scheduled to coordinate with a OSHA training session.

***Addendum:** Patrick Judge did conduct the election for board officers electronically. The results were to maintain the current slate of officers, as follows:

President - Dave Ryan

Vice President - Chris Borton

Treasurer - Chris Daum

Secretary - Patrick Judge

On January 29th, Patrick Judge surveyed the board members to determine whether they were willing to sign onto a letter of opposition to the proposed coal-to-liquids plant at Malmstrom. Air Force Base in Great Falls. Having heard no objections, and with affirmative responses from six board members (Dave Ryan, Chris Borton, Chris Daum, Conor Darby, Patrick Judge, Steven Aagenes), Patrick added MREA to the letter.

These Minutes were prepared by Patrick Judge, Secretary