

**Alternative Energy Committee
August 29, 2013**

Members present: Larry Bean, Chair; Burke Henry, Vice Chair; and Glenn Carlson

Members absent: Carl Frederickson and Tom Banner

Also present: Pete Clark, Town Administrator and Mike BeBeau, Xcel Energy Community Service Manager.

Public present:

1. Call to order.

The Alternative Energy Committee meeting called to order by Chair Larry Bean on Thursday, August 29, 2013 at 10:05 am at the Town Hall. A quorum of the committee is present as reflected in the members listed above.

2. Minutes of the following meetings to be considered for approval:

A. August 15, 2013.

Motion by G. Carlson to approve the August 15, 2013 Alternative Energy minutes as presented. Second, B. Henry. All in favor, all aye, motion carried.

Thank you to Mike BeBeau for attending this meeting. Dave Donovan, Xcel Energy had encouraged us to invite Mike to a meeting to see what we are up to.

3. Report from the Town Administrator: Town of La Pointe Emergency Plan

Discussion at the August 15, 2013 meeting was about the importance of integrating the Town's Emergency Plan with alternative energy to achieve energy security for emergency preparedness. The Dept of Energy has a whole division devoted to emergency preparedness and each state has been given a grant to formulate an energy emergency plan.

Pete Clark, Town Administrator, said he reviewed the 2002 Town Emergency Plan and agreed that alternative energy be inserted in that plan. We need to decide where to evacuate people and how to ensure that there is heat and power. In order to do that we need to know the Town's minimum usage power requirements.

L. Bean said he and Pete talked about the backup generator behind the Emergency Services (EMS) Building. Pete will find out the size of the generator and what the generator powers when the power goes off.

A priority list in regards to what has to be powered in the case of an emergency needs to be developed by the Town. A priority list would also give this committee the minimum size unit that would be required. Agreement that it would not be appropriate for this committee to set those priorities.

The committee will begin this project on a step by step basis and is moving ahead with the placement of a solar installation on the Island; first choice for the installation would be at the closed landfill. Once the installation is up a microgrid could be added at a later date. A microgrid requires a battery bank which maintains the load if the grid goes down and also regulates peak management. To be noted is that a microgrid does not supply 100% of the energy needed so this committee needs to figure out the percentage the microgrid would supply and set priorities. The committee could apply for a planning grant to size the battery bank.

The present Emergency Plan calls for one or more centers that would handle a maximum of 20 people for 3 days. Buildings that could be used for evacuation are the School, Emergency Services Building (EMS), Library, Town Hall, Clinic, Airport buildings and the Winter Transportation Building. The designated buildings would require backup power. There is emergency fuel storage at the airport for the backup generator at the EMS building. More emergency fuel storage would be needed if more buildings are designated as centers.

Discussion of the committee's mission in regards to emergency plans. Agreement that this committee's role is not to suggest buying generators or write an emergency plan but the goal is to integrate an alternative energy system into the emergency plan. An appropriate committee should study the emergency plan and change what needs to be changed. A member of this committee could sit on that committee.

Pete will ask the Town Board to establish an ad hoc committee to study the emergency plan.

Pete Clark leaves the meeting (10:25 am).

4. Review and discussion of AEC mission, goals, objectives and action plan.

L. Bean has not had time to re-write the 2007 mission statement as he has been involved in correspondence with the DNR about our closed landfill.

There is a closed landfill in Wisconsin with a solar installation. The person from the DNR who worked on that site will be working with this committee. L. Bean has answered questions about our landfill and John Johanning, the site assessor for the MRF site forwarded the landfill pictures to the DNR. L. Bean is very encouraged with the response from the Energy Office and DNR.

L. Bean said he does not think the goals need to change. Membership and history should be updated.

Discussion of the AEC 2013 Work Plan which is hereby attached and made a part of these minutes.

A comma is needed after the word assessments in #1.

#2: B. Henry suggested that this committee define "Town's electricity".

The goal of the Wind Study was to take on 100% of the load of the Island. After discussion "Town's electricity" will mean "town government". Question if this means town government facilities. The Library is a part of the town, but is governed by a separate board. The Library is looking at a separate solar installation which includes a cooling system.

#5: Mike BeBeau said efficiency improvements are the least costly. As an example, the present expensive dock lights need to change to more efficient lighting.

Suggestion to renumber the plan by putting #5 as #1 and #4 would then become the present #5.

Agreement that #1 should be energy efficiency.

5. Budget 2014

A. Capital Expenditures

B. Town and Facility energy use and cost.

Budget recommendations are due in a little over a month.

An energy audit was done several years ago.

L. Bean presents draft capital expenditure recommendations based on that audit.

1. Ferry dock lighting. Need 6 fixtures and 10 poles. This could be expensive.
 2. The breakwater solar LED lights (3) would not need poles.
- Both #1 and #2 could be done with an 80%/20% cost share grant under harbor.
3. Parking lot LED lights. 8 fixtures on existing poles will cost about \$8,000. L. Bean is waiting for a bid from John Carlson as to the cost for installation of the lights.
 4. Wood fired boiler. This could be placed between the EMS and Winter Transportation Buildings. Wood has to be gathered but the woodbox only needs to be filled once a day. Cost is approximately \$10,000 and could pay for itself in about three years. Mike BeBeau suggested contacting the Town's insurance agent as some insurance agencies are concerned about wood fired boilers.

The EMS building has three different heating systems: a big heater that goes out on ducts into the meeting and engine rooms, radiant heat and a forced air unit in the office area. The wood fired boiler would override these three systems. The company selling the boiler has offered to send someone here, the attraction being that the airport (radiant floor heat) and the Recycling Center might also be interested in a wood fired boiler.

Agreement that Pete Clark contact our insurance company to see if they have concerns about wood fired boiler systems. The cost of a wood fired boiler is approximately \$10,000.

The last recommendation (#5) is for new front and side doors for the Town Hall. Cost would be approximately \$13,000 for two doors.

Other items: Electric vehicles; more insulation for the library, change the outside light at Town Hall to a motion detector. These are not capital expenditures, but energy efficiency. Suggestion to use the Ashland WITC general construction class for some of these projects. You buy the material and they supply the labor.

Question of what the payback would be for the LED lights. Suggestion to ask the State what the savings will be if you replace 400w high pressure sodium with 100w LEDs.

L. Bean mentioned to Dave Donovan that we would be very interested in becoming a demonstration community for our street lights.

These recommendations need to be refined with numbers before the recommendations are included in the upcoming budget.

Discussion that each of these recommendations needs to be analyzed as to cost and savings per year. There is enough information for this analysis for recommendations #1, #2 and #5. Recommendations #3 and #4 need more information.

Agreement to wait on gas consumption. There could be grant money available for electric vehicles which we could find out when we go to Madison.

6. Response from letter regarding contractor interest in solar energy projects on Madeline Island.

A number of contractors of the 21 who received a letter letting them know what this committee is thinking about.

7. Grant Initiatives.

Lisa Potswald, Planning and Zoning Administrator contacted the Rural Development Council in Spooner, WI. Money is exhausted for 2013 and the process will begin in 2014. Lisa pointed out that we need to portray community support so this committee needs to hold presentations to discuss the possible solar installation and the 20 residences that are interested in individual solar installations.

B. Henry will complete the Island Association grant.

8. Madison Itinerary.

L. Bean said we could use money from the Island Association for the Madison trip but he will use his own money if necessary. He would also like to meet with Don Wichert, former head of Focus on Energy. Focus awarded us the grant for the wind study. G. Carlson will pay his own way and could also find out more information about the Monona project.

B. Henry cannot go to Madison.

Agreement to take one vehicle and leave on the 7am ferry Sept 30th. Will meet with legislators and the State Energy Office that afternoon and will meet with the DNR on Tuesday morning.

To be noted is that there is an engineer coming to the Island on September 16th to look at the landfill.

9. Marketing and Community Outreach.

G. Carlson has set up an Alternative Energy Facebook page.

B. Henry would be glad to help with community presentations.

10. Set next meeting and agenda.

Next meeting set for September 24, 2013 at 10:00 am.

11. Adjourn.

Motion by B. Henry to adjourn, second, G. Carlson. All in favor, all aye. Motion carried.

Meeting adjourned at approximately 11:15am.

Minutes taken from recorder and respectfully submitted by Kathy Erickson, Clerical Assistant
Minutes approved as presented September 24, 2013

AEC 2013 WORK PLAN
DRAFT

1. Assist property owners with solar PV planning and acquisition including assessments technical and financial support.
2. Investigate solar development that would cost-effectively provide the Town's electricity on an annual basis. Pursue grant opportunities.
3. Assist the Town library in the planning and acquisition of cooling equipment that would be solar powered and also provide solar electricity for the library's annual need as well as the adjacent medical clinic.
4. Investigate the opportunities for increased Island energy security and independence with "micro-grid" development.
5. Make recommendations to the Town board for cost effective energy efficiency improvements including suggestions for funding assistance.