

**MINUTES OF THE MEETING
OF THE
ENERGY ADVISORY COMMITTEE (EAC)**

**Regional Emergency Back Up Power Sources
Disaster Mitigation Plan**

November 19, 2010

PRESENT:

Marion Benson	Planning Director/Town of Lunenburg
Victor Koivumaki	MRPC Chairman/Lancaster Planning Board
Jennifer Siciliano	MRPC Regional Planner
John Hume	MRPC Planning and Development Director
Jason Stanton	MRPC GIS Director
Eric Smith	MRPC Regional Planner
Glenn Eaton	MRPC Executive Director
Brad Harris	MRPC Transportation Director
Chantell Fleck	MRPC Regional Planner
Mike Radzicki	Worcester Polytechnic Institute/Sterling Planning Board
Ann Pierce	Mass Development
Trevor Beauregard	Gardner Economic Development
Guillermo Weyer	Consulting Engineers Group
Chris Christie	Groton
Ryan McNutt	Fitchburg Mayors Office
Mary Krapf	Ashby
Lillian Whitney	Ashby
Sean Hamilton	Templeton Municipal Light and Water

I. Welcome and Introduction

S. Hamilton called the meeting to order at 12:30 p.m. He announced that he is will be taking over the position of the General Manager for the Sterling Municipal Light Plant effective November 20, 2010. All present introduced themselves.

II. Approval of August 20, 2010 Minutes

A motion was made that the Energy Advisory Committee approve the August 20, 2010 minutes as printed. The motion was seconded and passed unanimously.

III. PRESENTATION OF DRAFT EMERGENCY BACK UP POWER SOURCES MITIGATION PLAN – John Hume, Jennifer Siciliano and Jason Stanton, MRPC and Guillermo Weyer, Consulting Engineers Group(CEG)

A power point presentation was made by Jennifer Siciliano regarding the Draft Emergency Back Up Power Sources Mitigation Plan. The plan is divided into the following sections: Introduction and Overview; Forming the Planning Team; The Public Process; Inventory and

Survey of Regional Assets; Analysis of Emergency Back Up Power Sources' Analysis of the Electric Grid Structure; Recommendations and Next Steps and Appendices.

The December 13, 2008 Ice Storm was the impetus for this plan. MRPC was successful in receiving a grant from the Economic Development Administration to develop this plan. A wrap up event will be held on December 14, 2010 at 9:00 a.m. at the Four Points in Leominster.

J. Siciliano further explained that an inventory of all critical assets in the region was mapped by our GIS Department. We developed a 23 question survey regarding back up power and distributed to all critical assets in the region. Our GIS Department then mapped the critical assets that provided a response to our survey; the assets that had generators and renewable energy resources in the region.

MRPC surveyed 963 critical assets and there were 805 unique assets - meaning it is the same building. We received 267 responses. Survey results were as follows: the most common answer for what type of fuel was used was diesel (32%), gasoline (24%); the most common testing schedule for back up generators was weekly at (33%); 43% of those surveyed had contingency plans for outages; 34% had hazard plans; 17% of critical assets were interested in updating their current back up systems but cost made it prohibitive.

From the responses received all the following categories had generators: police stations, hospitals, nursing homes, pharmacies and colleges. Categories that did not have generators included shipping facilities; home improvement, cable television and general medical facilities. Most supermarkets had generators powering life safety systems only. Some informed us that during the ice storm they rented generators. The majority of schools have generators. Many of them serve as emergency shelters. We also surveyed major employers in the region with only nine responses. Of those responding, seven had generators. Only 33 of the 47 emergency shelters/centers have generators. The only public water/wastewater facility that responded was from Fitchburg and they do have a generator. Most highway departments and cell towers have generators. The majority of gas stations do not have generators.

Recommendations were developed by both MRPC and CEG. Recommendations include: 1) on site generation for primary and secondary shelters, fire stations and police stations, departments of public works, and critical care facilities. 2) Communities should review and maintain their Hazard Mitigation Plans; 3) Communities should review and communicate their risks and evaluate the needs to improve the areas with high risk; 4) Update and populate GIS map with critical assets; 5) Emergency Management Directors should work to create life line lists for residents requiring emergency power; 6) Create a database of emergency generators for public use along with their location and maintenance schedule; 7) Create communication protocol for all communities to provide needed information to all residents during emergency situations; 8) Establish a local emergency management director in each town; 9) Examine the use of de-energize restoration for future storm related emergencies; 10) Should seek funding opportunities to implement a roll up generator "Feasibility Report" to investigate the installation of generator plugs at various critical buildings in each town; 11) Prioritize and rank needs for generators in the region so that we can apply for funding for generators through the Central MA Homeland Security Council; 12)

The Commonwealth of Massachusetts should be encouraged by applicable entities throughout the region, to develop programs to help supplement the cost of emergency back-up power systems, especially for gas stations; 13) Encourage major employers to acquire generators; and 14) Communities should consider having clean energy generating systems.

S. Hamilton commented that Templeton just used the Community Preservation Act funds for generators for elderly housing.

R. McNutt stated regarding communities having a clean energy system the problem that he has run into in Fitchburg is that there is cap on how much utilities have to get from clean energy (1% of peak load). Fitchburg has Unitil and Unitil is already at seven-tenths. Even if Fitchburg had solar or wind Unitil doesn't have to take it because it is already at the cap.

M. Benson commented that she thought Unitil had raised that cap.

S. Hamilton commented now is a good time for public/private partnerships.

G. Weyer indicated that CEG partnered with Source One to put together the analysis of the electric grid structure. He informed the committee of his educational background and experience. CEG undertook several tasks: 1) Met with MRPC stakeholders, municipals and utilities to develop a consensus on data that we could use to develop this report. 2) Reviewed the existing system; 3) Surveyed the local emergency management directors to see what their experiences were; and 4) Identified beneficial methods to improve reliability.

G. Weyer commented that he located a table in the MA State Hazard Mitigation Plan which identified Worcester County and Middlesex County as having the most ice storms in the last 28 years. Ice Storms are a problem in this area. He indicated that National Grid is the largest electrical provider in the region. Unitil covers four communities. Some other communities are covered by municipal plants. Mr. Weyer explained in detail how power generation systems work. Transmission lines have the highest level of reliability. They have large maintained right of ways. Distribution lines are what you see on your streets and have the lowest level of reliability because of their proximity to vegetation and public traffic. If your town is supplied solely off of distribution lines, the probability that you are going to suffer a sustained power outage is higher. The number of customers and the reliability statistics were also considered when we developed our priorities. Our high priority areas are Ashby, Athol, Fitchburg, Gardner Harvard, Hubbardston, Lancaster, Lunenburg, Leominster, Petersham, Phillipston, Royalston and Townsend. They are highly vegetated and for the most part are highly reliant on distribution voltage lines to supply electricity. Distribution comes from a substation. So therefore there is more exposure, more lines and more trees to pick up.

G. Weyer indicated that Jennifer already talked about the recommendations earlier in the meeting. He reiterated that one of the recommendations is for a rollup generation feasibility report which was geared toward facilities that don't have generation. That would look at what needs to be done for a quick connect system.

IV. Interview of Consultant for Regional Energy Plan for WPI Student Oversight

J. Hume explained that MRPC received a grant for \$66,000 from the Federal Economic Development Administration to develop a regional energy plan for the region. On this plan, we will work with Worcester Polytechnic Institute students under Professor Michael Radzicki. Due to the amount of work involved in the project, we budgeted \$15,000 for a consultant to provide oversight to the students. In October we advertised the availability of Request for Qualifications in the Goods and Services Bulletin. The deadline was November 3rd and we

received one proposal from Jennifer Andersen from Lancaster, Pennsylvania. MRPC staff and Professor Radzicki ranked her proposal.

J. Siciliano indicated that Jennifer had a master's degree in modeling. Professor Radzicki indicated that Jennifer is an alumni from WPI and is familiar with the type of projects the students will be doing.

J. Hume indicated we would interview Jennifer over the phone and provided the Committee with sample questions.

V.Koivumaki asked if she would be working from Pennsylvania.

M. Radzicki responded yes but she will travel to Massachusetts as necessary. She will participate by the web with students.

The Committee then interviewed Jennifer Andersen.

S. Hamilton opened the cost proposal from Jennifer Andersen. The total cost was \$15,000.

M. Benson asked about Jennifer Anderson's interaction with the Committee and how that would be accomplished.

J. Hume replied she should come to at least two of our Energy Advisory Committee Meetings.

A motion was made to recommend to the MRPC that Jennifer Andersen be hired as the consultant to provide oversight of the WPI students for a cost of \$15,000. The motion was seconded and passed unanimously.

V. 2011 Regional Transportation Plan Status and Discussion – Brad Harris, MRPC Transportation Project Director

B. Harris presented a brief overview of the Regional Transportation Plan Update currently ongoing. He indicated the need for public input and is reaching out to the Energy Advisory Committee as part of the consultations process required for the plan. He encouraged all to visit MRPC's website for further updates and provide any feed back they deem appropriate.

VI. Wrap Up Event! - December 14, 2010

J. Siciliano invited all those to the Wrap Up Event for this project on Tuesday December 14, 2010 at the Four Points in Leominster.

VII. Adjournment

The meeting adjourned at 230 p.m.