

**ELECTRIC ADVISORY COMMITTEE**  
**06/13/2007**

The regular meeting of the Electric Advisory Committee was called to order at 5:22pm by Acting Chairman, John Mellinger, in Room 121 of Catherine Bonifas Civic Center.

**Present:** Ron Beauchamp, Ann Bissell, John Mellinger, Tim Wilson

**Absent:** Larry Arkens, Tony Westerberg, Pat Fulsher

**Also Present:** Gil Cheves, Mike Furmanski, Council Liaison Leo Evans,

**Approval of Minutes:**

Mellinger called for a motion to approve the minutes of the May 09, 2007 meeting. A motion was made by Beauchamp and seconded by Wilson, to approve the minutes of the meeting without the attachment provided by Glendon Brown to Committee Members via e-mail. Discussion showed that Beauchamp was approached by a Council Member who said that the minutes of the meeting would not be accepted by Council had the issue not been resolved as to whether or not an e-mail received after the meeting could be accepted into the minutes. Beauchamp himself had questioned the issue at the 05/09 meeting. Beauchamp asked if Brown could go over his e-mail at this meeting, and then it could be entered into the meeting minutes for this 06/13 meeting.

Motion made by Beauchamp to accept the minutes of the 05/09 meeting as amended to exclude Brown's attachment which was included on the 04/18 meeting minutes. Wilson seconded the motion and it passed unanimously.

**Adjustments to the Agenda:**

Glendon Brown presentation from e-mail as item #5.

**Conflict of Interest Declarations:**

None

**OLD BUSINESS:**

None

**NEW BUSINESS**

## **Election of Officers**

Motion made by Beauchamp to postpone the election of officers to the next meeting when more members may be present. Motion seconded by Bissell and passed unanimously.

## **Electric Report of City Activities/Issues-Furmanski**

Mike reported to members that he would be combining items #2 & #3 together as Pat was unable to make the meeting. As far as the electric department, we are business as usual, with new services and pole replacement going on at this time.

In regards to the plant, Mike reported that the original estimate of damages to the plant from the May 14<sup>th</sup> lightning strike were around \$1.2 million with a 12-16 week repair time. At this time all the bids are in, however they are being compared as they are not all "apples to apples". One company bid stator only, another bid rotor and stator. There was also variations in the windings. A full rewind is also needed, a partial rewind will not work. Bids are still at this point are still being worked out with some of our questions still getting answered so we can boil it all down and have a better time frame of when the repairs will be finished.

Members were told that City Officials met with WPS on Friday, June 1 to discuss the issue of the lightning strike. WPS threw some numbers out at this time for a short term power purchase agreement. Pat had asked for number for 7x16, which is 7 days a week for 16 hours a day. The number provided by WPS was \$93 Mw. \$68 Mw was given as the 7x24 price, however at this 24 hour agreement, we would lose out on our economy purchases at night. Pat further mentioned a possible 5x16, which at this time we are still waiting to hear from them on this. Once the numbers are in, it is covered under the operating agreement and UPPCO people will go ahead and decide, no council motion is needed. Bissell questioned how many bidders we are looking at. Furmanski reported that 5 bids were received. He further stated that the bid that is accepted could depend on the Purchase Power Agreement. Members were advised that the generator is out and on the floor. The rotor also has to be shipped out and rebalanced. When questioned by Beauchamp as to the final determination on the lightning strike cause, Furmanski advised it was due to the communications tower on the plant being hit and has since been removed. Bissell questioned if something may be done to the plant to protect it from further strikes. Mike advised that he was contacted by a woman who sold lightning protection devices, and he referred her to Jerry at the plant. Plans are for something to possibly be put on this plant. Wilson questioned a problem with fire crews being unable to get in to the plant through the main gate. Mike advised he would check to see if their procedures had possibly been changed so someone on the inside could manually let in the crews who were held up at the gate unable to get in when the power to the gate was affected by the lightning strike.

Mike advised members of an incident at plant on Thursday, June 7<sup>th</sup>. During a storm, we had about ½ dozen fuses in the distribution system taken out. In the plant, they could smell smoke and upon checking further, found 3 small transformers that were smoking. They immediately took them off line. They controlled the directional relay in the City #2 line. They were worried about protection on that line, so they opened the breaker. UPPCO is working on the problem, and have ordered new transformers with a lead time of about a week.

CT ran for 9 days in May after the lightning strike. 1 was for a capacity test and 8 times was for MISO. The unit has only run 1 time so far in June.

### **Power Plant Report-Fulsher**

Fulsher unavailable for meeting. No report given

### **Escanaba Power Generating Project Update-Cheves**

Report Supplement: Cheves had e-mailed a supplement report to all members before the meeting. Contents of the report were gone over item by item. Report attached to minutes.

- Closure of Sargent and Lundy Agreement-expect it to be out this week sometime.
- Status of WPPI-anticipating this to take place next week
- Energy Supply Option Pricing-meeting with WPS on 06/14 to set the basis and so they can get an understanding of what we want priced. Subcommittee members advised of meeting. Firm numbers will not be gotten from tomorrow's meeting. Cheves would like one person from EAC involved. Ron Beauchamp will be at the meeting. WPPI has given us 3 dates for next week and they will do this as a conference call. E-mail will be sent out when a date is finalized.
- Larger Scale Facility Development Issues-door is open, we do have a good site
- Third Party Proposals
- Plant Utilization-long term interest in the biomass option.
- Closure of the Energy Supply Option Assessment-our goal is to have our numbers set for the next meeting so we can compare and come up with a recommendation that the City should take.

Cheves wanted to confirm that he had an EAC member for the Public Affairs Informational Forum-Tim Wilson said he is available.

### **E-mail from Glendon Brown to Members-Brown**

Brown commented first before his presentation a comment on biomass. He reported today there is a higher cost of service of electricity with biomass than with eastern coal. The only reason someone would look at biomass now, is if they need a renewable component. It is coming in Michigan, but not yet at this time. What changes there has to be for biomass to compete with coal is 1) carbon tax and 2) cap

and trade system for greenhouse gases. He reported also the biggest cost of biomass is the fuel costs to transport it.

Glendon then went on to report his comments sent out in an e-mail to committee members after the April 18<sup>th</sup> meeting and went over it with members. E-mail is submitted as an attachment to these minutes. The key issue he feels is to get us to be more competitive. The cost to produce is more of a crisis than us being in a crisis of not enough generation for Escanaba.

Bissell debated with Brown on what Fulsher was trying to say in response to the question asked at the 04/18 meeting. She said that we are short on capacity as far as the consumer is concerned, and said that a decision can not be only a cost driven decision. Bissell commented that she would like to have Pat Fulsher's comments in response to Brown's e-mail.

### **Public Comment**

Baker commented on the lightning strike and said he has talked with outside people on the issue. He said he has listened to UPPCO's and the City's side on the matter also. He felt that with us being covered on the UPPCO insurance with a million dollar deductible he felt it would be prudent business practice for the City to hire someone from the outside to give us a true independent review of this issue. He commented that he has never seen anything to prove that there has ever been an inside operational audit review of the plant. Someone to come in and see that the City's assets are being protected. What happened was unfortunate, but it was an UPPCO communications tower, used for their trucks and not in operation anymore, that was hit and caused the damage. Why was it still there after all this time.

### **Board Announcements or Comments:**

Date of next meeting was in question and all advised it would be July 11<sup>th</sup>, back at the City Hall location.

### **Adjournment :**

Meeting adjourned at 6:39pm

### **ATTACHMENT:**

May 8, 2007

To: EAC

Cc: Gil Cheves

Subject: April EAC Meeting Comments and Minutes on Escanaba Generation Capacity

At the April 18<sup>th</sup> EAC meeting during the final Public Comment segment of the meeting, a question was raised about whether the Escanaba generation plant is at its generation capacity limit. Based on the response given to the question, the public was left with a very inaccurate impression of the city's true electric generation capacity situation. One of the key roles of the EAC is to be sure the public is informed on the accurate and true facts.

Let's review the facts on Escanaba's generation capacity situation. First, Escanaba has two electric generation units which can be described as follows:

<b>Escanaba Generation Units</b>	<b>Generation Capacity, MW</b>	<b>Function</b>
<b>Coal Fired Units</b>	<b>25</b>	<ul style="list-style-type: none"> <li>• Base,</li> <li>• Intermediate and</li> <li>• Some Peaking Loads</li> </ul>
<b>CT Peaking Unit</b>	<b>15</b>	<ul style="list-style-type: none"> <li>• Peak loads,</li> <li>• Emergency backup for coal fired units</li> <li>• Allows Non-firm power purchase</li> </ul>
	<b>40 MW TOTAL</b>	

The best way to illustrate the city's electric load is using a Load Duration Curve which plots the city load during a given time period (e.g., 2006 calendar year) from highest load to lowest load in MW in one hour increments. Figure 1 shows the 2006 Load Duration Curve for Escanaba. This graph also includes the PSE 2013 forecast for the Escanaba load duration curve. Reviewing Figure 1, the following conclusions can be made:

1. In 2006, the 25 MW generation capacity of the coal fired units was exceeded less than 5% of the time during peak demand periods.
  - Peak load was 31.5 MW
  - Megawatt Hours (MWH) in excess of 25 MW was 513 hours
  - Peak loads in excess of 25 MW could have been serviced by either the CT peaking unit or purchasing power. The lowest cost option was purchasing power to service these peak loads.
  - The city average load was 18.3 MW, or 73% capacity utilization (18.3/25).
  
2. In the 2013 PSE forecast, the 25 MW generation capacity of the coal fired units is exceed less than 13% of the time during peak demand periods.
  - Peak load is forecasted at 38.2 MW
  - MWHs in excess of 25 MWs is estimated at 4,305 hours.
  - Peak loads in excess of 25 MWs could be serviced by either the CT peaking unit or purchasing power, whichever is the lowest cost option.

- The city's average forecast load is 20.4 MW or 82% average capacity utilization (20.4/25).
3. Figure 1 clearly indicates that Escanaba is not in a power supply crisis but needs to start planning for future supply source additions to have in place by 2013 – 2015. The current Escanaba Electric Power Supply Options project is addressing this future need.
  4. The important message that the EAC needs to inform the public when this type of question is asked is:

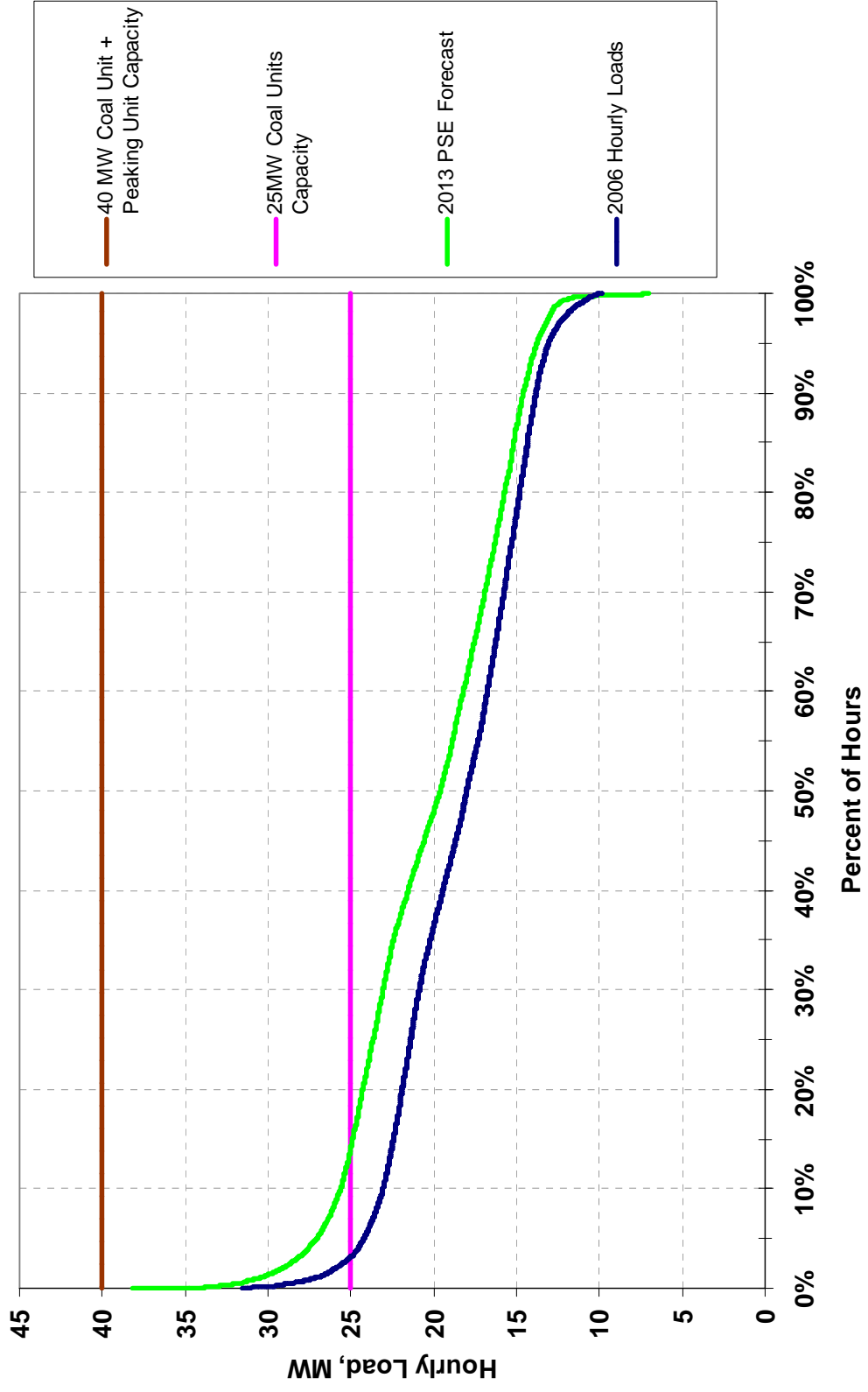
Escanaba has two generation units with a total capacity of 40MW. The high fixed cost coal-fired generation units are not the most cost effective way to service peak loads that occur less than 10% of the time.

- **We have never exceeded or even come close to exceeding our total generation capacity.**
- **We have never had to run the Peaking unit to meet our peak loads due to the availability of lower cost purchased power.**

**The more important issue in the short term is developing a plan to become more competitive in power costs.**

**Glendon**

Escanaba 2006 and 2013 Forecast Load Duration Curves and Generation Capacities



## REPORT SUPPLEMENT

June 6, 2007

To: Jim O'Toole  
From: Gilbert Cheves

The following more specifically defines the current activity in regards to the June 4, 2007, Status Report:

1. **Closure of the Sargent & Lundy Agreement** – S&L has been notified that the submission of the Phase 1 report will be the final submission. The report is being revised to facilitate its issue as a final report, and 12 original copies, plus an electronic copy, will be forwarded to Escanaba. Upon receipt of the report, a joint letter of cessation of services will be sent to S&L.
2. **Status of WPPI** – With the closure of S&L, Escanaba and WPPI must agree to a final disposition of the Cost Sharing Agreement. This should occur within the next two weeks. Since WPPI chose to place the program on hold, Escanaba has more flexibility with its ability to utilize the Feasibility Study. However, any use of the study must be done under a confidentiality agreement with Escanaba in order to protect the investment and to provide for reimbursement of cost if a project is developed. WPPI is scheduling to meet to present their proposal for full service requirements and plant utilization next week. We will review the Cost Sharing Agreement closure issues at the same time.
3. **Energy Supply Option Pricing** – To complete the supply option evaluation, we need the wholesale and plant utilization proposals from WPPI and WPS. Other area energy suppliers have not yet responded. WPPI is scheduling to meet next week. WPS is scheduling for next week or the week after. We are in the process of completing the capital cost estimates to upgrade the power plant to; 1) increase efficiency with added over-fire air; 2) conversion to burn western coal; 3) conversion to burn biomass. When completed, these costs will be evaluated by Mike Dewar, in our model, to determine the near-term energy cost gains. The cost of conversion to biomass will provide development information for near-term and/or long-term options to utilize biomass as fuel.
4. **Larger Scale Facility Development Issues** – Mike Dewar will complete the financial model for Escanaba's participation in a larger scale facility with the information currently available. The purpose of this evaluation is to determine the threshold of the levelized bus bar cost that Escanaba could afford for participation if the option re-developed. Based on the current status of Michigan and Wisconsin power plant development, this information would be available for discussions in respect to long-term energy supply development. Unless this cost can come within 5% of wholesale or full-service requirements energy cost, this would not be considered a near-term option. However, since the siting study of a larger facility is completed, Escanaba should be receptive to discussions if a power producer has interest in developing a larger facility here. Other than making this option known to the general industry, there would be no further effort on our part unless

approached, and then this effort should be treated as any other industrial development proposal.

5. **Third Party Proposals** – Since the press release of WPPI’s withdrawal, several power development companies have approached us. The primary initiative is the development of a biomass energy supply source in the range of up to 65 Mw. These proposals are based on the assumption that Escanaba would commit its load requirements to the project and seek other communities to facilitate an 80% participation, before the developers will commit. Since these are private, independent developers, we are open to their submission of proposals for review, but should not commit study time to these proposals since project development costs appear similar to the S&L study.
6. **Plant Utilization** – Separate from the evaluation of plant modifications to gain efficiency and the use of opportunity fuels, our current facility offers opportunity for sister industrial development. We have been approached by industrial developers to site their facilities near the plant to take advantage of process steam supply and electrical load. While this is not an item under current study, it should be considered in the evaluation so that any plant modifications allow for this development opportunity. With the smaller facility serving primarily Escanaba’s load, we have an opportunity with other development to increase our capacity utilization, which would lower the average cost per generated megawatt and support industrial development.
7. **Closure of the Energy Supply Option Assessment** – We are still on tract to complete our evaluation of the energy supply options this month and to present the findings to the EAC and Council in July.

APPROVED :

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TONY WESTERBERG, CHAIRMAN

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MIKE FURMANSKI, INTERM SUPT.