

**Mansfield Municipal Electric Department
Light Commissioner Minutes
November 20, 2013**

Present: George Dentino; Chairman, Olivier Kozlowski; Vice Chairman, Jess Aptowitz; Clerk, Douglas Annino, Kevin Moran and William Ross; Town Manager; Gary Babin, Director

1. Meeting Called To Order at 8:44 PM

Chairman Dentino called the meeting to order. Chairman Dentino stated that this meeting is being broadcast live by Mansfield Cable Access and taped for future broadcast.

2. Citizen Comments

There were no Citizen Comments

3. Review and Approval of Minutes of Meeting of October 16, 2013

Motion: To approve Light Commissioner Minutes from the meeting of October 16, 2013 (Aptowitz/Annino) **PASSES 5:0**

4. Directors Report

Overview and Discussion Regarding Financial Results for the Month of September 2013 -

Mr. Babin reported that Net Operating Income was \$771,530 year to date, which was slightly behind last year's. He noted that energy sales in September were down significantly by 11.6%, with overall sales being down 4.0% year to date. Mr. Babin explained that municipal sales were up significantly, which is still the case, and that was due to the Plain and West Street wells going online so the electric consumption from those two facilities contributed to most of the increase in energy. HT sales were down 29% year to date and Mr. Babin found that the closure of Smurfit Stone was the primary reason for that. Mr. Babin stated that upon Mr. Aptowitz's request he has prepared a Cash Flow Statement, included in the Board's packet. The statement covers July 1 through September 30 and covered receipts from customers, jobbing activities, sale of retired capital assets and interest as well as MMWEC, NextEra and Constellation purchased power payments, acquisition and construction of capital assets, payments to other suppliers, payroll payments to employees, MA sales tax and police details.

Mr. Aptowitz stated that the Cash Flow Statement did not address depreciation of funds but otherwise he liked it. Mr. Babin noted that the depreciation fund is part of the beginning balance to which Mr. Aptowitz was fine with that.

Discussion of Rebate to Electric Customers in FY14 - Mr. Babin noted that this is a topic that Mr. Aptowitz requested for discussion. Mr. Babin created a Cash Flow Analysis projected out for the remainder of FY14 through FY17 to get a sense of MMED's financial position given that the department has significant capital items planned for that period. Mr. Babin reported that basic assumptions were to maintain a minimum of \$6 million in operating cash, which is sufficient to cover 90 days of operating expenses, and a minimum of \$2 million retained in depreciation funds, which is

sufficient to cover expenditures for a catastrophic event. Another assumption was estimating net income to be 4.5% of gross plant in service. Mr. Babin said the projected operating cash balance at the end of FY14 would be \$9.6 million and increases to almost \$13 million at the end of FY17. That increase is primarily due to net income during that period increasing about \$3.4 million and capital expenditures during that period to be \$10.6 million.

Mr. Ross stated that in his and John Stanbrook's review of the analysis, a rebate for this fiscal year is possible but would be difficult in following years due to the aggressive program of completing underground work to connect the two substations and to place circuits underground coming out of Bird Road to complete utilization of that project. It was Mr. Ross and Mr. Stanbrook's recommendation to implement a \$2 million rebate and he also reminded the Commissioners that when this was previously done it was through the Generation Charge as it spreads the rebate equally among all classes.

Mr. Aptowitz inquired if the rebate could be done over a two month period or was it easier for staff to complete it over one month. Mr. Babin noted it was better over the two month periods as it has a net impact of about a \$0.05 reduction per kilowatthour per month and if completed over one month bills would be minimal. Mr. Aptowitz asked if it was too late for December to which Mr. Babin stated it was but that passing the rebate though in January would not be a problem.

Motion: To rebate \$2 million to the rate payers of MMED, half in January billing and half in February billing (Aptowitz/Kozlowski)

Discussion:

Mr. Aptowitz stated that this should be no problem in that this is a locally owned utility and if there is money available it should be paid back to customers.

Mr. Kozlowski inquired as to the amount of the previous rebate to which Mr. Babin stated it was \$2.2 million split over two months in 2012.

Chairman Dentino asked Mr. Babin what MMED is projected to earn this year in net income with 4.5% to which Mr. Babin reported \$2.25 million.

Motion: To rebate \$2 million to the rate payers of MMED, half in January billing and half in February billing (Aptowitz/Kozlowski) **PASSES 5:0**

Different Options with Regard to Potential Energy Conservation Programs for MMED Customers - Mr. Babin reported that based on feedback from commercial customers at a recent Chamber of Commerce meeting, which Bill Ross attended, he has investigated different types of energy conservation and demand management programs that may exist.

Mr. Babin first reported that MMWEC has a staff that can assist in energy conservation/peak demand shaving where they offer some programs to systems (Westfield, Chicopee) that they can help administer. Mr. Babin noted that primarily you are looking at lighting and mechanical systems where lighting offers the "best bang for the buck" as far as payback, which is typically a few years at the most and for mechanical systems it is a longer term payback. He noted that the Commissioners would have to commit money on an annual basis for this type of program. He explained that the typical steps involved are: (1) A Level One general audit (high level and paid for by the utility) is conducted to identify energy saving opportunities, (2) A Level Two analysis (more detailed) to determine materials and estimated costs as well as provide a detailed analysis of cost savings and securing price quotes,

(3) A Memorandum of Understanding is prepared and executed by the customer stating their intention to move forward while the utility makes the financial commitment to pay the customer and authorizes the project, typically in the form of rebates and (4) The customer performs the project and utility performs a post-installation inspection to assure project is carried out and then payment is made. Mr. Babin noted that while there is some staff ability on the department level to do this work, MMED would really rely on MMWEC as they have the specialists.

Mr. Annino felt these were great ideas and asked how to start the process monetarily. Mr. Babin responded by stating we first need to determine the magnitude of dollars the Board wishes to commit and then develop a more detailed plan in terms of making it available for enough customers to make it worth their while. He suggested having MMWEC come in to inform the Commissioners of what other towns are doing and cited some examples that were included in the Commissioner's packets. Mr. Annino asked if it was ever broken down in terms of just residential customers to which Mr. Babin noted there is a residential conservation services mandate from the State where MMED commits \$80,000 to \$90,000 each year with the biggest item being appliance rebates. He noted it is a popular program and very successful. Mr. Annino would like to see what surrounding communities are offering.

Mr. Kozlowski stated that what the Commission is talking about is essentially committing funds to help a select few of our customers purchase less of our product which didn't make a lot of sense to him. Mr. Annino felt it was the wrong attitude as we are trying to be a greener, more sustainable community and country. Mr. Kozlowski felt that these are ideas (examples in the packet) that are defeating the purpose of the business of MMED. Mr. Annino felt one of the Commission's charges is to educate the community and to provide ideas to become a sustainable community and felt that he was looking at this environmentally and that Mr. Kozlowski was looking at it monetarily.

Mr. Ross wondered if there were a way to mesh the two divergent opinions and can we research energy conservation measures that would impact the peak periods when we are buying the most expensive power and by doing so reduce that higher cost and engage in appropriate energy conservation. Mr. Babin felt that was a valid point and would look into that.

Motion: To direct Mr. Ross and Mr. Babin to explore the alternatives for energy conservation and managing peaks (Annino/Moran) **PASSES 3:2 Kozlowski and Dentino NAY**

LED Lighting Issues for MMED Consideration - Mr. Babin noted that Mr. Annino had requested at a previous meeting a discussion regarding LED lighting. Mr. Babin would like to inform the Commission what has been done, discuss where there are some opportunities or conversely areas to avoid and finally make some general comments.

Mr. Babin reported that MMED did purchase and install LED overhead lighting in the Brookside Estates and was surprised at the mixed reactions he received. Feedback received from customers included questioning if it made sense financially, not liking the distribution of light or the glare of crisp, clean lighting. He noted that the lights are expensive, on the order of 1.5 to 2.5 times the standard installation for a street light (pole mounted). In reviewing subdivisions the lighting cost difference to purchase fixtures was about \$100 more to put in an LED light versus the standard light MMED had been installing. MMED began by putting lights into the subdivision on Ephraim Road to see how they would look and decided to begin specifying the LEDs in subdivisions as it was felt it was a clean light and a better light compared to the ones previously used.

Mr. Babin stated that naturally the big question was whether LEDs could be installed on North Main Street. He reported that what needs to be considered is (1) if it makes sense at a cost of about \$50,000 - \$60,000 to change out all the heads to LED and (2) with the overall design and spacing of the poles being uneven does it make sense to do this right now or wait to do this during a redesign of the street. Mr. Babin had been forwarded information from Mr. Kozlowski regarding a specific LED light, which was \$150, as it was overhead installation and it would be hard to justify installing on about 2,000 poles.

In regards to payback Mr. Babin reported the real savings would be in labor costs for maintenance because a typical street light bulb lasts 20,000 hours or 5 years and an LED light claims a life expectancy of 15 years, thus avoiding two cycles of having to incur the labor cost to replace a street light bulb plus the cost of the bulb. He noted the Town currently pays about \$80,000 annually for street lighting.

Mr. Kozlowski asked who is responsible for swapping out the lights to which Mr. Babin answered that the Town pays MMED for street light maintenance and doing patrols to determine where bulbs are out.

Mr. Moran personally felt the traditional lights were warmer and more directional and asked if there were a redesign if newer fixtures could be investigated.

Mr. Dentino found it was a big advantage cost wise but Mr. Ross was not convinced and felt it needed to be monitored further and once it became more competitive then the Town could investigate further.

Update On Gilbert Street Substation Transformer T4 Emergency Repair Work - Mr. Babin provided the background regarding the circumstances surrounding repair work on the T4 transformer at Gilbert Street Substation. He reminded the Board that it was determined during routine testing that there was concern with respect to the transformer winding power factor. He then referred to a table reflecting the history of the tests completed (Transformer Winding Power Factor History). These tests were performed on this transformer over the years 2003 – 2013. Mr. Babin directed the Board to the readings regarding the measurement of insulation within the high and low voltage windings. He noted that the threshold is 1.00 (the point at which issues need to be addressed) and in looking at the table the trending has been upward over time with the latest reading coming in at 1.4. He also stated that subsequent to those tests, oil samples were taken indicating loss of dielectric strength which indicated loss of the insulating quality of the oil.

MMED then retained Delta Star for the repair work, which was performed during the week of November 11th. From the new series of tests done after the repair work, all indications from the readings show that the transformer testing is in line with test results from 2009, which is what MMED was hoping for. MMED will continue monitoring the transformer over the next six months and retest at that time as it will provide a better indication of the condition of the unit.

Mr. Annino asked if any contaminants were found to which Mr. Babin stated the tests have yet to come back but the thought process was it was organic matter (windings are wrapped in paper) or wood framing due to degradation. Mr. Annino asked if that would continue to which Mr. Babin felt the test results from Doble Labs, which had not yet been received, would show that. Mr. Annino also asked about the condition of the other transformer to which Mr. Babin stated there is no indication of any trouble.

Mr. Kozlowski noted the limited warranty on these pieces and inquired if the Bird Road transformers were adequately covered. Mr. Babin indicated he was not happy with the condition of the Bird Road transformers upon installation and was able to get the one year warranty on those units bumped up to a full five year warranty.

Chairman Dentino noted that the Gilbert Street Substation has four transformers and thought it would be interesting to look at the test results for the other three transformers and compare those to the transformer which needed repair. The Chairman spoke about contaminants in a sealed unit and couldn't fathom that they could be wood and paper given the high temperature of the oil. Chairman Dentino asked if screens were inserted when the oil was removed so that in future cases those contaminants could be captured. Mr. Babin reported that the process used was to circulate the oil through a heating unit and through a pre-filter and second stage filter. Mr. Babin inspected the filters and there was no apparent matter. It was his feeling that the matter was dissolved in the oil but there was visible evidence that the filter was dirty. Chairman Dentino thought the heat of the oil would take care of that which is why he was not in favor of changing all of the oil and in time it could clean itself. Again, Mr. Babin pointed out the test results showed it was exceeding the threshold of 1.0, which indicated there was a problem

5. Comments from Commissioners

There are no comments this evening.

6. Any Items Not Anticipated by the Chairman 48 Hours Prior To This Meeting

None

7. Vote To Enter Into Executive Session, Pursuant To Open Meeting Law, G.L. c. 30A, Section 21, Exception 3, To Discuss Strategy With Respect To Collective Bargaining With AFSCME, AFL-CIO, Council 93, Local 1702 and Also To Approve the Executive Session Minutes from the October 16, 2013 Light Commission Meeting

Motion: To enter into executive session pursuant to Open Meeting Law, G.L. c. 30A, Section 21, Exception 3 (Moran/Aptowitz) Kozlowski (AYE), Moran (AYE), Annino (AYE), Aptowitz (AYE), Chairman Dentino (AYE) **PASSES 5:0 (10:15 PM)**

8. Return to Open Session

Return to Open Session at 10:42 PM

9. Adjourn

Motion: To adjourn the Light Commissioner's Meeting at 10:43 PM (Aptowitz/Moran) **PASSES 5:0**

Signature of Clerk
/Tracey Whalen

Date of Approval