

## Board of Public Utilities

### Regular Meeting Minutes

Monday, July 29, 2013  
4:00 p.m., DPW Conference Room, 1199 8<sup>th</sup> Avenue



City of South Haven

#### 1. Call to Order by Stickland at 4:00 p.m.

#### 2. Roll Call

Present: Burr, Winkel, Stickland

Absent: Henry, Overhiser (ex-officio), Rose (ex-officio), Stein (ex-officio)

Also present: Roger Huff, Public Works Director; Larry Halberstadt, City Engineer; William Conklin, Engineer; Michael P. McGeehan, P.E., President, GRP Engineering, Inc.

#### 3. Approval of Agenda

Motion by Burr, second by Winkel to approve the agenda as presented.

All in favor. Motion carried.

#### 4. Acceptance of Minutes for the Record - June 24, 2013 Regular Meeting Minutes July 11, 2013 Special Meeting Minutes

Motion by Winkel, second by Burr to accept the June 24, 2013 Regular Meeting Minutes.

All in favor. Motion carried.

Motion by Winkel, second by Burr to accept the July 11, 2013 Special Meeting Minutes.

All in favor. Motion carried.

#### 5. Interested Citizens in the Audience Will be Heard on Items Not on the Agenda

A. Plug-In Electric Vehicle Electric Rates from various electric utilities are provided as background information for the Board in anticipation of a citizen attending the meeting regarding this subject.

The board discussed Plug-In Electric Vehicle Rates.

Sabrina Callahan, 04437 Beechwood Lane, South Haven. Owns a Tesla 2013 Electric Car, has had a charge port with a 240 hookup installed. Requested a discounted rate for the electric car charging portion of their bill.

The board discussed nearby locations of charging stations. Stickland noted that the city does not have a rate; has not considered a rate because this issue has not come up previously. The board discussed Holland BPW getting grants to install their charging stations. Halberstadt will approach Meijer's regarding installing a charging station at the new store in South Haven.

Stickland noted that the city has some issues with subsidizing one customer over another since we are a public-owned utility. The board briefly discussed other electric car manufacturers and how electric cars are charged.

Stickland requested that staff and the board do some research and bring this subject to the next meeting.

## REPORTS

### **6. Cost of Energy from Indiana-Michigan Power Company (AEP)**

- A. 2013 Billings – All Charges
- B. 2012 Billings – All Charges
- C. AEP Rate change information

Huff noted he included an email from Conklin that outlined the rate change. Burr said it adds to approximately \$300,000 compared to last year. Stickland noted the demand charges went up more than the commodity cost went down. Stickland recommended that the city look into time related metering.

### **7. Financial Reports**

- A. Water Fund CuFt Comparisons
- B. Water Fund Financial Statement
- C. Sewer Fund Financial Statement
- D. Electric Fund KWH Comparisons
- E. Electric Fund Financial Statement
- F. Memo regarding financial reports

Stickland noted that unaccounted for water is less than 10% while Huff informed the board that the plant is running very efficiently and flushing is roughly accounted for. Burr noted that quite a few water mains have been repaired.

The board discussed the timing of debt service payments; Hochstedler noted that debt service is paid twice yearly.

The board discussed the comparison to last year. Hochstedler pointed out the amount in cash and investments and noted that depreciation is not a cash expense so can be subtracted. Hochstedler noted that if depreciation is added back the utility makes a small profit. The board discussed doing work on the system to get the system into better condition.

Hochstedler pointed out the memo in the board's packet explaining that last month's financials were pulled because it had been noticed that in November that some figures had been doubled up during part of the month for the old system and the new system resulting in about a \$200,000 change.

Stickland requested a copy of the audit when it is complete.

#### **8. Indian Grove Infrastructure Project**

- A. Sewer Study Progress Report
- B. MDEQ Notice of Grant Application Approval
- C. S2 Grant Press Release

Huff noted that there has been additional work being done and that project completion will be spring 2014. The board discussed the Peterson Drain and some issues that were discovered and repaired.

#### **9. Unresolved Issues Report**

Huff noted the updates and pointed out that there were no issues added.

#### **10. Electric Outage Report, 2<sup>nd</sup> Quarter 2013**

Stickland thinks the outage report just confirmed what McGeehan said in his report. Burr asked McGeehan his opinion on whether the city's trees are adequately trimmed. McGeehan said that visually there is more work to be done; there have been many tree-related outages. The board discussed increasing the amount of tree work being done with special attention to the areas where the most tree outages were occurring. Hochstedler noted that \$180,000 worth of tree work was done this year compared to \$70,000 last year.

Quarterly report with a graph was requested by Burr to determine whether we are having more or fewer tree related outages.

#### **OLD BUSINESS**

#### **11. Board will be presented additional, requested information regarding Bulk Water Sales, and requested to pass a motion recommending that Council adopt new Bulk Water Sales by Resolution.**

Halberstadt noted he added Subsection E with availability of hydrant meters. This would be for an emergency situation; Halberstadt does not think any customer will really request this service because it will be very expensive. But if that is something that is an issue, the city can provide that service. Huff noted that there were two extreme weather events, spring freeze and drought, which created a larger-than-usual demand for water.

Halberstadt did not propose any changes to what was recommended last time; equivalent to standard monthly standby fee divided by number of days in the month. Other municipalities were charging a wide variety of fees. Halberstadt recommended staying with what is shown on the chart provided.

Motion by Burr to accept the bulk water sales policy and rates and forward this to the City Council for final approval. Second by Winkel.

All in favor. Motion carried.

## NEW BUSINESS

### **12. Board will be presented the Electric Distribution System Study & Five-Year Plan prepared by GRP Engineering, Inc.**

Michael P. McGeehan, P.E., President, GRP Engineering, Inc. Pointed out several slides and graphs from GRP's study provided in the packet. The goal in this report is to project out five (5) years and ten (10) years as well as see where the City of South Haven's distribution system at this time. Substation transformers and equipment were also looked at and the entire system was reviewed, not to the point of looking at every pole and every line, but checking to see if our model is correct and which areas in the distribution areas are obviously aged.

McGeehan reviewed the slides and spoke to equipment failure and weather related outages. Slide one demonstrates that when one transformer is under peak conditions, the maximum loading on that transformer would be 40% of its maximum rating. If one transformer is out of service that entire load needs to be brought over to another transformer. McGeehan also noted that it is not good practice to load a transformer all the way to 100%; 40% to 80% is preferable.

McGeehan explained that to establish a philosophy of how much substations should be loaded, allow the distribution circuit with a tie switch to be loaded to 60% in the case of a transformer being out of service. Noted that by not going all the way to 100% of capacity, there is always a little reserve capacity. McGeehan noted, "As we modeled the entire system and the load on the entire system, we looked at all conductors to see if any were loaded above the 60% level."

McGeehan presented models indicating no loss of customers on a peak day and contingency one. Under the second contingency modeled there would be two major pieces of equipment down and McGeehan noted, "There would be customers out of service."

McGeehan pointed out the City of South Haven Historical System Load graph from 2001 – 2012. "This chart is done in MVA, not megawatts. MVA includes "imaginary" power; if you do not include this, your system must be built even greater for that var or Imaginary flow.

"We show by the graphs that there is not enough transformer capacity and backup," McGeehan noted. With added load growth of 1.5% and with the addition of Meijer's, the addition of another transformer at Phoenix Road would put the system where it should be. McGeehan noted, "If we take out transformer #1 at Substation #1, we can do so at peak conditions and still maintain the load."

After a question from Burr, McGeehan stated that GRP's recommendation for locating a transformer would be at Phoenix Road. This would allow the system in 2014 to show a spreading of the load due to the addition of the suggestions made.

Visually inspected problem areas showed up on outage reports; the study found some aged areas that need to be brought into a 5-year plan for replacement due to failing hardware, copper conductor, etc. These are recommended projects but not a priority to be done in the first year. The need to insure that we can keep the greatest number of customers on at the same time is the top priority.

Burr said we are looking at ten (10) months to a year to obtain a new transformer. "What can we do now, short-term, to fill up this year (in preparation for installing a new transformer)?" McGeehan responded that distribution projects that are scheduled for 2014 as part of a new transformer project. That would result in having the two circuits ready when the transformer comes in, according to Burr, to which McGeehan agreed.

There was discussion regarding the timing of ordering the transformer including the design, review and bidding processes.

The board discussed whether the city is fed from American Electric Power (AEP) by radial or loop. There was also discussion regarding who would own the transformer, AEP or the city.

Burr asked McGeehan what the steps are for the transformer project, to which McGeehan responded that GRP would put the specs (specifications) together on the transformer and put together a bid package. Burr asked about bidding out the two circuits and McGeehan did not recommend putting the circuits out to bid as a joint project but separately. One circuit is all overhead work while the other is all underground and would likely be bid by different contractors. Hochstedler asked about timing for bidding the two circuits to which McGeehan recommended the overhead this winter and the underground in spring.

The board discussed other interim projects the city can do with McGeehan recommending secondary projects including work on core downtown areas; the open wire secondaries; replacement of mechanical connections and small conductors feeding to large conductors. Per McGeehan, "There are investments that need to be made in the system that aren't really a 'project'."

There was discussion of how this preliminary work could be bid and how contractors could bid a set price on reviewing the system and replacing only the aged or faulty parts. Huff noted there would need to be field engineering by GRP. Stickland noted that the advantage of replacing everything would be you could bid it out that way and when they were done everything would be new. McGeehan noted that alternatively a more engineered design could be used on that portion of the system. Burr asked if work could begin almost immediately on the secondary to which McGeehan responded, "Yes."

Conklin noted that most problems, according to Electric Supervisor Hasty, have been in the connection side. Burr noted the secondary has only been addressed on an as needed basis. Stickland asked how much of the proposed secondary work is parallel with the primary work that needs done to which McGeehan responded that the work is not parallel. Stickland said we could go to that high density area and get competitive bids for that and McGeehan said a better price could be obtained by bidding it out that way.

There was discussion regarding getting bids for immediate work versus winter work as well as locating primaries in front yards versus back yards.

Burr said we need to order the transformer and start on the secondary; build the two circuits. Stickland commented on getting a proposal to do the downtown area and put together specs (specifications) for the substation. Burr reminded of the two new circuits to be bid out. Burr asked if there is any secondary part that our guys can do. There was discussion of how much time our crews have to do "time and material" type of work. Burr said some work for in house crews needs to be defined and the "four-square" downtown area needs to be done.

Conklin noted that transformer ordering involves money paid up front followed by progress payments. The board discussed the various transformer manufacturers.

**13. Board will be requested to approve a recommendation to enter into a contract with Fishbeck, Thompson, Carr and Huber, Inc. for Professional Services for the 2013 Water System Reliability Study.**

Huff noted that Halberstadt and Miller reviewed proposals; recommending Fishbeck, Thompson, Carr & Huber (FTC&H) based on their familiarity with the system and the clarity of their proposal; the modeling has already been done. The board discussed the costs of the proposals.

Motion by Burr to enter into a contract with Fishbeck, Thompson, Carr & Huber (FTC&H) for Professional Services for the 2013 Water System Reliability Study. Second by Winkel.

All in favor. Motion carried.

**14. Next meeting is scheduled for Monday August 26, 2013 at 4:00 pm in the DPW Conference Room, 1199 8<sup>th</sup> Avenue, South Haven, Michigan.**

**15. Director's Comments**

Huff distributed a regional trend handout regarding rising wholesale electric prices.

**16. Board Member Comments**

Winkel: Finds the discussion interesting.

Huff: Responded to questions by Stickland regarding finding an (electrical) superintendent.

**17. Adjourn**

Motion by Winkel, second by Burr to adjourn at 6:12 p.m.

All in favor. Motion carried.

RESPECTFULLY SUBMITTED,

Marsha Ransom  
Recording Secretary