

## Board of Public Utilities

### Regular Meeting Agenda

Monday, January 26, 2015  
4:00 p.m., DPW Conference Room  
1199 8<sup>th</sup> Avenue



City of South Haven

1. Call to Order
2. Roll Call
3. Approval of Agenda
4. Approval of Minutes – December 18, 2014 Special Meeting
5. Interested Citizens in the Audience Will be Heard on Items Not on the Agenda

#### REPORTS

6. Cost of Energy from Indiana-Michigan Power Company (AEP)
  - A. 2014 Billings – All Charges
7. Financial Reports
  - A. Electric Fund – Financial Report for period ending December 31, 2014
  - B. Electric Fund – Review of Percentage Billed
  - C. Electric Fund – Capital Projects
  - D. Water Fund – Financial Report for period ending December 31, 2014
  - E. Water Fund – Review of Percentage Billed
  - F. Sewer Fund – Financial Report for period ending December 31, 2014
8. Unresolved Issues Report
9. Quarterly Outage Report
10. SAW Grant Project Progress Report

#### NEW BUSINESS

11. Board will be presented information concerning a billing correction for the Meijer store.

**12. Board will be asked to review alternatives for repainting of the water tower located in the I-196 Industrial Park.**

**13. Public Works Director Comments**

A. The February 23, 2015 meeting will be cancelled due to lack of quorum. The next meeting is scheduled for March 30, 2015.

**14. Board Member Comments**

**15. Adjourn**

RESPECTFULLY SUBMITTED,

Roger Huff, PE  
Public Works Director

## Board of Public Utilities

### Special Meeting Agenda

Thursday, December 18, 2014  
9:00 a.m., DPW Conference Room, 1199 8<sup>th</sup> Avenue



#### 1. Call to Order by Stickland at 9:00 a. m.

#### 2. Roll Call

Present: Burr, Henry, Roberts, Stein, Winkel, Stickland  
Absent: Overhiser, Rose

Also present: Larry Halberstadt, City Engineer; Wendy Hochstedler, Finance Director

In response to a question by Stickland regarding this being a special meeting, Huff stated that the required notice was given.

#### 3. Approval of Agenda

Motion by Henry, second by Burr to approve the December 18, 2014 Special Meeting Agenda as written.

All in favor. Motion carried.

#### 4. Acceptance of Minutes for the Record – November 24, 2014

Motion by Burr, second by Roberts to accept the November 24, 2014 Regular Meeting Minutes for the record.

All in favor. Motion carried.

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

#### NEW BUSINESS

#### 6. Board will be requested to approve a recommendation to City Council to approve the Amended and Restated Cost-Based Formula Rate Agreement for Full Requirements Electric Service with Indiana Michigan Power Company.

Huff noted this item is the reason for calling this meeting.

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After questions, Halberstadt said we had hoped to just renew this. However, we were informed that we had to use an electronic system. Burr stated that the amount of notification time required to break the contract was decreased from seven (7) years to four (4) years and that is the only change.

Discussion ensued regarding I&M having to purchase power ahead of time and what liabilities there are because we canceled the contract. Stickland asked if the new contract is filed with the Federal Energy Regulatory Commission (FERC).

Stickland said we could protest, in the old contract, we could object to certain things. Halberstadt said Lisa Gast assured him that we would still be able to file appropriate action with FERC. They still included that in the new contract.

Halberstadt noted quarterly reports (EQRs) will be filed with FERC.

Stickland asked if we are closing all doors we have to protect us? Halberstadt said he can share an email with Stickland which he received from Lisa Gast of Duncan, Weinberg, Genzer & Pembroke, P.C.

Burr asked where the change from seven (7) to four (4) years came from. Halberstadt said it was our counsel's idea. Indiana Michigan Power Company (I&M) was dissolving the power pool and replacing it with a power coordination agreement. The concern, according to Halberstadt, was off-system sales we shared could be reduced having a negative impact on our rates. It was a negotiation that occurred in an attempt to protect us.

Halberstadt and Stickland pointed out the letter from our attorneys in the packet.

Henry recommended that the board go with the recommendation of our attorney and counsel.

Halberstadt was concerned that we were giving up a right to protest with FERC, but Lisa Gast assured him that was not the case, to which Stickland added that we want to be able to still go in there and protest their numbers, which are still being reviewed.

Roberts asked about the agreement, noting that at the end of this letter there is a reassurance that if any problem occurs they can fall back on the previous contract. Noted that the rules changed in 2010 and wondered what the drive is to have this done this year?

Halberstadt noted that the first opportunity to provide the four year notice is May 21, 2015. "The city wants that opportunity; that's why we want to get this agreement in place. Are we going to do this? Probably not. But we want that ability to be in there. It would be a complex process due to there being ten (10) or more boards that would have to decide the same thing."

Roberts asked if there is going to be back-and-forth with e-tariff. Stickland noted that there is indication that this is not a simple process, remarking, "If we were to have a reason to protest numbers it would cost us a lot of money and take a while because it's FERC, it's Washington, but it's our own protection."

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Winkel pointed out that Dowagiac agreed to this and they are being used as the model. I & M is going to get away without using e-tariff. Stickland said they are changing us to a different model. Halberstadt said a Supreme Court judgment makes this allowable.

Motion by Roberts, second by Burr to recommend a motion recommending that Council approve the Amended and Restated Cost-Based Formula Rate Agreement for Full Requirements Electric Service with Indiana Michigan Power Company. Council's approval will take the form of a resolution authorizing the Mayor to execute the Amended Agreement on behalf of the City.

All in favor. Motion carried.

**7. Board will be requested to approve a recommendation to City Council to award the following contracts for Core City Secondary Upgrade – Phase II:**

**A. Extend the contract with Kent Power, Inc. of Kent City, Michigan for Core City Secondary Upgrades – Phase II. Labor and materials to be provided are defined in the contract documents prepared by GRP Engineering.**

**B. Award the contract for professional services for community outreach and communication to Abonmarche in the amount of \$33,500.**

**C. Award the contract for preconstruction videotaping services for the Core City Secondary Project to Structures, Inc. in the not-to-exceed amount of \$18,923.**

Huff introduced Item 7 as something that just came up so we added it to this agenda, explaining that when Phase 1 was approved we intended to look at the possibility of extending Kent's contract for Phase 2. GRP put together plans for Phase 2, provided them to Kent Power, and Kent Power has agreed to maintain their unit prices that they bid for Phase 1 with one exception. GRP discussed with Kent Power about their unit price for setting the secondary poles. Phase 1 charged \$3,000 per pole, which is their crew cost per day, while in actuality, Kent crews were resetting three (3) poles per day. Kent agreed to do pole setting under time and material.

Huff noted the reasons we recommend going with extending contract. Phase 1 has gone well; their crews have worked professionally and we have gotten many compliments from residents and staff; they know our system; they know the work and no time will be needed to "get up to speed". Huff noted that the same bidding environment exists now as at the time of bidding Phase 1: there is a lot of work; contractors are busy and a lot of work is being bid. Contractors are not bidding on everything and bidding is high so the feeling is that bidding would not get us a better price.

This item also includes a proposal for entering into another contract with Abonmarche for community outreach and coordination for the amount of \$33,500.

Discussion ensued regarding the Phase 2 area including both sides of Center to Lake Michigan and South Haven Street to Aylworth. Stickland pointed out that Phase 2 encompasses an area south of Phase 1 beginning at South Haven Street. Burr said the

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same crews would move from Phase 1 to Phase 2 once materials are purchased and City Council approves Phase 2 the first Monday in January.

Huff noted that a public meeting will be held on Jan 17, 2015, and then Abonmarche would do the same things they did in Phase 1 including using door hangers. Notification letters would be sent out today if the proposal is approved.

Regarding questions on the cost of the total project, Hochstedler distributed a handout with the updated figures. Total project cost will be \$861,000 with \$4,745,527 in capital outlay. Burr noted that included in the capital outlay figure is \$1.1M for a building that will not be happening this fiscal year. Halberstadt noted staff is working with architects and Huff said staff will get the project bid, but the money will not be spent by July 2015.

Henry believes Kent Power knows their trade and craft; they look like they did a great job. Burr stated the condition of the wire was really bad, worse than originally thought; may have been installed around 1948; there was some line loss involved. Burr noted that because of that it is critical to continue and complete Phase 2. Burr explained that maybe Phase 3 & 4 wires are not that same age so Huff noted that we probably want to do some primary work before we tackle those phases.

After questions from Roberts, Burr noted our engineers identified the poles to be replaced.

Roberts asked if there were any surprises during the Phase 1 work to which Burr responded the condition of the wires and Stickland noted the condition of the poles, with both agreeing that the wires and poles were likely over sixty (60) years old.

Stickland thinks extending the contract to do the Phase 2 work is a good deal; and the city needs to do it. Henry said his question would be whether we are satisfied with Kent Power's quality and level of work and he thinks the answer is yes.

Discussion ensued regarding disposal of poles and transformers. It was determined that the city is paying Kent Power to take care of the disposal of those items.

Motion by Henry, second by Burr to approve a recommendation to City Council to award the following contracts for Core City Secondary Upgrade – Phase 2:

- A. Extend the contract with Kent Power, Inc. of Kent City, Michigan for Core City Secondary Upgrades – Phase II. Labor and materials to be provided are defined in the contract documents prepared by GRP Engineering.
- B. Award the contract for professional services for community outreach and communication to Abonmarche in the amount of \$33,500.
- C. Award the contract for preconstruction videotaping services for the Core City Secondary Project to Structures, Inc. in the not-to-exceed amount of \$18,923.

All in favor. Motion carried.

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**8. Next meeting is scheduled for Monday, January 26, 2015 at 4:00 pm in the DPW Conference Room, 1199 8<sup>th</sup> Avenue, South Haven, Michigan.**

Huff noted that there will be no regularly scheduled meeting in February due to board absences, unless there is a need to call one on a different date.

**9. Director's Comments**

Huff appreciates everyone showing up with short notice. Have a great, happy holiday!

**10. Board Member Comments**

Roberts said someone is surveying storm sewer in front of his house. Huff explained that work is part of the SAW grant, the first step of the Asset Management Plan. They are picking up every structure on GPS and that gets tied in to our GIS system; the contractor will do a condition assessment which will be a tool for us to see where the bad sections of pipe are.

Stickland asked if he wanted to see the location of the sewer on his street where would he go. Huff said we would send you to Ryan Bosscher, GIS Tech, and if needed, he could print the as-built drawings. Huff also commented favorably on the quality of the work the GIS Tech has produced during his years with the city.

Roberts asked if the SAW grant project results in any core change. Huff responded, "Not right now, this grant includes storm and sanitary, but they are also picking up any water and electric they find."

Stickland wished all a Merry Christmas.

**11. Adjourn**

Motion by Henry, second by Winkel to adjourn at 9:54 a. m.

All in favor. Motion carried.

RESPECTFULLY SUBMITTED,  
Marsha Ransom  
Recording Secretary

CITY OF SOUTH HAVEN																					
Cost of Electric Energy from Indiana-Michigan Power Company (AEP)																					
2014																					
Date	ACTUAL				BILLING			COST					PJM Open Access Transmission Tariff					Total Cost	cts/ KWH		
	KW Demand	KVAR Demand	KVA	Power Factor	KW Demand	KVAR Demand	KWHRS	\$ KW Demand	\$ KWH	\$ Fuel Charge	\$ Fuel Adjust	Actual Fuel True-up	Sch 1A \$ KWHR	\$ Network	RTO Start-up \$	Other	Credits			Total PJM	
Main	11,432	1,646	11,550	0.9898	11,432	1,646	7,085,827	\$185,609.79	\$75,459.10												
Welder	333	269	428	0.7774	333	269	153,577	\$5,398.47	\$1,635.48												
Phoenix	8,053	1,020	8,117	0.9921	8,053	1,020	4,768,206	\$130,748.35	\$50,778.06												
Welder	0	0	0		0	0	0	\$0.00	\$0.00												
<b>Dec-14</b>	<b>19,818</b>	<b>2,935</b>	<b>20,034</b>	<b>0.9892</b>	<b>19,817</b>	<b>2,935</b>	<b>12,007,610</b>	<b>\$321,756.61</b>	<b>\$127,872.64</b>	<b>\$213,609.38</b>	<b>\$7,797.74</b>	<b>\$60,535.03</b>	<b>\$1,573.24</b>	<b>\$108,790.08</b>	<b>\$299.21</b>	<b>\$15,805.37</b>	<b>(\$1,585.52)</b>	<b>\$124,882.38</b>	<b>\$856,453.78</b>	<b>7.133</b>	
Main	12,007	1,673	12,123	0.9904	12,003	1,673	6,729,178	\$194,883.96	\$71,661.03												
Welder	352	355	500	0.7036	352	355	123,903	\$5,706.95	\$1,319.48												
Phoenix	7,901	939	7,957	0.9930	7,899	939	4,543,741	\$128,253.03	\$48,387.66												
Welder	6	7	9	0.6658	6	7	4,150	\$94.17	\$44.19												
<b>Nov-14</b>	<b>20,266</b>	<b>2,973</b>	<b>20,483</b>	<b>0.9894</b>	<b>20,260</b>	<b>2,973</b>	<b>11,400,971</b>	<b>\$328,938.11</b>	<b>\$121,412.36</b>	<b>\$202,817.57</b>	<b>(\$65,271.70)</b>	<b>(\$1,364.06)</b>	<b>\$1,493.76</b>	<b>\$105,280.72</b>	<b>\$289.56</b>	<b>\$16,026.12</b>	<b>(\$1,439.90)</b>	<b>\$121,650.26</b>	<b>\$708,182.54</b>	<b>6.212</b>	
Main	18,379	4,189	18,850	0.9750	18,369	4,189	9,061,510	\$298,233.08	\$96,498.74												
Welder	309	284	420	0.7354	309	284	142,496	\$5,010.43	\$1,517.48												
Phoenix	10	24	25	0.3782	5	24	2,118,777	\$74.69	\$22,563.49												
Welder	6	7	9	0.6658	6	7	4,282	\$94.17	\$45.60												
<b>Oct-14</b>	<b>18,703</b>	<b>4,503</b>	<b>19,238</b>	<b>0.9722</b>	<b>18,688</b>	<b>4,503</b>	<b>11,327,065</b>	<b>\$303,412.36</b>	<b>\$120,625.31</b>	<b>\$201,502.82</b>	<b>(\$33,179.24)</b>	<b>\$16,236.53</b>	<b>\$1,484.08</b>	<b>\$108,790.08</b>	<b>\$299.21</b>	<b>\$17,152.73</b>	<b>(\$1,357.26)</b>	<b>\$126,368.84</b>	<b>\$734,966.62</b>	<b>6.489</b>	
Main	16,115	5,015	16,877	0.9548	16,112	5,015	8,006,033	\$261,594.43	\$85,258.65												
Welder	265	254	367	0.7230	265	254	131,837	\$4,307.41	\$1,403.97												
Phoenix	11,860	4,871	12,821	0.9250	11,857	4,871	3,682,892	\$192,514.47	\$39,220.22												
Welder	6	7	9	0.6658	6	7	4,144	\$94.17	\$44.13												
<b>Sep-14</b>	<b>28,246</b>	<b>10,146</b>	<b>30,013</b>	<b>0.9411</b>	<b>28,240</b>	<b>10,146</b>	<b>11,824,906</b>	<b>\$458,510.48</b>	<b>\$125,926.97</b>	<b>\$210,359.17</b>	<b>(\$46,334.71)</b>	<b>\$11,060.21</b>	<b>\$1,549.30</b>	<b>\$105,280.72</b>	<b>\$289.56</b>	<b>\$17,328.13</b>	<b>(\$1,342.88)</b>	<b>\$123,104.83</b>	<b>\$882,626.95</b>	<b>7.464</b>	
Main	17,344	5,375	18,158	0.9552	17,344	5,375	8,324,249	\$281,597.27	\$88,647.42												
Welder	358	342	495	0.7237	358	342	116,920	\$5,814.11	\$1,245.12												
Phoenix	12,794	5,443	13,903	0.9202	12,794	5,443	6,038,441	\$207,716.97	\$64,305.17												
Welder	8	17	19	0.4368	8	17	6,431	\$136.38	\$68.49												
<b>Aug-14</b>	<b>30,504</b>	<b>11,177</b>	<b>32,487</b>	<b>0.9390</b>	<b>30,504</b>	<b>11,177</b>	<b>14,486,040</b>	<b>\$495,264.73</b>	<b>\$154,266.19</b>	<b>\$257,699.41</b>	<b>(\$38,669.04)</b>	<b>\$30,716.83</b>	<b>\$1,897.97</b>	<b>\$108,790.05</b>	<b>\$299.21</b>	<b>\$16,772.20</b>	<b>(\$1,567.24)</b>	<b>\$126,192.19</b>	<b>\$1,025,470.31</b>	<b>7.079</b>	
Main	16,930	5,025	17,660	0.9587	16,930	5,025	7,907,886	\$274,875.40	\$84,213.45												
Welder	251	125	280	0.8945	251	125	130,862	\$4,070.37	\$1,393.59												
Phoenix	12,527	4,460	13,298	0.9421	12,527	4,460	5,672,349	\$203,391.54	\$60,406.54												
Welder	8	18	20	0.4307	8	18	6,555	\$136.38	\$69.80												
<b>Jul-14</b>	<b>29,716</b>	<b>9,628</b>	<b>31,237</b>	<b>0.9513</b>	<b>29,716</b>	<b>9,628</b>	<b>13,717,651</b>	<b>\$482,473.68</b>	<b>\$146,083.38</b>	<b>\$244,030.16</b>	<b>(\$44,811.45)</b>	<b>\$27,682.40</b>	<b>\$1,797.29</b>	<b>\$108,790.05</b>	<b>\$299.21</b>	<b>\$16,658.83</b>	<b>(\$1,607.15)</b>	<b>\$125,938.23</b>	<b>\$981,396.40</b>	<b>7.154</b>	
Main	16,223	4,553	16,850	0.9628	16,223	4,553	7,323,514	\$263,396.55	\$77,990.30												
Welder	10	22	24	0.4238	10	22	131,334	\$165.61	\$1,398.61												
Phoenix	12,192	4,498	12,996	0.9382	12,192	4,498	5,285,671	\$197,955.73	\$56,288.70												
Welder	8	19	20	0.4134	8	19	6,421	\$136.38	\$68.38												
<b>Jun-14</b>	<b>28,434</b>	<b>9,092</b>	<b>29,852</b>	<b>0.9525</b>	<b>28,434</b>	<b>9,092</b>	<b>12,746,939</b>	<b>\$461,654.26</b>	<b>\$135,745.98</b>	<b>\$226,761.68</b>	<b>(\$44,703.52)</b>	<b>\$23,664.10</b>	<b>\$1,092.76</b>	<b>\$89,707.48</b>	<b>\$289.56</b>	<b>\$13,460.59</b>	<b>(\$1,301.93)</b>	<b>\$103,248.46</b>	<b>\$906,370.96</b>	<b>7.110</b>	
Main	12,148	2,693	12,443	0.9763	12,148	2,693	6,470,207	\$199,737.00	\$62,245.98												
Welder	242	210	321	0.7548	242	210	137,320	\$3,980.61	\$1,321.07												
Phoenix	9,104	2,965	9,575	0.9508	9,104	2,965	4,589,361	\$149,685.91	\$44,151.48												
Welder	9	25	27	0.3318	9	25	6,845	\$146.33	\$65.85												
<b>May-14</b>	<b>21,503</b>	<b>5,894</b>	<b>22,296</b>	<b>0.9644</b>	<b>21,503</b>	<b>5,894</b>	<b>11,203,733</b>	<b>\$353,549.86</b>	<b>\$107,784.39</b>	<b>\$168,627.37</b>	<b>(\$13,600.21)</b>	<b>\$16,585.82</b>	<b>\$960.46</b>	<b>\$92,697.73</b>	<b>\$299.21</b>	<b>\$11,967.29</b>	<b>(\$1,309.38)</b>	<b>\$104,615.31</b>	<b>\$737,562.54</b>	<b>6.583</b>	
Main	11,035	2,280	11,268	0.9793	11,035	2,280	6,200,288	\$181,437.72	\$59,649.25												
Welder	275	340	437	0.6288	275	340	140,285	\$4,518.26	\$1,349.59												
Phoenix	7,223	155	7,225	0.9998	7,223	155	4,026,846	\$118,767.39	\$38,739.87												
Welder	9	23	25	0.3693	9	23	6,598	\$149.62	\$63.48												
<b>Apr-14</b>	<b>18,542</b>	<b>2,798</b>	<b>18,752</b>	<b>0.9888</b>	<b>18,542</b>	<b>2,798</b>	<b>10,374,017</b>	<b>\$304,872.99</b>	<b>\$99,802.19</b>	<b>\$156,139.32</b>	<b>(\$11,636.53)</b>	<b>(\$12,558.64)</b>	<b>\$889.33</b>	<b>\$89,707.48</b>	<b>\$289.56</b>	<b>\$11,967.29</b>	<b>(\$1,364.68)</b>	<b>\$101,488.98</b>	<b>\$638,108.31</b>	<b>6.151</b>	
Main	11,756	1,283	11,826	0.9941	11,756	1,283	6,923,540	\$193,291.82	\$66,607.22												
Welder	242	304	388	0.6216	242	304	140,739	\$3,970.74	\$1,353.96												
Phoenix	7,975	1,170	8,060	0.9894	7,975	1,170	4,701,765	\$131,124.62	\$45,232.86												
Welder	9	26	27	0.3239	9	26	6,989	\$146.33	\$67.24												
<b>Mar-14</b>	<b>19,981</b>	<b>2,784</b>	<b>20,174</b>	<b>0.9904</b>	<b>19,981</b>	<b>2,784</b>	<b>11,773,033</b>	<b>\$328,533.52</b>	<b>\$113,261.29</b>	<b>\$177,195.92</b>	<b>(\$10,877.11)</b>	<b>(\$44,950.65)</b>	<b>\$1,009.27</b>	<b>\$92,697.73</b>	<b>\$299.21</b>	<b>\$11,967.29</b>	<b>(\$1,935.73)</b>	<b>\$104,037.77</b>	<b>\$667,200.74</b>	<b>5.667</b>	
Main	11,651	1,530	11,751	0.9915	11,651	1,530	6,719,607	\$191,565.41	\$64,645.31												
Welder	371	312	485	0.7652	371	312	141,182	\$6,098.34	\$1,358.23												
Phoenix	8,190	1,078	8,261	0.9915	8,190	1,078	4,543,059	\$134,666.23	\$43,706.04												
Welder	9	22	24	0.3867	9	22	6,223	\$149.62	\$59.87												
<b>Feb-14</b>	<b>20,221</b>	<b>2,941</b>	<b>20,434</b>	<b>0.9896</b>	<b>20,221</b>	<b>2,941</b>	<b>11,410,071</b>	<b>\$332,479.60</b>	<b>\$109,769.45</b>	<b>\$171,732.98</b>	<b>\$19,759.96</b>	<b>(\$46,438.54)</b>	<b>\$978.15</b>	<b>\$83,726.98</b>	<b>\$270.26</b>	<b>\$11,967.30</b>	<b>(\$1,743.34)</b>	<b>\$95,199.35</b>	<b>\$682,502.80</b>	<b>5.982</b>	
Main	12,263	1,559	12,362	0.9920	12,263	1,559	7,522,565	\$201,628.25	\$72,370.09												
Welder	333	300	448	0.7431	333	300	81,682	\$5,480.12	\$785.81												
Phoenix	8,052	1,097	8,126	0.9909	8,052	1,097	4,995,844	\$132,384.41	\$48,062.02												
Welder	25	40	47	0.5283	25	40	8,502	\$406.12	\$81.79												
<b>Jan-14</b>	<b>20,672</b>	<b>2,995</b>	<b>20,968</b>	<b>0.9897</b>	<b>20,673</b>	<b>2,995</b>	<b>12,608,593</b>	<b>\$339,898.89</b>	<b>\$121,299.71</b>	<b>\$189,771.93</b>	<b>\$53,801.47</b>	<b>\$69,341.54</b>	<b>\$1,080.90</b>	<b>\$92,697.73</b>	<b>\$299.11</b>	<b>\$11,973.87</b>	<b>(\$1,941.22)</b>	<b>\$104,110.39</b>	<b>\$877,724.03</b>	<b>6.961</b>	

City of South Haven  
Electric Fund - Fund 582  
For the period ended December 31, 2014

Col 6 & 11

Revenues:	Month Actual	Monthly Budget	Prior year MTD	MTD Variance to Budget	MTD Variance to Prior Year	YTD Actual	YTD Budget	Prior YTD Actual	Variance to Budget	Variance to Prior Year	2014-15 Adopted Budget	% of Annual Budget
Electric Sales	\$ 1,050,547	\$ 1,146,367	\$ 1,126,476	\$ (95,820)	\$ (75,929)	\$ 6,825,829	\$ 6,878,202	\$ 7,388,433	\$ (52,373)	\$ (562,605)	\$ 13,756,404	50%
Charges for Service	\$ 4,521	\$ 12,500	\$ 22,729	\$ (7,979)	\$ (18,207)	\$ 50,456	\$ 75,000	\$ 133,497	\$ (24,544)	\$ (83,041)	\$ 150,000	34%
Interest Income	\$ 13,174	\$ 2,500	\$ 9,070	\$ 10,674	\$ 4,104	\$ 37,798	\$ 15,000	\$ 30,005	\$ 22,798	\$ 7,793	\$ 30,000	126%
Other Revenue	\$ -	\$ 2,500	\$ 2,626	\$ (2,500)	\$ (2,626)	\$ 14,873	\$ 15,000	\$ 45,692	\$ (127)	\$ (30,818)	\$ 30,000	50%
Transfers In	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
<b>Total Revenues</b>	<b>\$ 1,068,243</b>	<b>\$ 1,163,867</b>	<b>\$ 1,160,901</b>	<b>\$ (95,624)</b>	<b>\$ (92,658)</b>	<b>\$ 6,928,955</b>	<b>\$ 6,983,202</b>	<b>\$ 7,597,626</b>	<b>\$ (54,247)</b>	<b>\$ (668,671)</b>	<b>\$ 13,966,404</b>	

1 2 3 4 5 6 7 8 9 10 11

Expenses	Month Actual	Monthly Budget	Prior year MTD	MTD Variance to Budget	MTD Variance to Prior Year	YTD Actual	YTD Budget	Prior YTD Actual	Variance to Budget	Variance to Prior Year	2014-15 Adopted Budget	% of Annual Budget
Purchased Power	\$ 856,454	\$ 800,000	\$ 874,146	\$ 56,454	\$ (17,692)	\$ 5,189,057	\$ 4,800,000	\$ 5,052,984	\$ 389,057	\$ 136,073	\$ 9,600,000	54%
Other Operating Expenses	\$ 231,291	\$ 141,833	\$ 159,365	\$ 89,459	\$ 71,926	\$ 921,626	\$ 850,995	\$ 875,089	\$ 70,631	\$ 46,537	\$ 1,701,990	54%
Property Tax Equivalents	\$ 58,235	\$ 58,235	\$ 57,236	\$ -	\$ 999	\$ 349,410	\$ 349,410	\$ 343,415	\$ -	\$ 5,995	\$ 698,820	50%
Energy Optimization Costs	\$ 23,141	\$ 21,800	\$ 22,037	\$ 1,341	\$ 1,104	\$ 138,273	\$ 130,801	\$ 131,861	\$ 7,472	\$ 6,413	\$ 261,602	53%
Capital Outlay	\$ 310,031	\$ 399,086	\$ 8,980	\$ (89,055)	\$ 301,051	\$ 1,918,451	\$ 2,394,514	\$ 25,080	\$ (476,063)	\$ 1,893,371	\$ 4,789,027	40%
Transfer Out	\$ 14,025	\$ 14,025	\$ 14,754	\$ (0)	\$ (729)	\$ 84,150	\$ 84,151	\$ 88,524	\$ (0)	\$ (4,374)	\$ 168,301	50%
Depreciation	\$ 55,873	\$ 55,873	\$ 39,510	\$ -	\$ 16,363	\$ 335,239	\$ 335,239	\$ 237,062	\$ -	\$ 98,177	\$ 670,478	50%
Administrative Expenses	\$ 54,298	\$ 62,761	\$ 67,099	\$ (8,462)	\$ (12,801)	\$ 393,488	\$ 376,563	\$ 367,265	\$ 16,925	\$ 26,223	\$ 753,126	52%
<b>Total Expenses</b>	<b>\$ 1,603,348</b>	<b>\$ 1,553,612</b>	<b>\$ 1,243,127</b>	<b>\$ 49,736</b>	<b>\$ 360,221</b>	<b>\$ 9,329,695</b>	<b>\$ 9,321,672</b>	<b>\$ 7,121,281</b>	<b>\$ 8,023</b>	<b>\$ 2,208,414</b>	<b>\$ 18,643,344</b>	

Net Fund Change \$ (535,105) \$ (389,745) \$ (82,226) \$ (145,360) \$ (452,879) \$ (2,400,739) \$ (2,338,470) \$ 476,346 \$ (62,269) \$ (2,877,085) \$ (4,676,940)

**AS OF JUNE 30, 2014**

Retained Earnings	\$ 17,951,744
Less Net Capital Assets	\$ (11,195,364)
<b>Net Undesignated Reserves</b>	<b>\$ 6,756,380</b>

The Difference here is the addition of new capital assets less new depreciation for FY 15

**PROJECTED AS OF JUNE 30, 2015**

Retained Earnings - Beginning of yr	\$ 17,951,744
Projected Net Income (see below) FY 15	\$ 112,087
Less Net Capital Assets	\$ (15,248,888)
<b>Net Undesignated Reserves</b>	<b>\$ 2,814,943</b>

The 2015 Budget figures include the projects approved by the BPU to date and a revised depreciation figure  
The capital outlay also includes the storage building, DPW building improvements and WI FI project costs

Year end audit adjustments - not expenses on Income statement



FY 2015 Revenues	\$ 13,966,404
FY 2015 Expenses	\$ (18,643,344)
Net Fund Change	\$ (4,676,940)
Add back Investment in Capital Assets	\$ 4,789,027
Projected Net Income	\$ 112,087

CITY OF SOUTH HAVEN  
ELECTRIC FUND  
KWH COMPARISONS  
ROLLING TWELVE MONTHS

		KWH PURCHASED	KWH BILLED	KWH STREET LTS	STREET LTS 12 MO AVE.	TOTAL KWH BILLED AND STREET LTS	PERCENTAGE BILLED AND STREET LTS TO PURCHASED (ROLLING 12 MOS)	PERCENTAGE BILLED AND STREET LTS TO PURCHASED CURRENT MONTH	NOTE: ADD'L MEIJER KWH UNBILLED ADDED TO MONTHLY TOTALS	
<b>FISCAL 2013</b>										
July	2012	17,466,170	14,702,549	38,276	52,303	14,740,825	93.26%	84.40%		31
August	2012	14,358,453	15,845,089	43,385	52,376	15,888,474	93.50%	110.66%		31
September	2012	11,481,145	12,211,557	48,595	52,463	12,260,152	94.22%	106.79%		30
October	2012	10,545,910	9,741,443	54,699	52,284	9,796,142	94.11%	92.89%		31
November	2012	10,466,158	10,312,656	61,617	52,287	10,374,273	94.68%	99.12%		30
December	2012	11,131,795	9,798,623	69,065	52,368	9,867,688	94.46%	88.64%		31
January	2013	11,560,064	10,621,867	68,768	52,615	10,690,635	94.14%	92.48%		31
February	2013	10,550,434	10,544,686	59,658	52,705	10,604,344	94.21%	100.51%		29
March	2013	11,110,656	10,170,132	53,004	52,242	10,223,136	93.95%	92.01%		31
April	2013	10,233,332	9,906,424	48,201	52,313	9,954,625	94.19%	97.28%		30
May	2013	11,168,009	10,537,176	44,120	52,288	10,581,296	94.78%	94.75%		31
June	2013	11,593,465	10,064,318	37,708	52,258	10,102,026	95.35%	87.14%		30
		<u>141,665,592</u>	<u>134,456,520</u>	<u>627,096</u>		<u>135,083,616</u>				
<b>FISCAL 2014</b>										
July	2013	14,702,976	12,364,189	37,740	52,213	12,401,929	94.64%	84.35%		31
August	2013	13,559,712	13,582,248	42,342	52,126	13,624,590	94.42%	100.48%		31
September	2013	11,670,399	12,462,283	48,796	52,143	12,511,079	95.03%	107.20%		30
October	2013	10,945,398	10,453,792	54,475	52,125	10,508,267	94.91%	96.01%		31
November	2013	10,657,150	9,502,492	58,511	51,866	9,561,003	94.96%	89.71%		30
December	2013	11,962,287	10,244,088	71,063	52,032	10,315,151	94.68%	86.23%		31
January	2014	12,608,593	10,959,716	65,878	51,791	11,025,594	94.12%	87.45%	+93960	31
February	2014	11,410,071	12,066,200	59,636	51,790	12,125,836	94.72%	106.27%	+116640	29
March	2014	11,773,033	10,878,414	54,626	51,925	10,933,040	94.54%	92.87%	+221400	31
April	2014	10,374,016	10,020,033	48,541	51,953	10,068,574	94.63%	97.06%	+232740	30
May	2014	11,203,732	10,614,984	44,334	51,971	10,659,318	94.97%	95.14%	+245700	31
June	2014	12,746,940	11,082,867	39,220	52,097	11,122,087	93.90%	87.25%	+363420	30
		<u>143,614,306</u>	<u>134,231,306</u>	<u>625,162</u>		<u>134,856,468</u>				
<b>FISCAL 2015</b>										
July	2014	13,717,651	12,578,551	38,129	52,129	12,616,680	93.99%	91.97%	+342360	31
August	2014	14,486,040	12,740,027	42,644	52,154	12,782,671	93.13%	88.24%	+390960	31
September	2014	11,824,906	13,323,234	48,696	52,146	13,371,930	93.87%	113.08%	+335340	30
October	2014	11,327,065	11,109,952	55,667	52,245	11,165,619	94.22%	98.57%	+352080	31
November	2014	11,400,971	10,662,987	62,443	52,573	10,725,430	94.56%	94.07%	+273780	30
December	2014	12,007,610	11,126,842	67,163	52,248	11,194,005	94.83%	93.22%	+265140	31
		<u>74,764,243</u>	<u>71,541,593</u>	<u>314,742</u>		<u>71,856,335</u>			+3233520	
Prior Year-to-date		73,497,921	68,609,092	312,927		68,922,019				
Two Years Prior		75,449,631	72,611,917	315,637		72,927,554				

ELECTRIC FUND  
CAPITAL PROJECTS

ACTIVITY THROUGH DECEMBER, AS BUDGETED FOR FY 15 AND PRELIM PROJECTIONS FOR FY 16

GL Number	Description	12/31/2014 Amended Budget	YTD As Of 12/31/2014	2014-15 Projected	2015-16 REQUESTED	
<b>--- Appropriations ---</b>						
582-558-975-000	BUILDINGS/ADDITIONS/IM	0.00	0.00	0.00	0.00	
582-558-975-000-0170	BUILDINGS/ADDITIONS IM	174,000.00	2,850.00	174,000.00	0.00	DPW Office Renovations
582-558-975-000-0220	BUILDINGS/ADDITIONS IM	930,000.00	1,362.50	930,000.00	0.00	DPW Storage Building
582-558-977-000	EQUIPMENT - SHOP	0.00	0.00	0.00	0.00	
582-558-979-000	EQUIPMENT - YARD & STC	3,000.00	0.00	3,000.00	0.00	
582-558-980-000	OFFICE EQUIPMENT & FU	16,000.00	0.00	16,000.00	0.00	
582-558-988-000	ELECTRICAL SYSTEM CO	0.00	0.00	0.00	0.00	
582-558-988-000-0151	ELECTRICAL SYSTEM CO	212,000.00	147,952.49	212,000.00	0.00	Downtown WI FI project
582-558-988-000-0175	ELECTRICAL SYSTEM CO	1,502,000.00	614,091.39	1,502,000.00	0.00	Core City Secondary Engineering and construction
582-558-988-000-0303	ELECTRICAL SYSTEM CO	349,000.00	297,753.78	349,000.00	0.00	Veterans UG Conduit Engineering and construction
582-558-988-000-0304	ELECTRICAL SYSTEM CO	181,000.00	0.00	181,000.00	0.00	2nd Ave/Blue Star/6th Engineering and construction
582-558-988-000-0305	ELECTRICAL SYSTEM CO	84,000.00	0.00	84,000.00	0.00	Lovejoy to Aylworth Engineering and construction
582-558-988-000-0307	ELECTRICAL SYSTEM CO	39,500.00	1,000.00	39,500.00	0.00	Capacitor Banks 1 Engineering and construction
582-558-988-000-0308	ELECTRICAL SYSTEM CO	0.00	0.00	0.00	52,800.00	14th Ave Electric Engineering and construction
582-558-988-000-0309	ELECTRICAL SYSTEM CO	159,000.00	1,500.00	159,000.00	0.00	St. Joseph Electric Engineering and construction
582-558-988-000-0310	ELECTRICAL SYSTEM CO	0.00	0.00	0.00	49,500.00	Kalamazoo St Elec Engineering and construction
582-558-988-000-0312	ELECTRICAL SYSTEM CO	0.00	0.00	0.00	22,000.00	Capacitor Banks 2 Engineering and construction
582-558-988-000-0313	ELECTRICAL SYSTEM CO	0.00	0.00	0.00	220,000.00	LaGrange/Phillips Elec Engineering and construction
582-558-988-000-0314	ELECTRICAL SYSTEM CO	0.00	0.00	0.00	165,000.00	76th St Electric Engineering and construction
582-558-988-000-0315	ELECTRICAL SYSTEM CO	0.00	0.00	0.00	66,000.00	Monroe Blvd Elec Engineering and construction
582-558-988-000-0316	ELECTRICAL SYSTEM CO	0.00	0.00	0.00	104,500.00	Blue Star Conductor Engineering and construction
582-558-988-000-0317	ELECTRICAL SYSTEM CO	0.00	0.00	0.00	93,500.00	Blue Star/M-140 Engineering and construction
582-558-988-001	ELECTRICAL SYSTEM EQ	0.00	0.00	0.00	0.00	
582-558-988-001-0163	ELECTRICAL SYSTEM EQ	0.00	0.00	0.00	0.00	DO NOT USE - ALL COSTS MOVED TO PROJ 301
582-558-988-001-0301	ELECTRICAL SYSTEM EQ	1,139,527.00	851,940.84	1,139,527.00	0.00	Phoenix Substation - Engineering and construction
<b>Total Appropriations:</b>		<b>7,161,495.00</b>	<b>2,737,983.05</b>	<b>7,161,495.00</b>	<b>1,750,464.15</b>	
			1,918,451.00	4,789,027.00	773,300.00	

City of South Haven  
Water Fund - Fund 591  
For the period ended December 31, 2014

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Revenues:	Month Actual	Monthly Budget	Prior year MTD	MTD Variance to Budget	MTD Variance to Prior Year	YTD Actual	YTD Budget	Prior YTD Actual	Variance to Budget	Variance to Prior Year	2014-15 Adopted Budget	% of Annual Budget
Sales	\$ 258,896	\$ 308,537	\$ 349,057	\$ (49,641)	\$ (90,161)	\$ 1,960,396	\$ 1,851,220	\$ 2,029,725	\$ 109,177	\$ (69,328)	\$ 3,702,439	53%
Charges for Service	6,215	6,167	-	48	6,215	21,448	37,000	23,810	(15,552)	(2,362)	74,000	29%
Interest Income	1,979	167	46	1,813	1,933	2,634	1,000	-	1,634	2,634	2,000	132%
Special Assessment Revenue	-	1,083	4,199	(1,083)	(4,199)	12	6,500	12,461	(6,488)	(12,449)	13,000	0%
Other Revenue	-	2,917	5,758	(2,917)	(5,758)	32,097	17,500	24,108	14,597	7,989	35,000	92%
<b>Total Revenues</b>	<b>\$ 267,089</b>	<b>\$ 318,870</b>	<b>\$ 359,060</b>	<b>\$ (51,780)</b>	<b>\$ (91,971)</b>	<b>\$ 2,016,587</b>	<b>\$ 1,913,220</b>	<b>\$ 2,090,104</b>	<b>\$ 103,367</b>	<b>\$ (73,517)</b>	<b>\$ 3,826,439</b>	

Expenses:	Month Actual	Monthly Budget	Prior year MTD	MTD Variance to Budget	MTD Variance to Prior Year	YTD Actual	YTD Budget	Prior YTD Actual	Variance to Budget	Variance to Prior Year	2014-15 Adopted Budget	% of Annual Budget
Operating Expenses	\$ 135,716	\$ 114,641	\$ 104,742	\$ 21,075	\$ 30,974	\$ 637,965	\$ 687,849	\$ 593,230	\$ (49,884)	\$ 44,734	\$ 1,375,697	46%
Property Tax Equivalents	12,049	12,049	8,349	-	3,700	72,294	72,294	50,097	-	22,197	144,588	50%
Capital Outlay	2,724	17,724	14,618	(15,000)	(11,894)	20,210	106,343	247,994	(86,133)	(227,784)	<b>212,685</b>	10%
Debt Service	500	125,533	500	(125,033)	-	732,323	753,199	717,373	(20,876)	14,950	1,506,398	49%
Transfers Out	333	404	167	(70)	167	2,000	2,422	1,000	(422)	1,000	4,843	41%
Depreciation	50,703	50,703	16,307	-	34,396	304,218	304,218	97,842	-	206,376	608,435	50%
Administrative Expenses	17,233	19,714	25,026	(2,481)	(7,793)	137,077	118,284	125,754	18,793	11,323	236,567	58%
<b>Total Expenses</b>	<b>\$ 219,258</b>	<b>\$ 340,768</b>	<b>\$ 169,710</b>	<b>\$ (121,510)</b>	<b>\$ 49,548</b>	<b>\$ 1,906,085</b>	<b>\$ 2,044,607</b>	<b>\$ 1,833,289</b>	<b>\$ (138,521)</b>	<b>\$ 72,796</b>	<b>\$ 4,089,213</b>	

Net Fund Change \$ 47,831 \$ (21,898) \$ 189,351 \$ 69,729 \$ (141,519) \$ 110,502 \$ (131,387) \$ 256,815 \$ 241,889 \$ (146,313) \$ (262,774)

**AS OF JUNE 30, 2014**

Retained Earnings	\$ 7,685,404
Less Contributed Capital	\$ (2,093,205)
Less Net Capital Assets	\$ (5,175,140)
<b>Net Undesignated Reserves</b>	<b>\$ 417,059</b>

The Difference here is the addition of new capital assets less new depreciation for FY 15

**PROJECTED AS OF JUNE 30, 2015**

Retained Earnings - Beg of Year	\$ 7,685,404
Less Contributed Capital	\$ (2,093,205)
Projected Net Income (see below) FY 15	\$ 529,911
Less Net Capital Assets	\$ (5,570,890)
<b>Net Undesignated Reserves</b>	<b>\$ 551,220</b>

The 2015 Budget figures include the projects approved by the BPU to date and a revised depreciation figure  
The capital outlay includes some equipment and Dyckman Ave costs

Year end audit adjustments - not expenses on Income statement →  
Year end audit adjustments - not expenses on Income statement →

FY 2015 Revenues	\$ 3,826,439
FY 2015 Expenses	\$ (4,089,213)
Add back principal portion of debt service	\$ 580,000
Add back Investment in Capital Assets	\$ 212,685
<b>Projected Net Income(Loss)</b>	<b>\$ 529,911</b>

**FY 2015 Debt Service Payments:**

	Principal	Interest	Fees	Totals
Annual Bond Discount Amortization Due 4/1		\$ 26,353		\$ 26,353
Water System Revenue Bonds Due 10/1		\$ 5,800		\$ 5,800
Water System Revenue Bonds Due 4/1	\$ 25,000	\$ 5,800	\$ 550	\$ 31,350
2008 Water Plant Bonds Due 12/1		\$ 227,559	\$ 550	\$ 228,109
2008 Water Plant Bonds Due 6/1	\$ 275,000	\$ 227,559		\$ 502,559
2009 Water Plant Bonds Due 12/1	\$ 280,000	\$ 215,839		\$ 495,839
2009 Water Plant Bonds Due 6/1		\$ 215,839	\$ 550	\$ 216,389
<b>Total Budgeted Principal, Interest, Fees Due</b>	<b>\$ 580,000</b>	<b>\$ 924,749</b>	<b>\$ 1,650</b>	<b>\$ 1,506,399</b>

CITY OF SOUTH HAVEN  
 WATER FUND  
 CuFt COMPARISONS  
 ROLLING TWELVE MONTHS

		GALLONS PUMPED TO MAINS	CuFt PUMPED TO MAINS	CuFt PLANT TAP UNBILLED	CuFt WATER QUALITY FLUSHING	CuFt BILLED	PERCENTAGE BILLED PLUS PLANT TAP TO PUMPED TO MAINS (ROLLING 12 MOS)	PERCENTAGE BILLED PLUS PLANT TAP TO PUMPED TO MAINS CURRENT MONTH
<b>FISCAL 2013</b>								
July	2012	97,223,000	12,997,727	42,043	149,172	9,601,173	81.95%	74.19%
August	2012	73,095,000	9,772,059	40,244	227,566	10,549,444	83.36%	108.37%
September	2012	51,928,000	6,942,246	36,348	218,946	7,875,634	84.80%	113.97%
October	2012	37,774,000	5,050,000	27,350	259,447	4,949,605	85.50%	98.55%
November	2012	28,082,000	3,754,278	16,894	255,838	3,275,439	86.15%	87.70%
December	2012	27,941,000	3,735,428	34,835	160,400	3,150,827	86.30%	85.28%
January	2013	29,090,000	3,889,037	35,639	83,007	3,204,712	86.22%	83.32%
February	2013	27,257,000	3,643,984	25,791	72,180	3,368,685	86.69%	93.15%
March	2013	28,716,000	3,839,037	30,416	75,789	2,955,708	87.40%	77.78%
April	2013	27,256,000	3,643,850	38,784	79,398	3,120,869	88.84%	86.71%
May	2013	44,617,270	5,964,876	52,314	342,855	3,962,497	88.14%	66.43%
June	2013	52,158,000	6,972,995	57,485	312,780	5,366,701	91.24%	76.96%
		<u>525,137,270</u>	<u>70,205,517</u>	<u>438,141</u>	<u>2,237,378</u>	<u>61,381,294</u>		
<b>FISCAL 2014</b>								
July	2013	70,321,000	9,401,203	62,968	127,844	6,705,606	88.48%	72.00%
August	2013	62,517,000	8,357,888	48,003	196,427	8,322,168	88.81%	100.15%
September	2013	52,536,000	7,023,529	43,984	192,916	7,118,311	89.52%	101.98%
October	2013	35,699,000	4,772,594	41,176	182,891	5,303,775	90.51%	111.99%
November	2013	28,029,000	3,747,193	37,834	99,473	3,426,297	90.79%	92.45%
December	2013	28,262,000	3,778,342	37,166	178,083	2,904,054	90.43%	77.84%
January	2014	36,931,000	4,937,299	40,642	145,998	3,089,262	89.82%	63.39%
February	2014	36,711,000	4,907,888	36,230	128,741	3,454,550	89.24%	71.13%
March	2014	36,506,000	4,880,481	37,567	40,914	3,251,264	89.19%	67.39%
April	2014	29,869,000	3,993,182	33,957	57,952	3,321,979	89.46%	84.04%
May	2014	40,638,000	5,432,888	31,283	70,598	4,278,590	89.10%	78.75%
June	2014	53,611,000	7,167,246	37,032	100,575	5,543,066	85.86%	77.34%
		<u>511,630,000</u>	<u>68,399,733</u>	<u>487,843</u>	<u>1,522,412</u>	<u>56,718,922</u>		
<b>FISCAL 2015</b>								
July	2014	64,316,000	8,598,396	38,503	126,739	6,932,597	84.35%	81.07%
August	2014	66,789,000	8,929,011	42,246	34,492	7,841,235	83.45%	88.29%
September	2014	44,601,000	5,962,701	36,096	100,277	6,663,068	84.55%	112.35%
October	2014	33,430,000	4,469,251	34,492	117,932	4,619,497	85.38%	104.13%
November	2014	29,363,000	3,925,535	34,091	102,686	3,359,059	86.24%	86.44%
December	2014	28,908,000	3,864,706	35,294	67,388	3,125,243	86.64%	81.78%
		<u>267,407,000</u>	<u>35,749,599</u>	<u>220,722</u>	<u>549,514</u>	<u>32,540,699</u>		
Prior Year-to-date		277,364,000	37,080,749	271,132	977,634	33,780,211		
Two Years Prior		316,043,000	42,251,738	197,713	1,271,369	39,402,122		

City of South Haven  
Sewer Fund - Fund 592  
For the period ended December 31, 2014

Col 6 & 11

Revenues:	Month Actual	Monthly Budget	Prior year MTD	MTD Variance to Budget	MTD Variance to Prior Year	YTD Actual	YTD Budget	Prior YTD Actual	Variance to Budget	Variance to Prior Year	2014-15 Adopted Budget	% of Annual Budget
Sales	\$ 162,405	\$ 188,274	\$ 212,542	\$ (25,869)	\$ (50,137)	\$ 1,195,525	\$ 1,129,647	\$ 1,222,701	\$ 65,879	\$ (27,176)	\$ 2,259,293	53%
IPP Revenues	10,426	8,477	6,567	1,949	3,859	40,647	50,862	45,068	(10,215)	(4,421)	101,724	40%
Interest Income	2	208	16	(207)	(14)	-	1,250	-	(1,250)	-	2,500	0%
Special Assessment Revenue	-	1,250	2,360	(1,250)	(2,360)	17	7,500	8,510	(7,483)	(8,493)	15,000	0%
Other Revenue	-	542	200	(542)	(200)	16,938	3,250	5,296	13,688	11,643	6,500	261%
<b>Total Revenues</b>	<b>\$ 172,832</b>	<b>\$ 198,751</b>	<b>\$ 221,685</b>	<b>\$ (25,919)</b>	<b>\$ (48,853)</b>	<b>\$ 1,253,128</b>	<b>\$ 1,192,509</b>	<b>\$ 1,281,575</b>	<b>\$ 60,620</b>	<b>\$ (28,447)</b>	<b>\$ 2,385,017</b>	

Expenses	1 Month Actual	2 Monthly Budget	3 Prior year MTD	4 MTD Variance to Budget	5 MTD Variance to Prior Year	6 YTD Actual	7 YTD Budget	8 Prior YTD Actual	9 Variance to Budget	10 Variance to Prior Year	11 2014-15 Adopted Budget	% of Annual Budget
Operating Expenses	\$ 95,746	\$ 101,364	\$ 350,245	\$ (5,618)	\$ (254,499)	\$ 564,681	\$ 608,182	\$ 936,782	\$ (43,501)	\$ (372,101)	\$ 1,216,364	46%
Grant Expense-SSES	-	-	31,686	-	(31,686)	-	-	101,258	-	(101,258)	-	-
Property Tax Equivalents	7,453	7,453	7,453	0	-	44,721	44,721	44,721	0	-	89,441	50%
Capital Outlay	2,203	21,264	-	(19,062)	2,203	19,007	127,585	5,677	(108,578)	13,329	255,170	7%
Transfers Out	17,000	17,076	19,917	(76)	(2,917)	102,000	102,458	119,500	(458)	(17,500)	204,915	50%
Depreciation	29,060	29,060	20,379	-	8,681	174,360	174,360	122,273	-	52,087	348,719	50%
Administrative Expenses	25,600	27,642	32,245	(2,041)	(6,644)	175,046	165,850	167,122	9,196	7,924	331,700	53%
<b>Total Expenses</b>	<b>\$ 177,063</b>	<b>\$ 203,859</b>	<b>\$ 461,925</b>	<b>\$ (26,797)</b>	<b>\$ (284,862)</b>	<b>\$ 1,079,814</b>	<b>\$ 1,223,155</b>	<b>\$ 1,497,333</b>	<b>\$ (143,341)</b>	<b>\$ (417,519)</b>	<b>\$ 2,446,309</b>	

Net Fund Change \$ (4,230) \$ (5,108) \$ (240,239) \$ 877 \$ 236,009 \$ 173,315 \$ (30,646) \$ (215,757) \$ 203,961 \$ 389,072 \$ (61,292)

**AS OF JUNE 30, 2014**

Retained Earnings	\$ 6,979,471
Less Contributed Capital	\$ (1,013,995)
Less Net Capital Assets	\$ (5,632,250)
<b>Net Undesignated Reserves</b>	<b>\$ 333,226</b>

The Difference here is the addition of new capital assets less new depreciation for FY 15

**PROJECTED AS OF JUNE 30, 2015**

Retained Earnings - Beg of Year	\$ 6,979,471
Less Contributed Capital	\$ (1,013,995)
Projected Net Income (see below) FY 15	\$ 193,878
Less Net Capital Assets	\$ (5,725,799)
<b>Net Undesignated Reserves</b>	<b>\$ 433,555</b>

The 2015 Budget figures include the projects approved by the BPU to date and a revised depreciation figure  
The capital outlay includes some equipment and Dyckman Ave costs

Year end audit adjustments - not expenses on Income statement



FY 2015 Revenues	\$ 2,385,017
FY 2015 Expenses	\$ (2,446,309)
Add back Investment in Capital Assets	\$ 255,170
<b>Projected Net Income(Loss)</b>	<b>\$ 193,878</b>



City of South Haven

## Agenda Item #8

### Unresolved Issues

New items shown in **bold** text.

Completed items shown with single ~~strike through~~ text for one meeting, then double ~~strike through~~ text for the next meeting, then removed from the list.

#### ACTION ITEMS

- 3/26/12 – Stickland requested that staff provide the utility policy concerning tampering fees for review at the next meeting. Addressed under agenda item 15 at the April 30, 2012 meeting. MMEA was contacted requesting their assistance in contacting fellow members for their policies regarding meter tampering, disconnection or tampering with service feeders/pipes, theft of service, and unsealed meter showing consumption. No response has been received from MMEA. City staff is contacting fellow IMMMA members plus Holland, Lowell, and Coldwater. Policies have been received from Bluffton, IN; Coldwater, MI; Holland BPW; Lowell Light & Power; Niles, MI; Sturgis, MI; Zeeland BPW. These policies will be compiled and summarized and distributed to staff and the BPU for review and comment. Updating the Public Utilities Rules, Regulations and Policies (and Code of Ordinances) is one of City Council's adopted priorities for 2014-15.
- 4/30/12 – As a result of the tamper fee discussion with a resident, staff was requested to compile a list of electrical and plumbing contractors licensed to work in South Haven for the purpose of sending notification letters concerning the tamper policy. City staff contacted the State of Michigan and Michigan Township services, but they could not provide specific information. City of South Haven Building Services has a bulletin board available for posting notices. Suggestion was made to add it to the building permit form or instructions. Start with the City and then work with the townships.
- ~~7/28/14 – DPW staff will work together with the finance department to develop policies to ensure that all material, labor, and design engineering services are appropriately billed to a specific project code. The purpose is to ensure that finance can properly capitalize project costs at the end of the fiscal year.~~
- ~~8/25/14 – Stickland requested that a fund reserve report be provided as often as possible, preferably monthly, but no less than quarterly.~~

# City of South Haven, MI



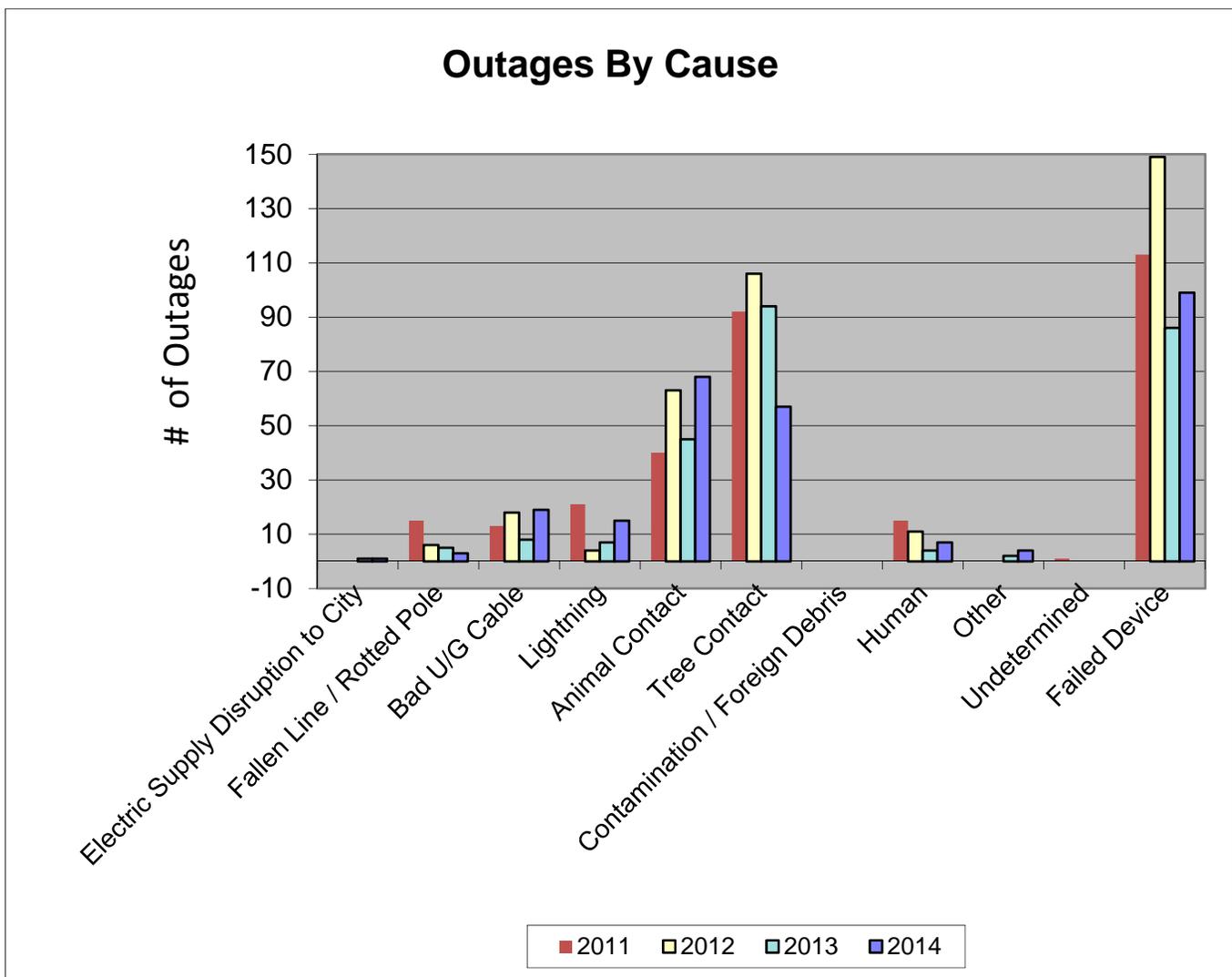
## Electric Outage Report 4th Quarter 2014

South Haven Electric Distribution System	Yearly Reliability report	Jan-Dec 2014	Jan-Dec 2013
<b>Number of Outages per year(by Cause)</b>			
	0 Electric Supply Disruption to City	1	1
	1 Fallen Line / Rotted Pole	3	5
	2 Bad U/G Cable	19	8
	3 Lightning	15	7
	4 Animal Contact	68	45
	5 Tree Contact	57	94
	6 Contamination / Foreign Debris	0	0
	7 Human	7	4
	8 Other	4	2
	9 Undetermined	0	0
	10 Failed Device	99	86
	<b>Total</b>	<b>273</b>	<b>252</b>

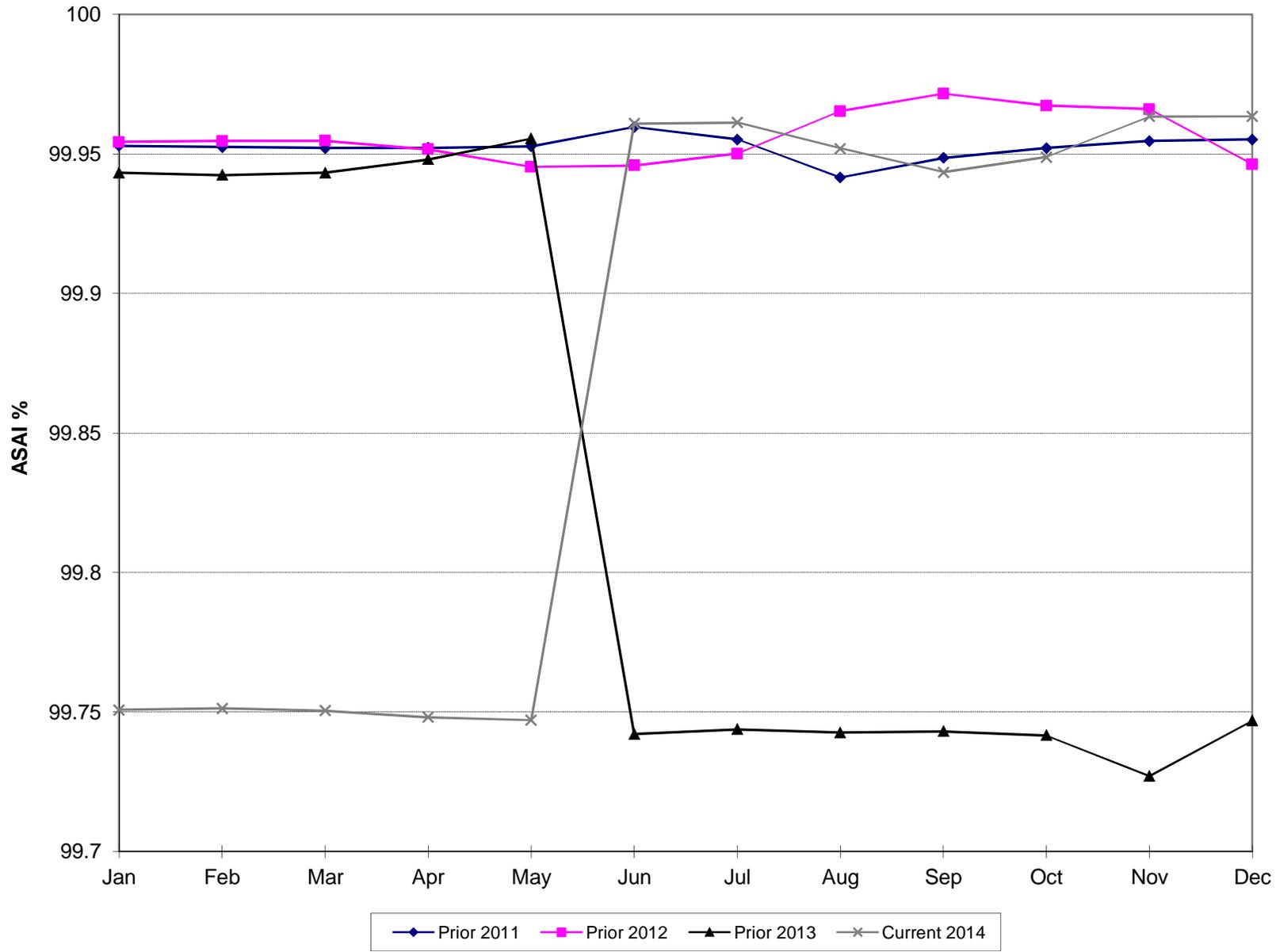
<b>Outage Statistics</b>	ASAI (%)	99.96341	99.946308
	CAIDI (Long) (min)	221.02824	242.67065
	SAIDI (Long) (min)	16.025986	23.58232
	SAIFI (Long) (ints/tot cust)	0.0725065	0.0971783
	SAIFI (Short) (ints/tot cust)	0	0.0004313

## Outage Reasons

<b>Number of Outages (by Cause)</b>	2011	2012	2013	2014	2013-2014
Electric Supply Disruption to City	0	0	1	1	0%
Fallen Line / Rotted Pole	15	6	5	3	-40%
Bad U/G Cable	13	18	8	19	138%
Lightning	21	4	7	15	114%
Animal Contact	40	63	45	68	51%
Tree Contact	92	106	94	57	-39%
Contamination / Foreign Debris	0	0	0	0	0%
Human	15	11	4	7	75%
Other	0	0	2	4	100%
Undetermined	1	0	0	0	0%
Failed Device	113	149	86	99	15%
<b>Grand Total</b>	<b>310</b>	<b>357</b>	<b>252</b>	<b>273</b>	<b>8%</b>

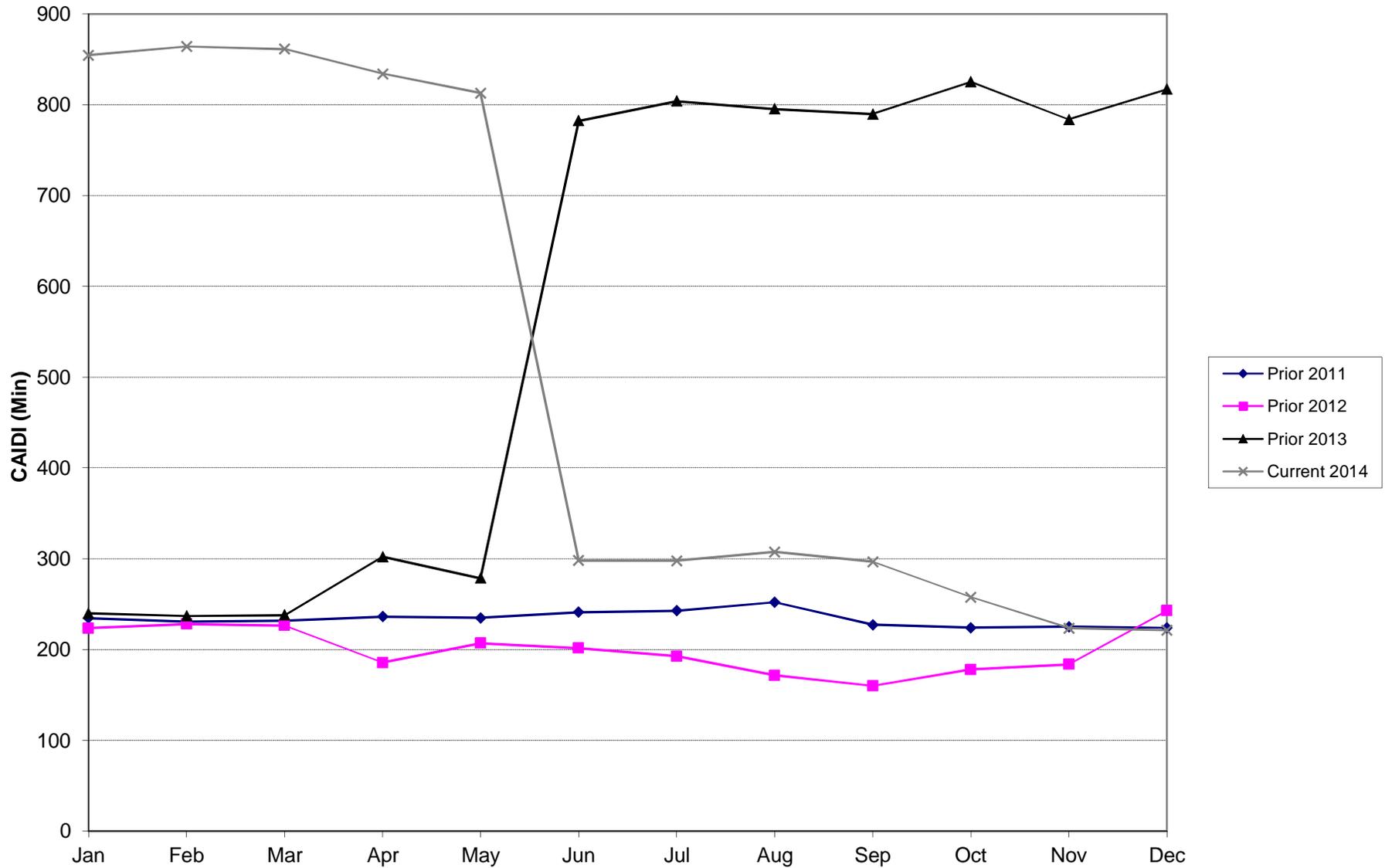


ASAI (Average Service Availability Index)



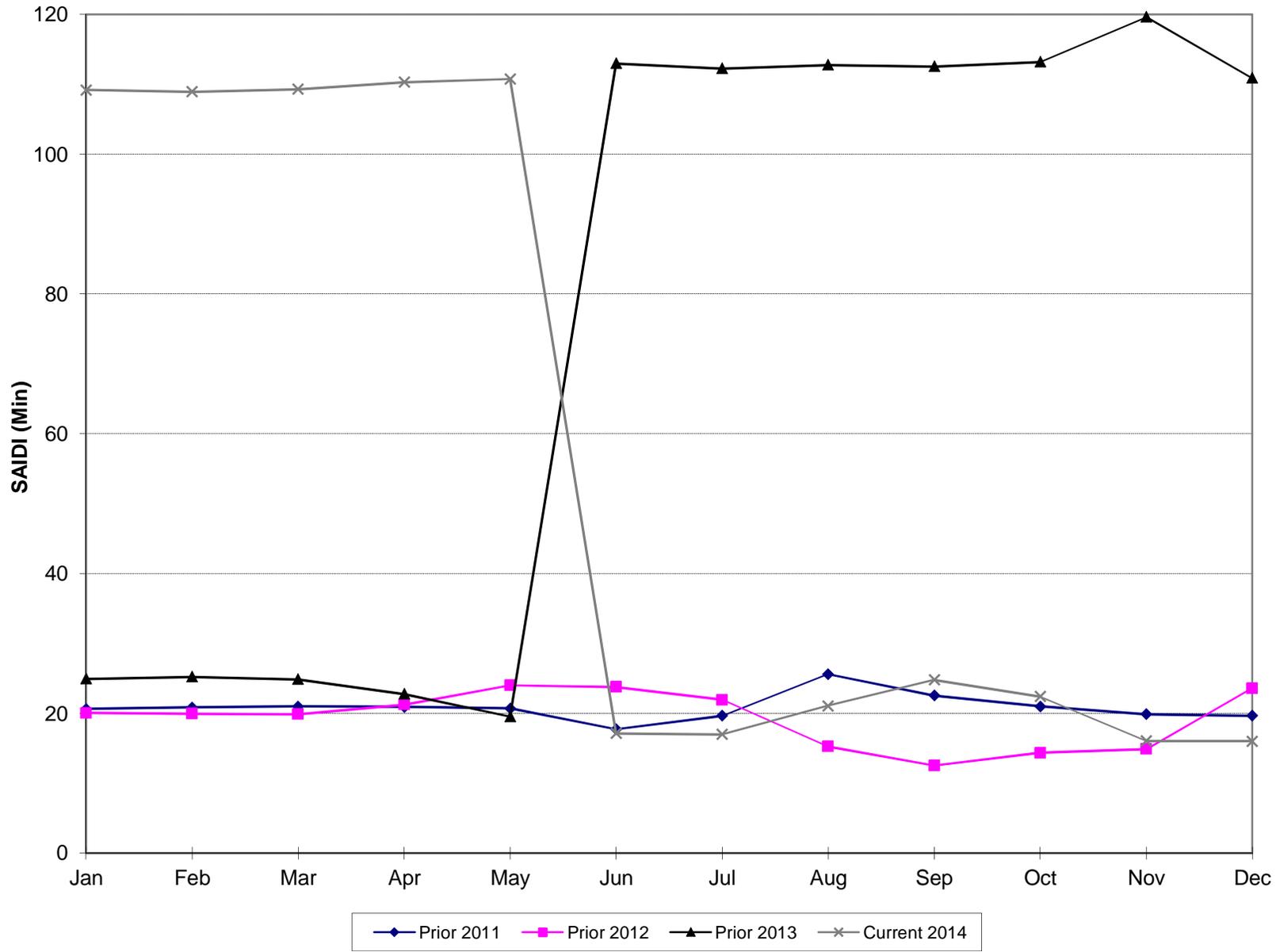
The ratio of the total customer minutes that service was available divided by the total customer minutes demanded (expected) in a time period. It is expressed as a percent.

CAIDI (Customer Average Interruption Duration Index)



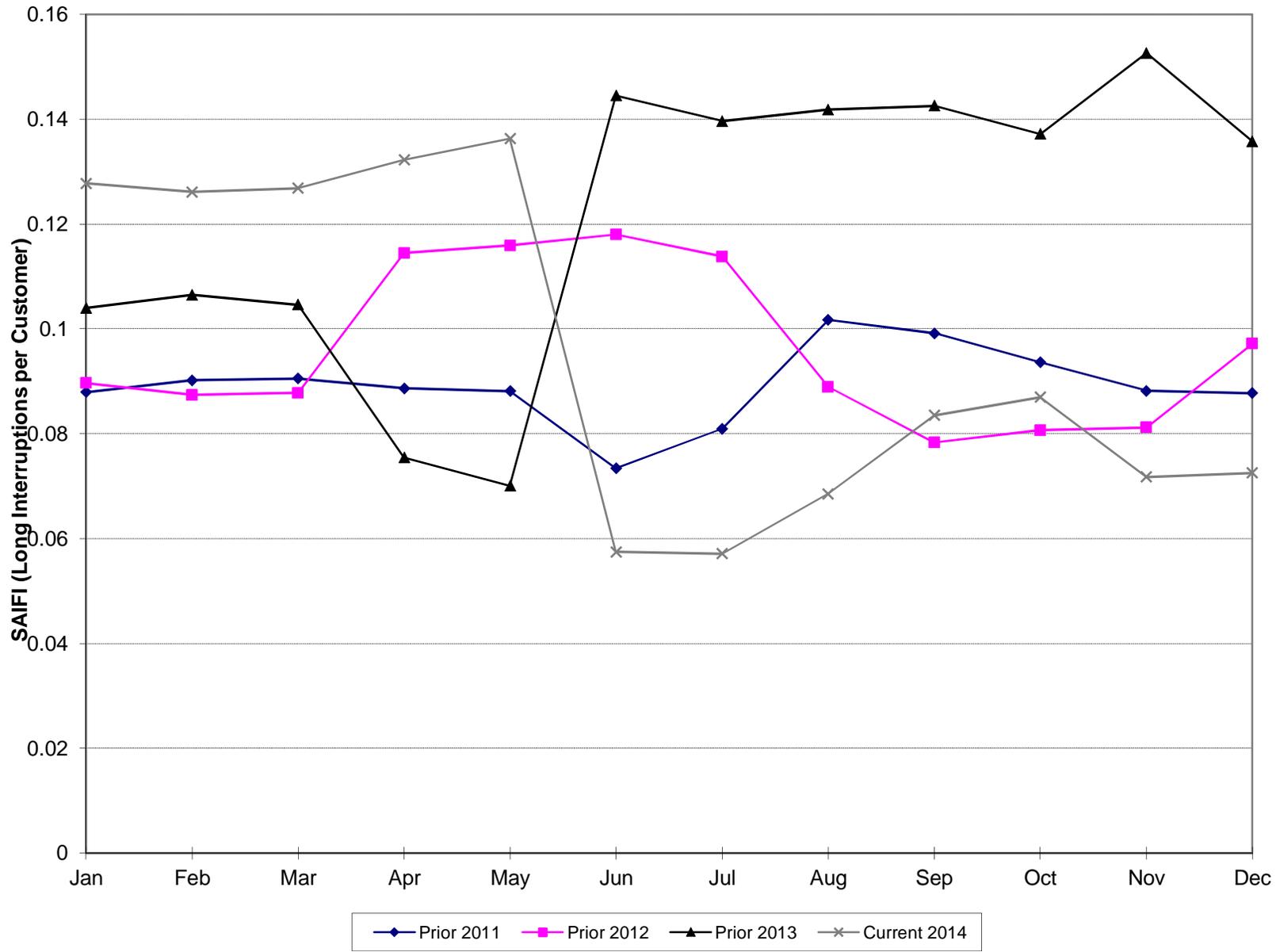
This is the average duration of a customer outage, and is calculated by dividing the sum of the customer minutes off by the number of customers who experienced long interruptions.

SAIDI (System Average Interruption Duration Index)



This is the avg interruption duration for all customers served, and is calculated by dividing the sum of the customer minutes off by the avg number of customers served.

SAIFI (Long) (System Average Interruption Frequency Index for Long Interruptions)



The number of times a customer is interrupted (>1 minute), averaged over all customers. Divide total customer interruptions by an avg of total customers served.

South Haven Electric Distribution System

MONTHLY OUTAGE REPORT

October 2014

#	Date	S/U	General Information	Cause	Time & Duration				Customers		
			Address/Location	Description	#	Ints	T off	T on	Mins	# Out	Cust Min
1	10/1/2014	U	15581 73rd St	Fuse - Squirrel	4	1	10/1/14 6:30 AM	10/1/14 8:05 AM	95	9	855
2	10/3/2014	U	Phoenix St & Veterans Blvd	U.G. line Fuse's Out	2	1	10/3/14 10:30 PM	10/4/14 2:10 AM	220	36	7920
3	10/4/2014	U	417 Cartwright Ave	Fuse - Tree Limb	5	1	10/4/14 8:30 AM	10/4/14 10:20 AM	110	17	1870
4	10/4/2014	U	72935 16th Ave	Fuse - Squirrel	4	1	10/4/14 12:40 PM	10/4/14 1:55 PM	75	14	1050
5	10/6/2014	U	230 Baseline Rd	Fuse - Squirrel	4	1	10/6/14 10:05 AM	10/6/14 11:10 AM	65	34	2210
6	10/7/2014	U	325 Humphrey St	Fuse - Bird	4	1	10/7/14 9:30 AM	10/7/14 10:40 AM	70	14	980
7	10/8/2014	U	00722 67th St	Service Line Down - Tree Cut	5	1	10/8/14 4:58 PM	10/8/14 7:00 PM	122	6	732
8	10/10/2014	U	7265 Baseline Rd	Fuse - Squirrel	4	1	10/10/14 1:55 PM	10/10/14 3:10 PM	75	6	450
9	10/14/2014	U	18022 CR 687	Line Fuse Out	10	1	10/14/14 2:25 AM	10/14/14 4:10 AM	105	27	2835
10	10/14/2014	U	77067 Pinewood Ln	Line Fuse - Tree on Primary Line	5	1	10/14/14 5:20 PM	10/14/14 8:50 PM	210	48	10080
11	10/14/2014	U	Ridgewood Dr	Line Fuse - Tree on Primary Line	5	1	10/14/14 10:20 PM	10/14/14 11:55 PM	95	64	6080
12	10/16/2014	U	270 Oak St	Bad Connection	10	1	10/16/14 5:40 PM	10/16/14 7:10 PM	90	1	90
13	10/17/2014	U	Ridgewood Dr	Tree on primary line - Fuse Out	5	1	10/17/14 9:50 AM	10/17/14 2:35 PM	285	64	18240
14	10/17/2014	U	73100 CR 388	Bad U.G. Line	2	1	10/17/14 1:35 PM	10/17/14 7:30 PM	355	7	2485
15	10/18/2014	U	950 Blue Star Hwy	Down Service Tree Limb	5	1	10/18/14 11:00 AM	10/18/14 3:00 PM	240	1	240
16	10/18/2014	U	11118 CR 689	Fuse - Squirrel	4	1	10/18/14 8:30 AM	10/18/14 10:05 AM	95	17	1615
17	10/19/2014	U	Baseline Rd & CR 689	Line fuse blown arrestor	10	1	10/19/14 10:50 AM	10/19/14 1:25 PM	155	51	7905
18	10/20/2014	U	15599 77th St	Bad Connection	10	1	10/20/14 8:05 AM	10/20/14 9:50 AM	105	1	105
19	10/20/2014	U	21150 M-140 Hwy	Bad Connection	10	1	10/20/14 1:35 PM	10/20/14 2:50 PM	75	1	75
20	10/20/2014	U	631 Broadway St	Bad Connection	10	1	10/20/14 8:45 PM	10/20/14 11:00 PM	135	4	540
21	10/20/2014	U	Ridgewood Dr	Line Fuse - Tree on Primary Line	5	1	10/20/14 6:05 PM	10/20/14 9:50 PM	225	64	14400
22	10/22/2014	U	16th Ave & CR 687	Line fuse tree on line	5	1	10/22/14 12:05 PM	10/20/14 3:40 PM	215	37	7955
23	10/23/2014	U	73300 Cider Ct	Bad U.G. splice	2	1	10/23/14 9:50 AM	10/23/14 2:25 PM	275	49	13475
24	10/25/2014	U	714 South Haven Pl	Line Fuse - Squirrel	4	1	10/25/14 5:20 PM	10/25/14 7:10 PM	110	62	6820
25	10/25/2014	U	809 Wilson St	Bad Connection	10	1	10/25/14 10:49 PM	10/25/14 11:50 PM	61	1	61
26	10/27/2014	U	541 Woodbridge Cir	Bad meter socket	10	1	10/27/14 5:00 PM	10/27/14 8:45 PM	225	1	225
27	10/28/2014	U	291 Blue Star Hwy	Bad Connection	10	1	10/28/14 4:55 AM	10/28/14 6:10 AM	75	1	75
28	10/28/2014	U	151 Dunkley Ave	Fuse - Bad jumper	10	1	10/28/14 8:20 PM	10/28/14 11:10 PM	170	21	3570
29	10/29/2014	U	07881 CR 687	Fuse - Squirrel	4	1	10/29/14 5:10 AM	10/29/14 6:55 AM	105	9	945
30	10/30/2014	U	515 Elkenburg St	Bad Connection	10	1	10/30/14 2:45 PM	10/30/14 4:00 PM	75	1	75
31	10/30/2014	U	19600 76th St	Bad Connection	10	1	10/30/14 5:30 PM	10/30/14 6:40 PM	70	1	70
32	10/31/2014	U	70500 CR 380	Bad fuse high voltage	10	1	10/31/14 3:00 PM	10/31/14 6:30 PM	210	21	4410

S/U - Scheduled or Unscheduled  
Ints - # of Interruptions  
Long - >1 min; Short - <1 min  
Cause # - see table on page 3

South Haven Electric Distribution System

OUTAGE SUMMARIES

October 2014

<b>Total Customers this Month</b>	<b>8,262</b>	<b>Days of Month</b>
<b>Total Customer Minutes this Month</b>	<b>368,815,680</b>	<b>31</b>

Outage Totals			
		This Month	This Month Last Year
<b>Unscheduled Outages</b>			
Long	# Outages	32	18
	# Customers Out	690	337
	# Minutes Out	4,593	46545
	# Customer Minutes Out	118,438	348470
	# Within City System	32	18
	# Supply to City Minutes	0	0
Short	# Outages (Blinks)	0	0
	# Customers Affected	0	0
	# Within City System	0	0
	# Supply to City Minutes	0	0
<b>Scheduled Outages</b>			
Long	# Outages	0	0
	# Customers Out	0	0
	# Minutes Out	0	0
	# Customer Minutes Out	0	0
	# Within City System	0	0
	# Supply to City Minutes	0	0
Short	# Outages (Blinks)	0	0
	# Customers Affected	0	0
	# Within City System	0	0
	# Supply to City Minutes	0	0
<b>Totals</b>			
Total Long Outages		32	18
Total Short Outages (Blinks)		0	0
Total Customers Out (Long)		690	337
Total Customers Affected (Short- Blinks)		0	0
Total Customer Minutes Out		118,438	348470
Total Outages Within City System		32	18
Total Outages in Supply to City		0	0

Number of Outages (by Cause)					
Cause #	Description	Total This Month	This Month Last Year	Rolling AT	% AT
0	Electric Supply Disruption to City	0	0	1	0%
1	Fallen Line / Rotted Pole	0	0	5	2%
2	Bad U/G Cable	3	1	21	7%
3	Lightning	0	0	15	5%
4	Animal Contact	8	6	64	22%
5	Tree Contact	8	3	72	25%
6	Contamination / Foreign Debris	0	0	0	0%
7	Human	0	0	6	2%
8	Other	0	0	4	1%
9	Undetermined	0	0	0	0%
10	Failed Device	13	8	98	34%
<b>Total</b>		<b>32</b>	<b>18</b>	<b>286</b>	

AT - Annual 12 Month Total

12 Month Outage Statistics		
Index	As of This Month	As of This Month Last Year
ASAI (%)	99.9488	99.7416
CAIDI (Long) (min)	257.58	825.37
SAIDI (Long) (min)	22.40	113.19
SAIFI (Long) (ints/tot cust)	0.09	0.14
SAIFI (Short) (ints/tot cust)	0.00	0.00

- ASAI - Average Service Availability Index  
(customer minutes available/total customer minutes, as a %)
- CAIDI - Customer Average Interruption Duration Index  
(average minutes interrupted per interrupted customer)
- SAIDI - System Average Interruption Duration Index  
(average minutes interrupted per customer for all customers)
- SAIFI (Long) - System Average Interruption Frequency Index  
(# of long interruptions per customer for all customers)
- SAIFI (Short) - System Average Interruption Frequency Index  
(# of short interruptions per customer for all customers)

S/U - Scheduled or Unscheduled  
Ints - # of Interruptions  
Long - >1 min; Short - <1 min  
Cause # - see table on page 3

South Haven Electric Distribution System

MONTHLY OUTAGE REPORT

November 2014

General Information				Cause	Time & Duration					Customers	
#	Date	S/U	Address/Location	Description	#	Ints	T off	T on	Mins	# Out	Cust Min
1	11/2/2014	U	125 Elkenburg St	Fuse Squirrel	4	1	11/2/14 12:45 PM	11/2/14 1:35 PM	50	14	700
2	11/3/2014	U	20069 Elm Ave	Bad Connection	10	1	11/3/14 4:40 PM	11/3/14 5:50 PM	70	1	70
3	11/3/2014	U	152 Black River St	Fuse - Squirrel	4	1	11/3/14 8:10 PM	11/3/14 9:35 PM	85	7	595
4	11/7/2014	U	22096 76th St	Fuse - Squirrel	4	1	11/7/14 6:45 AM	11/7/14 7:55 AM	70	11	770
5	11/8/2014	U	631 Broadway St	Bad Connection	10	1	11/8/14 9:10 PM	11/8/14 11:25 PM	135	1	135
6	11/9/2014	U	67653 Ridgewood Dr	Fuse - Squirrel	4	1	11/9/14 7:55 AM	11/9/14 9:45 AM	110	11	1210
7	11/9/2014	U	67653 Ridgewood Dr	Bad fuse high voltage	10	1	11/9/14 11:00 PM	11/10/14 6:00 AM	420	11	4620
8	11/10/2014	U	09704 76th St	2 line fuses - Squirrel	4	1	11/10/14 11:15 AM	11/10/14 12:55 PM	100	27	2700
9	11/12/2014	U	77373 Cr 380	Fuse - Squirrel	4	1	11/12/14 11:50 AM	11/12/14 1:10 PM	80	16	1280
10	11/12/2014	U	524 Phoenix St	Bad Connection	10	1	11/12/14 2:45 PM	11/12/14 4:00 PM	75	1	75
11	11/16/2014	U	Phillips St & Le Grange St	Car/Pole - Primary line down - linefuses	7	1	11/16/14 2:50 PM	11/16/14 6:05 PM	195	51	9945
12	11/17/2014	U	77500 20th Ave	Broken Pole - Primary Line Down - Tree Down	5	1	11/17/14 1:20 PM	11/17/14 8:00 PM	400	74	29600
13	11/22/2014	U	70340 CR 388	Down Service - Tree Limb	5	1	11/22/14 12:45 PM	11/22/14 2:10 PM	85	1	85
14	11/22/2014	U	76846 CR 380	Fuse - Squirrel	4	1	11/22/14 2:50 PM	11/22/14 4:35 PM	105	7	735
15	11/22/2014	U	404 North Shore Dr	Bad Fuse	10	1	11/22/14 5:10 PM	11/22/14 8:20 PM	190	26	4940
16	11/22/2014	U	75634 12th Ave	Bad Connection	10	1	11/22/14 5:35 PM	11/22/14 9:05 PM	210	1	210
17	11/22/2014	U	08679 CR 689	Bad Connection	10	1	11/22/14 5:55 PM	11/22/14 11:15 PM	320	1	320
18	11/23/2014	U	72921 Baseline Rd	Primary Line Down - Tree Down	5	1	11/23/14 2:20 AM	11/23/14 4:50 AM	150	46	6900
19	11/23/2014	U	75634 12th Ave	Bad Connection	10	1	11/23/14 4:30 AM	11/23/14 7:15 AM	165	1	165
20	11/23/2014	U	Fire Ln D	Down Primary Line - Tree	5	1	11/23/14 6:40 AM	11/23/14 12:30 PM	350	32	11200
21	11/25/2014	U	71217 16th Ave	Fuse - Squirrel	4	1	11/25/14 8:55 AM	11/25/14 10:10 AM	75	4	300
22	11/26/2014	U	67066 8th Ave	Fuse - Squirrel	4	1	11/26/14 12:00 AM	11/26/14 9:10 PM	1270	7	8890
23	11/28/2014	U	345 Bailey Ave	Bad Connection	10	1	11/28/14 12:00 PM	11/28/14 1:45 PM	105	1	105
24	11/28/2014	U	525 Phoenix St	Blown U.G. fuses	2	1	11/28/14 3:45 PM	11/28/14 6:10 PM	145	27	3915
25	11/29/2014	U	15781 Blue Star Hwy	Fuse - Squirrel	4	1	11/29/14 8:30 AM	11/29/14 9:45 AM	75	9	675

S/U - Scheduled or Unscheduled  
Ints - # of Interruptions  
Long - >1 min; Short - <1 min  
Cause # - see table on page 3

South Haven Electric Distribution System

OUTAGE SUMMARIES

November 2014

Total Customers this Month	8,262	Days of Month
Total Customer Minutes this Month	356,918,400	30

Outage Totals			
		This Month	This Month Last Year
<b>Unscheduled Outages</b>			
Long	# Outages	25	37
	# Customers Out	388	1877
	# Minutes Out	5,035	9715
	# Customer Minutes Out	90,140	714605
	# Within City System	25	37
	# Supply to City Minutes	0	0
Short	# Outages (Blinks)	0	0
	# Customers Affected	0	0
	# Within City System	0	0
	# Supply to City Minutes	0	0
<b>Scheduled Outages</b>			
Long	# Outages	0	0
	# Customers Out	0	0
	# Minutes Out	0	0
	# Customer Minutes Out	0	0
	# Within City System	0	0
	# Supply to City Minutes	0	0
Short	# Outages (Blinks)	0	0
	# Customers Affected	0	0
	# Within City System	0	0
	# Supply to City Minutes	0	0
<b>Totals</b>			
Total Long Outages		25	37
Total Short Outages (Blinks)		0	0
Total Customers Out (Long)		388	1877
Total Customers Affected (Short- Blinks)		0	0
Total Customer Minutes Out		90,140	714605
Total Outages Within City System		25	37
Total Outages in Supply to City		0	0

Number of Outages (by Cause)					
Cause #	Description	Total This Month	This Month Last Year	Rolling AT	% AT
0	Electric Supply Disruption to City	0	0	1	0%
1	Fallen Line / Rotted Pole	0	0	5	2%
2	Bad U/G Cable	1	1	21	8%
3	Lightning	0	0	15	5%
4	Animal Contact	10	7	67	24%
5	Tree Contact	4	18	58	21%
6	Contamination / Foreign Debris	0	0	0	0%
7	Human	1	0	7	3%
8	Other	0	0	4	1%
9	Undetermined	0	0	0	0%
10	Failed Device	9	11	96	35%
<b>Total</b>		25	37	274	

AT - Annual 12 Month Total

12 Month Outage Statistics		
Index	As of This Month	As of This Month Last Year
ASAI (%)	99.9634	99.7270
CAIDI (Long) (min)	223.51	783.66
SAIDI (Long) (min)	16.04	119.59
SAIFI (Long) (ints/tot cust)	0.07	0.15
SAIFI (Short) (ints/tot cust)	0.00	0.00

- ASAI - Average Service Availability Index  
(customer minutes available/total customer minutes, as a %)
- CAIDI - Customer Average Interruption Duration Index  
(average minutes interrupted per interrupted customer)
- SAIDI - System Average Interruption Duration Index  
(average minutes interrupted per customer for all customers)
- SAIFI (Long) - System Average Interruption Frequency Index  
(# of long interruptions per customer for all customers)
- SAIFI (Short) - System Average Interruption Frequency Index  
(# of short interruptions per customer for all customers)

S/U - Scheduled or Unscheduled  
Ints - # of Interruptions  
Long - >1 min; Short - <1 min  
Cause # - see table on page 3

South Haven Electric Distribution System

MONTHLY OUTAGE REPORT

December 2014

General Information				Cause	Time & Duration					Customers	
#	Date	S/U	Address/Location	Description	#	Ints	T off	T on	Mins	# Out	Cust Min
1	12/3/2014	U	76256 CR 380	Fuse - Squirrel	4	1	12/3/14 6:00 PM	12/3/14 7:10 PM	70	11	770
2	12/9/2014	U	30 67th St	Line Fuse - Bad Cut Out	10	1	12/9/14 6:00 PM	12/9/14 7:10 PM	70	17	1190
3	12/10/2014	U	569 Ravinia Dr	Fuse - Squirrel	4	1	12/10/14 8:55 PM	12/10/14 10:10 PM	75	13	975
4	12/11/2014	U	16th Ave & M-140 Hwy	Line Fuse - Squirrel	4	1	12/11/14 3:45 PM	12/11/14 5:15 PM	90	23	2070
5	12/13/2014	U	521 Woodbridge Cir	Bad Connection	10	1	12/13/14 7:40 AM	12/13/14 9:05 AM	85	1	85
6	12/13/2014	U	Ridgewood Dr	Fuse - Tree crew dropped limb	5	1	12/13/14 12:30 PM	12/13/14 2:10 PM	100	9	900
7	12/18/2014	U	67663 CR 388	Bad Connection	10	1	12/18/14 4:55 AM	12/18/14 6:10 AM	75	1	75
8	12/21/2014	U	CR 388 & 70th St	Bad Line - Cutout	10	1	12/21/14 1:15 AM	12/21/14 3:10 AM	115	27	3105
9	12/21/2014	U	76535 13th Ave	Line Fuse - Squirrel	4	1	12/21/14 12:20 PM	12/21/14 2:15 PM	115	61	7015
10	12/23/2014	U	29 72nd St	Bad Connection	10	1	12/23/14 11:45 AM	12/23/14 1:40 PM	115	1	115
11	12/24/2014	U	310 Cable Ave	Bad Cutout	10	1	12/24/14 3:40 PM	12/24/14 5:10 PM	90	17	1530
12	12/31/2014	U	767 Indiana Ave	Fuse	10	1	12/31/14 6:55 PM	12/31/14 8:50 PM	115	18	2070

S/U - Scheduled or Unscheduled  
 Ints - # of Interruptions  
 Long - >1 min; Short - <1 min  
 Cause # - see table on page 3

South Haven Electric Distribution System

OUTAGE SUMMARIES

December 2014

<b>Total Customers this Month</b>	<b>8,262</b>	<b>Days of Month</b>
<b>Total Customer Minutes this Month</b>	<b>368,815,680</b>	<b>31</b>

Outage Totals			
		This Month	This Month Last Year
<b>Unscheduled Outages</b>			
Long	# Outages	12	13
	# Customers Out	199	115
	# Minutes Out	1,115	2256
	# Customer Minutes Out	19,900	18856
	# Within City System	12	13
	# Supply to City Minutes	0	0
Short	# Outages (Blinks)	0	0
	# Customers Affected	0	0
	# Within City System	0	0
	# Supply to City Minutes	0	0
<b>Scheduled Outages</b>			
Long	# Outages	0	0
	# Customers Out	0	0
	# Minutes Out	0	0
	# Customer Minutes Out	0	0
	# Within City System	0	0
	# Supply to City Minutes	0	0
Short	# Outages (Blinks)	0	0
	# Customers Affected	0	0
	# Within City System	0	0
	# Supply to City Minutes	0	0
<b>Totals</b>			
Total Long Outages		12	13
Total Short Outages (Blinks)		0	0
Total Customers Out (Long)		199	115
Total Customers Affected (Short- Blinks)		0	0
Total Customer Minutes Out		19,900	18856
Total Outages Within City System		12	13
Total Outages in Supply to City		0	0

Number of Outages (by Cause)					
Cause #	Description	Total This Month	This Month Last Year	Rolling AT	% AT
0	Electric Supply Disruption to City	0	0	1	0%
1	Fallen Line / Rotted Pole	0	2	3	1%
2	Bad U/G Cable	0	2	19	7%
3	Lightning	0	0	15	5%
4	Animal Contact	4	3	68	25%
5	Tree Contact	1	2	57	21%
6	Contamination / Foreign Debris	0	0	0	0%
7	Human	0	0	7	3%
8	Other	0	0	4	1%
9	Undetermined	0	0	0	0%
10	Failed Device	7	4	99	36%
	<b>Total</b>	<b>12</b>	<b>13</b>	<b>273</b>	

AT - Annual 12 Month Total

12 Month Outage Statistics		
Index	As of This Month	As of This Month Last Year
ASAI (%)	99.9634	99.7469
CAIDI (Long) (min)	221.03	816.79
SAIDI (Long) (min)	16.03	110.87
SAIFI (Long) (ints/tot cust)	0.07	0.14
SAIFI (Short) (ints/tot cust)	0.00	0.00

ASAI - Average Service Availability Index  
(customer minutes available/total customer minutes, as a %)

CAIDI - Customer Average Interruption Duration Index  
(average minutes interrupted per interrupted customer)

SAIDI - System Average Interruption Duration Index  
(average minutes interrupted per customer for all customers)

SAIFI (Long) - System Average Interruption Frequency Index  
(# of long interruptions per customer for all customers)

SAIFI (Short) - System Average Interruption Frequency Index  
(# of short interruptions per customer for all customers)

S/U - Scheduled or Unscheduled  
Ints - # of Interruptions  
Long - >1 min; Short - <1 min  
Cause # - see table on page 3

South Haven Electric Distribution System

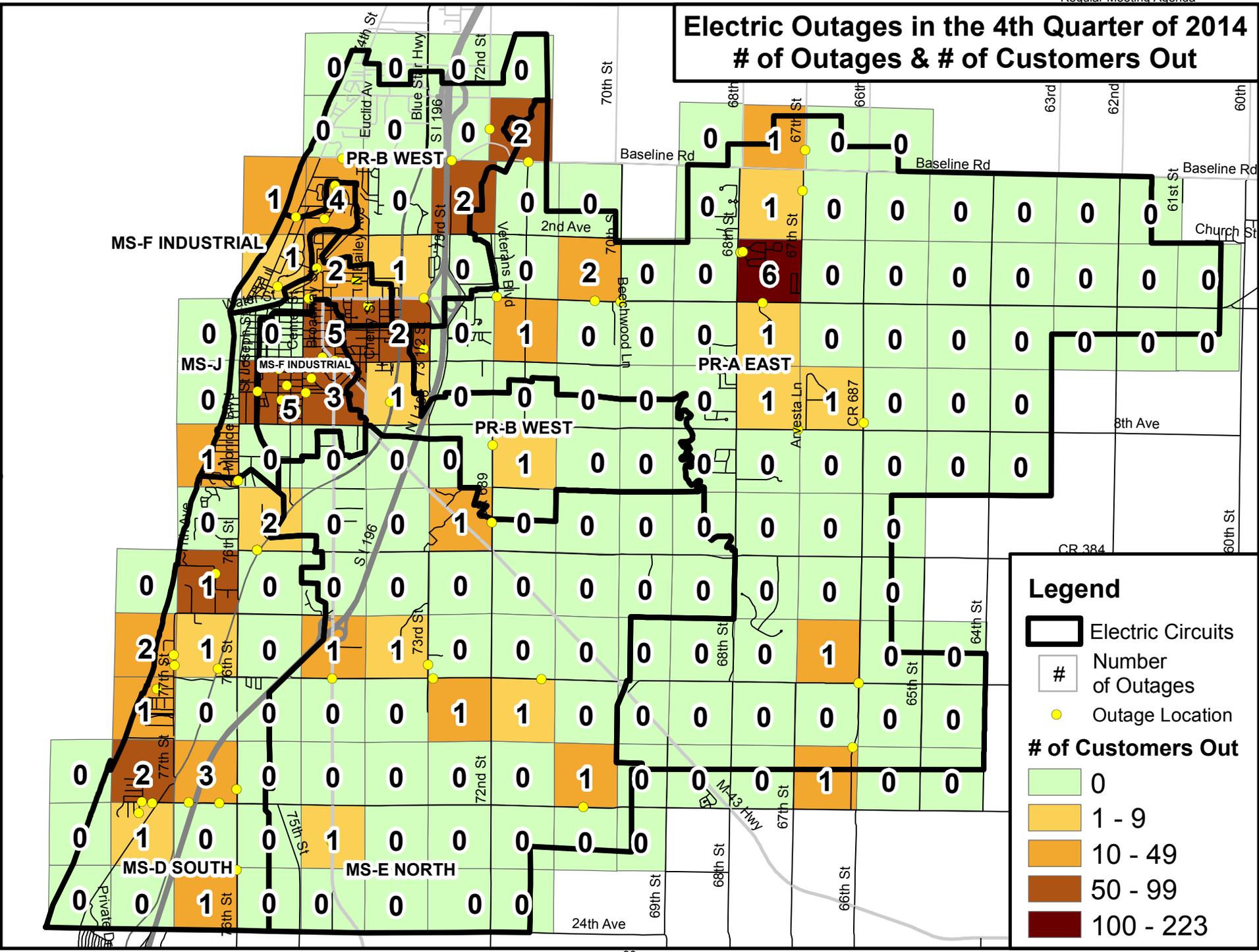
RELIABILITY REPORT

DEC 2014

Month	Dec 13	Jan 14	Feb 14	Mar 14	Apr 14	May 14	Jun 14	Jul 14	Aug 14	Sep 14	Oct 14	Nov 14	Dec 14
Number of Customers	8,130	8,248	8,248	8,248	8,239	8,239	8,239	8,140	8,140	8,140	8,262	8,262	8,262
<b>Unscheduled Outages</b>													
Long Outages # Outages	13	15	10	17	18	29	22	22	37	33	32	25	12
# Customers Out	115	198	178	132	557	503	419	421	1,605	1,864	690	388	199
# Minutes Out	2,256	2,865	1,715	3,560	2,229	3,510	3,305	2,425	6,790	4,339	4,593	5,035	1,115
# Customer Mins	18,856	42,350	38,010	43,150	115,429	83,685	57,380	52,755	502,220	417,779	118,438	90,140	19,900
# City System	13	15	10	17	18	29	22	22	37	32	32	25	12
# Supply to City Minutes	0	0	0	0	0	0	0	0	0	160	0	0	0
Short Outages # Outages (Blinks)	0	0	0	0	0	0	0	0	0	0	0	0	0
# Customers Out	0	0	0	0	0	0	0	0	0	0	0	0	0
# City System	0	0	0	0	0	0	0	0	0	0	0	0	0
# Supply to City Minutes	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Scheduled Outages</b>													
Long Outages # Outages	0	0	0	0	0	0	0	0	0	0	0	0	0
# Customers Out	0	0	0	0	0	0	0	0	0	0	0	0	0
# Minutes Out	0	0	0	0	0	0	0	0	0	0	0	0	0
# Customer Mins	0	0	0	0	0	0	0	0	0	0	0	0	0
# City System	0	0	0	0	0	0	0	0	0	0	0	0	0
# Supply to City Minutes	0	0	0	0	0	0	0	0	0	0	0	0	0
Short Outages # Outages (Blinks)	0	0	0	0	0	0	0	0	0	0	0	0	0
# Customers Out	0	0	0	0	0	0	0	0	0	0	0	0	0
# City System	0	0	0	0	0	0	0	0	0	0	0	0	0
# Supply to City Minutes	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Totals</b>													
Total Long Outages	13	15	10	17	18	29	22	22	37	33	32	25	12
Total Short Outages (Blinks)	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Custs Out (Long)	115	198	178	132	557	503	419	421	1,605	1,864	690	388	199
Total Custs Out (Short Blinks)	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Cust Mins Out	18,856	42,350	38,010	43,150	115,429	83,685	57,380	52,755	502,220	417,779	118,438	90,140	19,900
Total City System	13	15	10	17	18	29	22	22	37	32	32	25	12
Total Supply to City	0	0	0	0	0	0	0	0	0	1	0	0	0
<b>Indices</b>													
SAI (%)	99.75	99.75	99.75	99.75	99.75	99.75	99.96	99.96	99.95	99.94	99.95	99.96	99.96
CAIDI (Long) (min)	816.79	854.46	863.95	861.35	834.00	812.86	297.99	297.83	307.49	296.70	257.58	223.51	221.03
SAIDI (Long) (min)	110.87	109.17	108.94	109.27	110.30	110.77	17.13	17.01	21.07	24.78	22.40	16.04	16.03
SAIFI (long int/cust)	0.14	0.13	0.13	0.13	0.13	0.14	0.06	0.06	0.07	0.08	0.09	0.07	0.07
SAIFI (short int/cust)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# Electric Outages in the 4th Quarter of 2014

## # of Outages & # of Customers Out



### Legend

- Electric Circuits
- # Number of Outages
- Outage Location

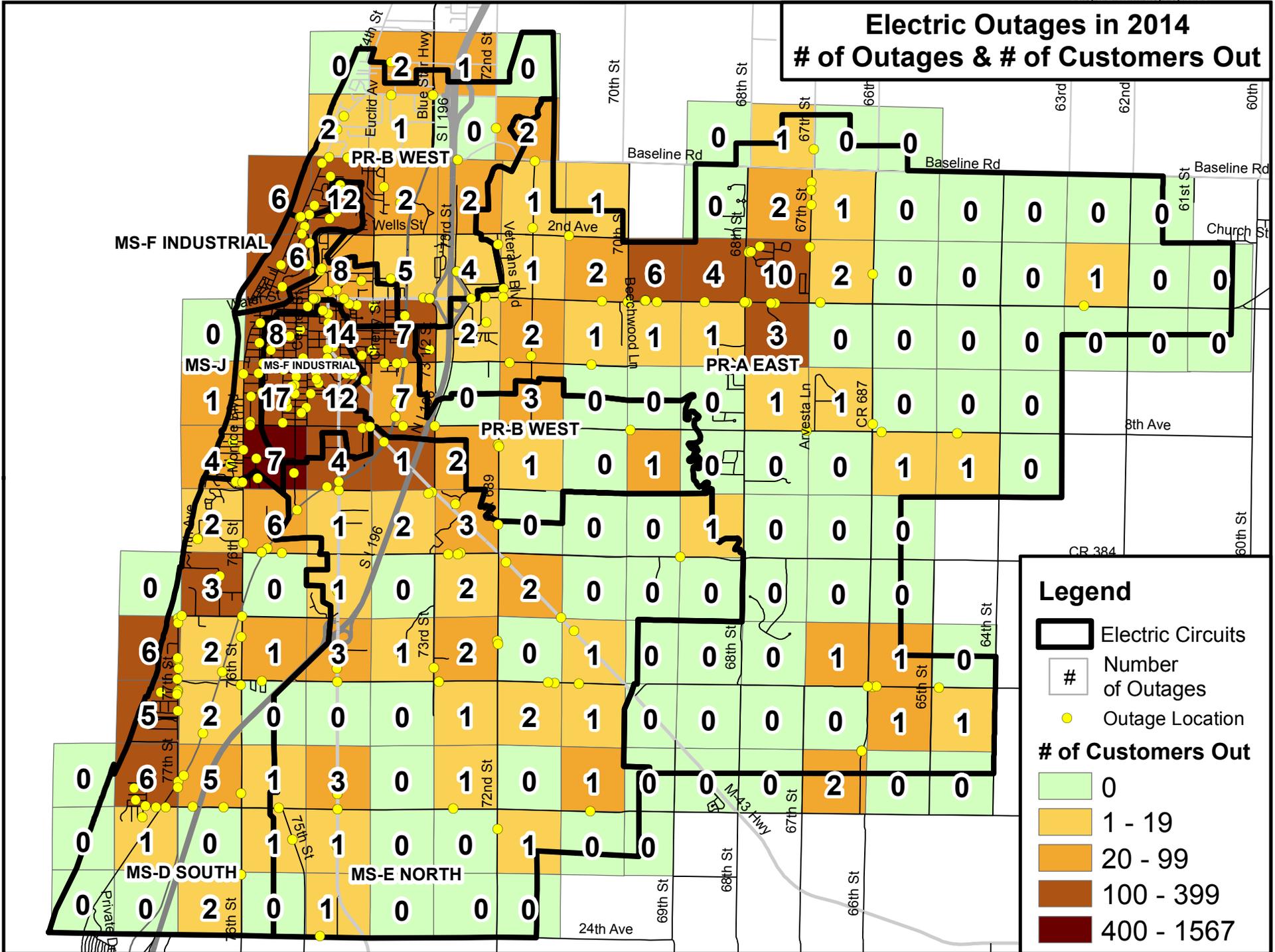
### # of Customers Out

- 0
- 1 - 9
- 10 - 49
- 50 - 99
- 100 - 223



# Electric Outages in 2014

## # of Outages & # of Customers Out



### Legend

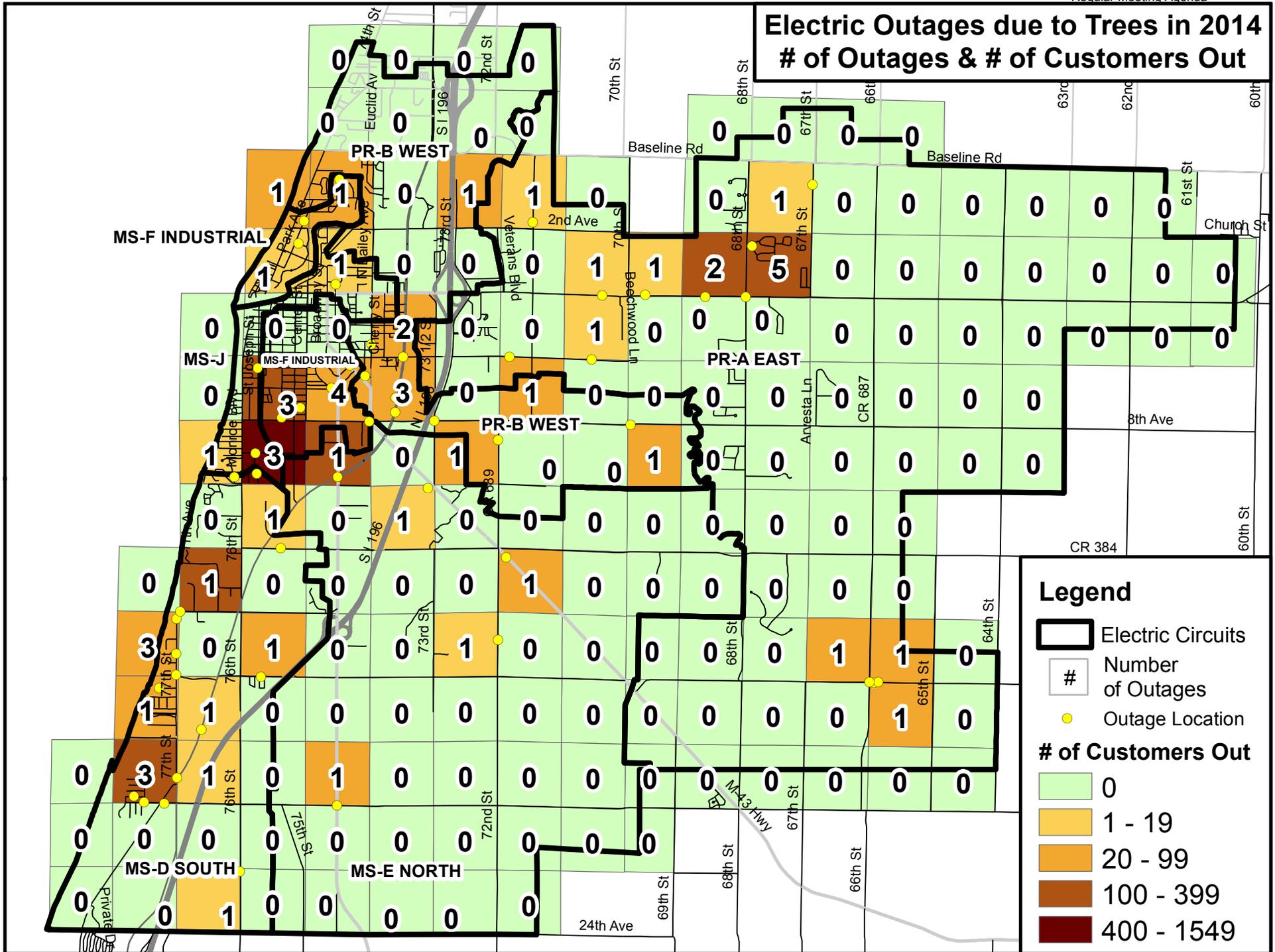
- Electric Circuits
- Number of Outages
- Outage Location

### # of Customers Out

- 0
- 1 - 19
- 20 - 99
- 100 - 399
- 400 - 1567

# Electric Outages due to Trees in 2014

## # of Outages & # of Customers Out





Engineering  
Architecture  
Land Surveying  
Marina/Waterfront  
Community Planning  
Landscape Architecture  
Development Services

# MEMORANDUM

DATE: January 20, 2015

TO: Roger Huff, City of South Haven

FROM: Timothy Drews, PE, Abonmarche

CC: Brian Dissette, City of South Haven  
Larry Halberstadt, City of South Haven  
Steve Oosting, City of South Haven  
Cindy Clendenon, MDEQ  
Tony McGhee, Abonmarche  
Christopher J. Cook, PE, Abonmarche

**RE: City of South Haven – SAW Grant Progress Report**

The following will summarize our progress to-date on the City of South Haven SAW Grant project:

## ASSET MANAGEMENT PLAN

1. Inventory – A majority of the initial data collection work has been completed. The attached map shows data points that have been collected. City staff is reviewing the data for accuracy and determining if additional points are needed. This task is on hold until the snow melts enough to continue.
2. Condition Assessment
  - a. Manhole Inspection - City staff has requested that manhole MACP Level 1 inspection data be collected with a few additional data fields from Level 2. The attached "Requirements for Manhole Inspections" form indicates the information to be gathered for each manhole. As a pilot program, we have started this work for manholes that are within the boundaries of streets that have had topographic survey completed for design work. The pilot program will provide a format for the remainder of the storm and sanitary systems and production rates to optimize the available budget.
  - b. CCTV work – City staff and Abonmarche met with Plummer's Environmental Services to discuss CCTV work related to the SAW

95 West Main Street  
Benton Harbor, MI 49022  
269.927.2295

361 First Street  
Manistee, MI 49660  
231.723.1198

503 Quaker Street  
South Haven, MI 49090  
269.637.1293

750 Lincoln Way East  
South Bend, IN 46601  
574.232.8700

341 Airport North Office Park  
Fort Wayne, IN 46825  
260.497.8823



- program. It was decided to implement a pilot program to determine preliminary costs, interaction with city staff pre-cleaning sewers, GIS integration, etc. This pilot program will concentrate on small sections of the system that are critical to the upcoming SAW-related design work.
- c. Storm Sewer System Metering and Modeling – this task will likely be eliminated and the budget re-allocated to other Asset Management efforts.
  3. Level of Service – Not yet started
  4. Criticality of Assets – Not yet started
  5. O&M Strategies/Revenue Structure/Funding/Report – Not yet started
  6. Other costs – We are starting to look at available Asset Management software packages, and will be scheduling demos in the near future.

### PHASE 1 Design Projects

Progress has been made as follows on the Phase 1 SAW Grant funded design projects:

1. Dyckman Avenue Reconstruction – Design complete, under construction, complete by Memorial Day
2. Black River Street Reconstruction – Topographic survey work complete, base drawing in progress.
3. North Shore Drive Reconstruction – Topographic survey work complete, base drawing complete, preliminary design underway including cross-section options.
4. Main Pump Station Consolidation – Topographic survey work complete, base drawing in progress. Abonmarche to contact HRC for a proposal to assist with design services.
5. Indian Grove Lift Station – Topographic survey work complete, base drawing complete, preliminary design underway including cross-section options. This project will coincide with the Monroe Boulevard project. Preliminary design is underway.
6. Peterson Ravine – Abonmarche to develop a bid package for manhole rehabilitation.
7. Center Street Sewer Separation – Topographic survey work complete, base drawing complete.



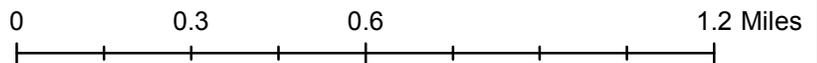
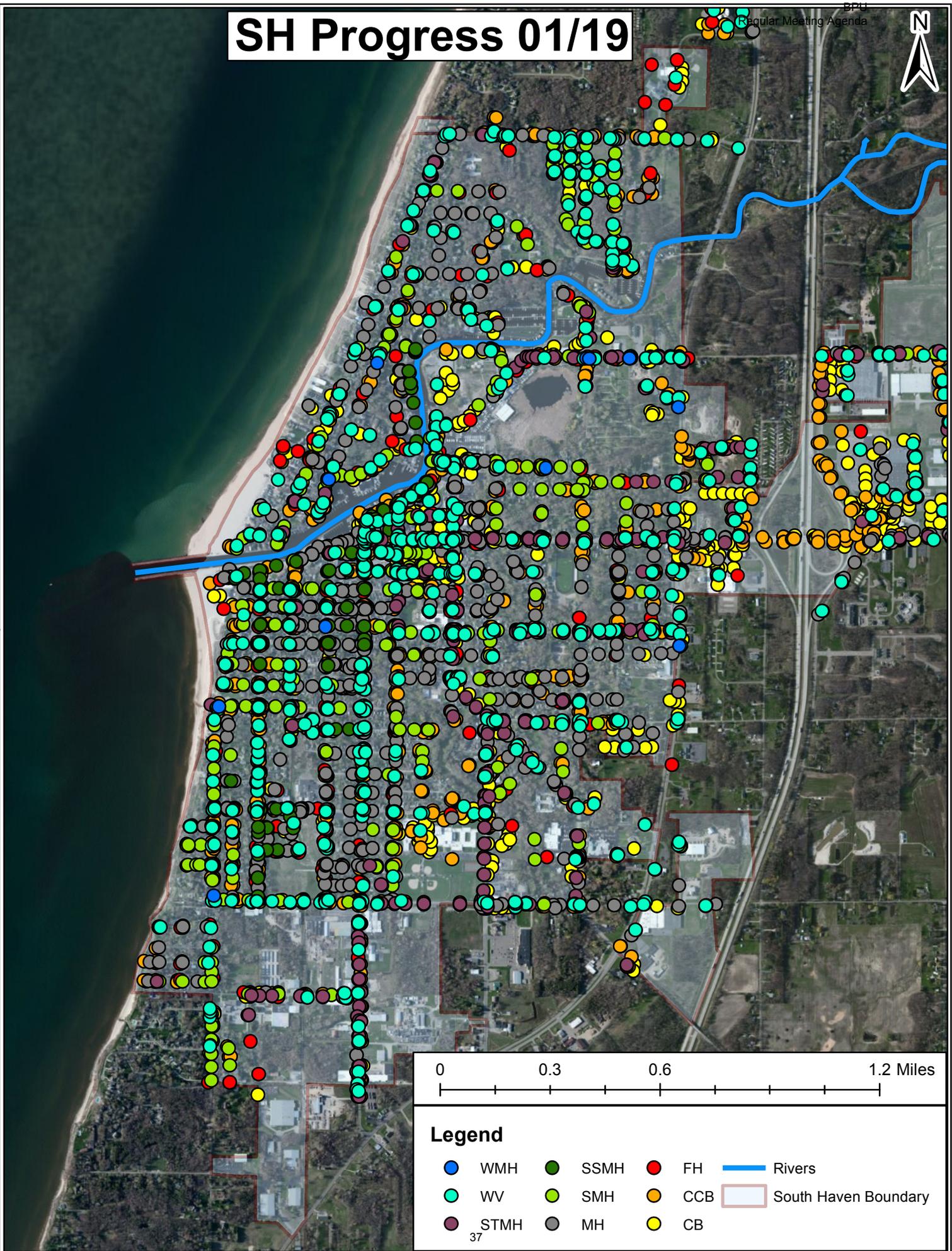
## PHASE 2 Design Projects

As the weather allows, we will kickoff the topographic survey work for the following Phase 2 SAW Grant funded design projects.

1. Center Street Reconstruction
2. Kalamazoo Street Reconstruction
3. Abell Avenue Reconstruction
4. Lyon Street Reconstruction
5. Indiana Avenue Reconstruction
6. Edgell Avenue Rehabilitation



# SH Progress 01/19



### Legend

- |      |      |     |                      |
|------|------|-----|----------------------|
| WMH  | SSMH | FH  | Rivers               |
| WV   | SMH  | CCB | South Haven Boundary |
| STMH | MH   | CB  |                      |

## City of South Haven SAW Grant Project No. 1179-01

### Requirements for Manhole Inspections

South Haven desires to record as much information as can be observed while still containing costs by not requiring personnel to enter manholes or utilize highly specialized equipment. Accordingly, South Haven's manhole inspections could be described as "MACP level 1 Plus" inspections which will include:

- *All* MACP level 1 data
- *Plus* select data fields from the MACP level 2 inspection forms
- *Plus* an abbreviated version of a defect assessment.

#### Manhole Inventory Data

For each manhole, record the following information:

- All MACP level 1 Mandatory data
- Any MACP Optional data which is known to the inspector
- MACP Field 60 – Frame Clear Opening Diameter
- MACP Field 65 – Frame Depth
- MACP Field 69 – Chimney Depth
- MACP Field 93 – Rim to Invert (Each Pipe Connection)
- MACP Field 95 – Pipe Material (Each Pipe Connection)
- MACP Field 97 – Pipe Diameter (Each Pipe Connection)
- MACP Field 100 – Seal Condition (Each Pipe Connection).

#### Manhole Defect Observations

South Haven does not find value in the higher cost of a comprehensive defect assessment for manholes according to MACP level 2 methodology due to the high level of detail needed for even minor defects. However, South Haven does not want the inspector to ignore major defects which may require immediate or short term response action on the part of the City. To that end, the following procedure should be used when performing manhole inspections:

Inspector should identify and photograph any defect of potential concern. Defects the City is most concerned about would be obstructions in the flow line or structural defects with soil or voids visible. If more than defect is present, identify and photograph each defect separately.

#### Special Instructions

Inspector to meet with City's GIS technician in advance to review data formatting, photograph numbering, and data collection/transfer protocols.

Obtain a block of unused manhole numbers from the City prior to performing manhole inspections. If inspecting any previously unmapped manhole, assign a new number from those provided. Describe location and record approximate distances to nearby identifiable features appearing on City GIS map. City will return to map GPS coordinates at a later date.

When reinstalling manhole covers which support traffic, take care to thoroughly remove all debris from the bearing surfaces to ensure the best possible fit. Field 49 "cover fit" should be the final observation made, after reinstalling the cover.



City of South Haven

## Agenda Item # 11

### Meijer Billing Correction

#### Background Information:

On Monday, Dec 29, 2014, the City of South Haven Utility Billing Office was contacted by the management company that handles all of Meijer stores accounts payables (over 200 stores). They were questioning electric usage and asked if we could verify the multiplier on the meter for the South Haven store; stating that all of the other stores average between 250,000 – 300,000 kWh per month and the South Haven store averages around 30,000 kWh per month. The Utility Billing Office verified that the original work order indicated a multiplier of 60, and that Meijer was being billed at that rate. A work order was written requesting to check the multiplier on the meter. The work order was completed by Department of Public Works Electric Department staff and indicated that the multiplier should be 600 not 60. Based on the difference in the multiplier, 3,233,520 kWh have been unbilled at a cost of \$222,177.90 uncollected. The Utility Billing Office worked with Meijer and was notified on January 5, 2015 that they would make full payment, which was received on January 14, 2015.

DPW staff investigated the incident and found that the new service order for the Meijer store was created on November 13, 2013. The trained DPW Electric Meter Worker began scheduled vacation time on November 14, 2013. On November 14, 2013, a senior DPW Electric Department Lineman performed the new service order. He registered the metering multiplier off of the tag that was on the potential transformer (PT) inside the cabinet that showed a 60:1 turn ratio (photo attached). He did not know that there is a set of current transformers (CT) in the upper side of the metering cabinet (photo attached but not legible due to the location in the top of an energized cabinet). The CT tag shows a ratio of 500:5 which yields a multiplier of 10. The multiplier of 10 is to be multiplied by 60 which yields the correct multiplier of 600.

#### Corrective Measures:

- Disciplinary Counseling – City management met with the staff member involved and addressed the error.
- CT and PT Metering Policy – The Electric Department has established a new policy requiring that only the qualified Electric Meter Worker shall perform the final registration of all metering multipliers and meter serial numbers after installation of all current transformers or potential transformers. If the Electric

Meter Worker is not available, the Electrical Superintendent shall consult with a qualified outside company. The Public Works Director and the Electrical Superintendent shall perform a final inspection of all new metering equipment containing CTs and PTs to verify the metering multipliers. DPW Electric Department Lineman shall continue to perform the installation of CT and PT equipment, but shall not perform the final registration of the metering used for utility billing.

- Multiplied Meter Audit – The Electric Department is in the process of a system-wide audit of all metering that includes multipliers to ensure all metering service, multipliers, and utility billing are correct. A metering field representative from Power Line Supply has been contracted to provide technical assistance with the audit.

**Support Material:**

New Service Order  
Multiplier Verification Work Order  
PT Tag Photo  
CT Tag Photo  
CT and PT Metering Policy

# New Service Order

New Service Type

Electric

Order Number

166

Date

11/13/2013 8:35

Name Meijer's Store	
Address 1223 Phoenix Road	Section No 125-30115
Account No 22017000	Meter No <del>21000</del> 94398 Main Store
Reading 00000	Read Date 11/14/13
City of <del>Rural</del> SHTWP	Type Of Customer Commercial } Industrial w/ Demand } Per Larry & Bill C.
New Meter Type Underground	Size 120' 277
No of Dials [ ]	Multiplier 60
Order Type New	Signed [Signature]
	Created By Debbie Keebler

60:1

~~0222~~ 0232  
~~0522~~ 0532  
~~1822~~ 1832  
~~1909~~ 1906

Demand Setup  
 Mult Usage 6  
 Mult Read 10

Electric Setup  
 Mult Usage 60  
 Mult Read 1

COPY

ELECTRICAL INSPECTION APPROVAL FORM

DATE: 11-8-13

THIS IS TO CERTIFY THAT THE ELECTRICAL INSTALLATION FOR:

OWNER: Meijer

JOB ADDRESS: 1223 Phoenix Main Store

ELECTRICAL CONTRACTOR: westmas

Act

PHONE: (616) 292-1955

CITY PERMIT

TOWNSHIP PERMIT

HAS BEEN INSPECTED AND IS APPROVED FOR CONNECTION TO YOUR FACILITIES FOR THE FOLLOWING SERVICE:

KIND: New

CLASS: Com

TYPE: a.c.

VOLTS: Primary to Customer Switch

AMPS:

PHASE: 3ø

NUMBER OF WIRES: —

NUMBER OF METERS: → 1

ELECTRICAL INSPECTOR

Lyle L.  
LYLE LESTER

FAX - 269-637-4778

PHONE - 269-637-0737

footage

Miss DigInfo!

CITY OF SOUTH HAVEN

January 26, 2015

Service Address: 1223 PHOENIX ST POWER

CUSTOMER NAME: MEIJER INC STORE #271

ACCOUNT #: 22017000

Work Order #: 51823

Regular Meeting Agenda

Due Date: 12/29/2014

Created Date: 12/29/2014 12:20 PM

Created By: keastman

Requested By: MEIJER INC STORE #271

Route/Seq: 125-30115

Demand

VERIFY MTR CONNECTIO

CREATED COMMENTS: JIM PEZZUTO..... I RECEIVED A CALL ASKING TO VERIFY MULTIPLIER OF 60 IS CORRECT ON THIS ACCOUNT METER. ALL OF THE OTHER STORES RUN TYPICALLY 250,000 - 300,000 KWH/MONTH AND THIS STORE IS ONLY AT ABOUT 40,000 KWH. PLEASE VERIFY SO I CAN CALL BACK TRACY AT ECOVA 866-322-4547 EXT 7050

Final Billing / Forwarding Address:

Address 1: PO BOX 2440
Address 2:
City: SPOKANE
State: WA
Zip: 99210-2440

New Customer Information:

Name:
Address 1:
Address 2:
City, St Zip:

Owners Name:

Landlord Transfer:

READING INFORMATION

Demand

VERIFY MTR CONNECTIO

ROUTE/SEQ#: 125-30115
METER ID: 94398
MULTIPLIER: 6.00

SIZE:
EMR: 94398

Table with 2 rows: CURRENT READ, CURRENT DEMAND READ

Location:

Electric

VERIFY MTR CONNECTIO

ROUTE/SEQ#: 125-30115
METER ID: 94398
MULTIPLIER: 60.00

SIZE:
EMR: 94398

Table with 2 rows: CURRENT READ, CURRENT DEMAND READ

Location:

Should be a multiplier of 600 NOT 60

Completed Comments:

SIGNED:

[Handwritten Signature]

DATE WORK DONE:

12/29/14

FOR OFFICE USE ONLY:

Connection Date: 12/17/2013

- 1. Service Order Completed: 2. Termination Complete: 3. New Account Typed:
Reconnected Services: Disconnected Services: Charges Added:



VOLTAGE TRANSFORMER

TYPE  
JVW-110C

RATIO  
**60:1**

PRI VOLTS 7200  
1000 VA @ 30 °C  
ACC CL 0.3 Y

60 Hz BIL 110kV  
700VA @ 55 °C

AE-1792

Caution: Read GEH-230

CATALOG NUMBER 765C131101

SERIAL NUMBER 53683243

CLEARWATER, FL USA

[www.gedigitalenergy.com](http://www.gedigitalenergy.com)





# City of South Haven

## Department of Public Works

DPW Building • 1199 8<sup>th</sup> Ave. • South Haven, Michigan 49090  
Telephone (269) 637-0737 • Fax (269) 637-4778

To: All DPW Electric Department Employees

From: Roger C. Huff, P.E., DPW Director

CC: Brian Dissette, City Manager  
Deb Lull, Human Resources Director

Date: January 19, 2015

**RE: CT and PT Metering Policy**

Effective immediately, only the qualified Electric Meter Worker shall perform the final registration of all metering multipliers and meter serial numbers after installation of all current transformers or potential transformers. If the Electric Meter Worker is not available, the Electrical Superintendent shall consult with a qualified outside company. The Public Works Director and the Electrical Superintendent shall perform a final inspection of all new metering equipment containing CTs and PTs to verify the metering multipliers. DPW Electric Department Lineman shall continue to perform the installation of CT and PT equipment, but shall not perform the final registration of the metering used for utility billing.



City of South Haven

## Agenda Item #12

### I-196 Business Park, Water Tower Painting

#### Background Information:

In 1998, the City constructed a water booster pump station and a 300,000 gallon spheroid water storage tank east of I-196. This created a high pressure service district, enabling the City to extend its water distribution system into an area of higher ground elevation. The improvements permitted the construction of a water distribution system to serve the properties in and adjacent to LDFA 3. Properties in LDFA 2 are also served by this water storage tank.

At the March 10, 2014 LDFA meeting, the Board approved their annual budget for the 2014-15 fiscal year. This budget includes \$75,000 for repainting of the exterior of the water storage tank in the I-196 business park, located within the boundary of LDFA 3.

The water storage tank coating is an epoxy urethane system. When last inspected in 2008, the coating was noted to be in overall good condition with some minor failures on the baseplate, roof vent neck, and on the painter's rail and roof safety rail. The consultant who performed the inspection advised the City to budget for exterior overcoating in 3-5 years. The consultant's report indicates that average exterior coating life is 12-15 years.

The proposed work will recoat the exterior of the tank with a full coat of epoxy, followed by two full coats of polyurethane. This system will have a life span of 12-15 years and can be recoated again at that time. Performing these periodic recoatings will postpone the need to strip the tank down to bare metal until 2038. Minor repairs to some interior coatings will also be completed.

The consultant that prepared the 2008 inspection report estimates the cost of work as follows:

Exterior overcoat:	\$55,000
Dry interior spot repaint:	<u>\$5,000</u>
Subtotal:	\$60,000
Engineering and contingencies:	<u>\$15,000</u>
Total Project Cost:	<b>\$75,000</b>

At their December meeting, the LDFA approved a contract with Dixon Engineering of Lake Odessa, Michigan to provide engineering, bidding, and inspection services for the tank recoating project in the amount of \$10,225.00.

Staff is requesting that the Board of Public Utilities and LDFA provide input on the exterior appearance of the water tower to determine if an alternate design is desired. The attached image shows the existing tank appearance. Dixon Engineering has indicated that a number of their clients are now requesting a two-tone paint design. Condensation often forms on the exterior to the tank. The condensate then runs to the bottom of the bowl and mold/mildew will

grow in this location. If a darker paint color is used on the riser and bottom of the bowl, then the mildew is less apparent.

Once the Board and the LDFA have provided feedback, staff will have renderings prepared to illustrate the desired design. Items for discussion include the following:

- Single color on tank and riser or two-tone paint
- Color of tank and riser
- Size of logo, style of logo
- Location of lettering and typeface used

**Recommendation:**

Review the attached images and provide feedback to staff on desired tank appearance. Staff will also be seeking the input of the LDFA at their next available meeting. If significant differences arise between the desires of the two boards, then a subcommittee of members from each board could be created to discuss the issue further.

**Attachments:**

Photos of Existing Tank  
Two-Tone Tank Sample

Existing Tank Appearance



Sample Two-Tone Tank: Marion Township

