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# Memorandum

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**To:** Mayor & Members of Council  
**From:** Monica Irelan, City Manager  
**Subject:** General Information  
**Date:** January 8, 2016

## CALENDAR

MONDAY, JANUARY 11<sup>TH</sup>

### AGENDAS

- 1) **Electric Committee & Board of Public Affairs @6:30 pm**
  - a) *Approval of Minutes* – the December 14, 2015 meeting minutes are enclosed.
  - b) *Review/Approval of the Power Supply Cost Adjustment Factor* – the reports for January, 2016 are attached.
  - c) *Electric Department Report* for December 2015 is attached
- 2) **Board of Public Affairs @6:30 pm**
- 3) **Water/Sewer Committee @7:00 pm**
  - a) *Approval of Minutes* – the meeting minutes from November 9, 2015 are enclosed.
  - b) *Review of Unlimited Pickup Procedures (Tabled)*
  - c) *Review of Water Contract Proposals with Satellite Customers* – please see my enclosed Memorandum
- 4) **Municipal Properties/ED Committee in Joint Session with City Council**
  - a) *Approval of Minutes* – the minutes from the December 14, 2015 meeting are enclosed.
  - b) *Review of Current Engineering Rules (Tabled)* – a draft copy of the engineering rules are enclosed.
  - c) *Review of Historical Data Regarding Previous Assessment Percentages*

TUESDAY, JANUARY 12

### MEETINGS CANCELED

- a. *Board of Zoning Appeals*
- b. *Planning Commission*

### INFORMATIONAL ITEMS

TMACOG January Newsletter

December 2015							January 2016							February 2016						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
		1	2	3	4	5						1	2		1	2	3	4	5	6
6	7	8	9	10	11	12	3	4	5	6	7	8	9	7	8	9	10	11	12	13
13	14	15	16	17	18	19	10	11	12	13	14	15	16	14	15	16	17	18	19	20
20	21	22	23	24	25	26	17	18	19	20	21	22	23	21	22	23	24	25	26	27
27	28	29	30	31			24	25	26	27	28	29	30	28	29					
							31													

 Calendar

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>	<b>31</b>	<b>1</b> HOLIDAY - Happy New Year	<b>2</b>
<b>3</b>	<b>4</b> 7:00 PM City COUNCIL Meeting	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b> 8:00 AM Christmas Tree Pickup (by Napoleon Fire and Rescue)
<b>10</b>	<b>11</b> 6:30 PM ELECTRIC Committee Board of Public Affairs (BOPA) Mtg. 7:00 PM WATER & SEWER Committee Mtg. 7:30 PM Municipal Properties/ED Committee Meeting	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>
<b>17</b>	<b>18</b> 6:00 PM Tree Commission Meeting 6:15 PM Parks & Recreation Committee Meeting 7:00 PM City COUNCIL Meeting	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>
<b>24</b>	<b>25</b> 6:30 PM FINANCE & BUDGET Committee Meeting 7:30 PM SAFETY & HUMAN RESOURCES Committee Meeting	<b>26</b>	<b>27</b> 6:30 PM Parks & Rec Board Meeting	<b>28</b>	<b>29</b>	<b>30</b>
<b>31</b>	<b>1</b> 6:15 PM TECHNOLOGY Committee Meeting 7:00 PM City COUNCIL Meeting	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>

City of Napoleon, Ohio  
Electric Committee

LOCATION: Council Chambers, 255 West Riverview Avenue, Napoleon, Ohio

Meeting Agenda  
Monday, January 11, 2016 at 6:30pm

- I. Approval of Minutes (*In the absence of any objections or corrections, the Minutes shall stand approved*)
- II. Review/Approval of the Power Supply Cost Adjustment Factor for January 2016:  
PSCAF three (3) month averaged factor:  $-\$0.00440$   
JV2:  $\$0.035222$   
JV5:  $\$0.035222$
- III. Electric Department Report
- IV. Any other matters currently assigned to the Committee
- V. Adjournment

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Gregory J. Heath, Finance Director/Clerk of Council



**Electric Department Report**

Clapp gave the Electric Department Report, adding that there are now cameras to replace timers at some traffic lights in the City. Maassel asked how many items are in the inventory to be counted; Clapp estimated that there are thousands of parts that are inventoried by two (2) employees. Travis thanked Clapp and his employees for cleaning up the area where a semi pulled down electric wires on Scott Street recently. Irelan reported that AMP sent the City a signed copy of the note that was paid off early.

**Any Other Matters To Come Before The Board**

None

**Any Other Matters Assigned To The Committee**

None

**BOPA Motion To Adjourn**

Motion: DeWit Second: Cordes  
To adjourn the meeting at 6:42pm

**Passed**

**Yea- 2**

**Nay- 0**

Roll call vote on above motion:  
Yea- Cordes, DeWit  
Nay-

**Electric Motion To Adjourn**

Motion: Maassel Second: Cordes  
To adjourn the Electric Committee meeting at 6:42pm

**Passed**

**Yea- 3**

**Nay- 0**

Roll call vote on above motion:  
Yea- Sheaffer, Maassel, Helberg  
Nay

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**Date**

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Travis Sheaffer, Chair

JANUARY 2016		City of Napoleon, Ohio									
DETERMINATION OF MONTHLY - POWER SUPPLY COST ADJUSTMENT FACTOR (PSCAF)											
AMP Billed Usage Month	City Billing Month	City Net kWh Delivered	Power Supply Costs (*Net of Known) (Credit's)	Rolling 3-Month Totals Current + Prior 2 Months		Rolling 3 Month Average Cost	Less: Fixed Base Power Supply Cost	PSCA Dollar Difference + or (-)	PSCAF 3 MONTH AVERAGED FACTOR		
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)		
		Actual Billed	Actual Billed	c + prior 2 Mo	d + prior 2 Mo	f / e	\$0.07194 Fixed	g + h	i X 1.075		
Dec '13	Feb '14	14,533,938	\$ 1,106,152.18	41,137,815	\$ 2,989,656.83	\$ 0.07267	\$ (0.07194)	\$ 0.00073	\$ 0.00079		
Jan '14	March '14	15,559,087	\$ 1,172,398.60	43,288,581	\$ 3,206,860.62	\$ 0.07408	\$ (0.07194)	\$ 0.00214	\$ 0.00230		
Feb '14	April '14	13,478,231	\$ 947,067.14	43,571,256	\$ 3,225,617.92	\$ 0.07403	\$ (0.07194)	\$ 0.00209	\$ 0.00225		
March '14	May '14	13,601,244	\$ 1,078,817.99	42,638,562	\$ 3,198,283.73	\$ 0.07501	\$ (0.07194)	\$ 0.00307	\$ 0.00330		
April '14	June '14	11,742,091	\$ 857,959.09	38,821,566	\$ 2,883,844.22	\$ 0.07428	\$ (0.07194)	\$ 0.00234	\$ 0.00252		
May '14	July '14	12,551,978	\$ 1,033,671.88	37,895,313	\$ 2,970,448.96	\$ 0.07839	\$ (0.07194)	\$ 0.00645	\$ 0.00693		
June '14	Aug '14	13,993,641	\$ 1,106,124.65	38,287,710	\$ 2,997,755.62	\$ 0.07830	\$ (0.07194)	\$ 0.00636	\$ 0.00683		
July '14	Sept '14	14,400,701	\$ 1,168,920.36	40,946,320	\$ 3,308,716.89	\$ 0.08081	\$ (0.07194)	\$ 0.00887	\$ 0.00953		
Aug '14	Oct '14	14,963,886	\$ 1,130,286.47	43,358,228	\$ 3,405,331.48	\$ 0.07854	\$ (0.07194)	\$ 0.00660	\$ 0.00709		
Sept '14	Nov '14	12,933,928	\$ 873,122.55	42,298,515	\$ 3,172,329.38	\$ 0.07500	\$ (0.07194)	\$ 0.00306	\$ 0.00329		
Oct '14	Dec '14	12,957,031	\$ 1,007,380.97	40,854,845	\$ 3,010,789.99	\$ 0.07369	\$ (0.07194)	\$ 0.00175	\$ 0.00189		
Nov '14	Jan '15	13,630,693	\$ 1,048,435.47	39,521,652	\$ 2,928,938.99	\$ 0.07411	\$ (0.07194)	\$ 0.00217	\$ 0.00233		
Dec '14	Feb '15	14,030,217	\$ 1,077,557.19	40,617,941	\$ 3,133,373.63	\$ 0.07714	\$ (0.07194)	\$ 0.00520	\$ 0.00559		
Jan '15	March '15	14,814,734	\$* 1,036,847.14	42,475,644	\$ 3,162,839.80	\$ 0.07446	\$ (0.07194)	\$ 0.00252	\$ 0.00271		
Feb '15	April '15	13,867,347	\$ 960,357.18	42,712,298	\$ 3,074,761.51	\$ 0.07199	\$ (0.07194)	\$ 0.00005	\$ 0.00005		
March '15	May '15	13,844,262	\$ 1,003,564.83	42,526,343	\$ 3,000,769.15	\$ 0.07056	\$ (0.07194)	\$ (0.00138)	\$ (0.00148)		
April '15	June '15	12,167,778	\$ 886,097.15	39,879,387	\$ 2,850,019.16	\$ 0.07147	\$ (0.07194)	\$ (0.00047)	\$ (0.00051)		
May '15	July '15	11,261,298	\$ 881,002.83	37,273,338	\$ 2,770,664.81	\$ 0.07433	\$ (0.07194)	\$ 0.00239	\$ 0.00257		
Jun '15	Aug '15	13,738,522	\$ 916,655.51	37,167,598	\$ 2,683,755.49	\$ 0.07221	\$ (0.07194)	\$ 0.00027	\$ 0.00029		
Jul '15	Sep '15	15,053,827	\$ 979,654.01	40,053,647	\$ 2,777,312.35	\$ 0.06934	\$ (0.07194)	\$ (0.00260)	\$ (0.00280)		
Aug '15	Oct '15	15,336,926	\$ 965,909.05	44,129,275	\$ 2,862,218.57	\$ 0.06486	\$ (0.07194)	\$ (0.00708)	\$ (0.00761)		
Sept '15	Nov '15	14,245,268	\$ 1,020,249.35	44,636,021	\$ 2,965,812.41	\$ 0.06644	\$ (0.07194)	\$ (0.00550)	\$ (0.00591)		
Oct '15	Dec '15	13,510,482	\$* 809,877.76	43,092,676	\$ 2,796,036.16	\$ 0.06488	\$ (0.07194)	\$ (0.00706)	\$ (0.00758)		
<b>Nov '15</b>	<b>Jan '16</b>	<b>13,060,476</b>	<b>\$* 939,293.49</b>	<b>40,816,226</b>	<b>\$ 2,769,420.60</b>	<b>\$ 0.06785</b>	<b>\$ (0.07194)</b>	<b>\$ (0.00409)</b>	<b>\$ (0.00440)</b>		

**BILLING SUMMARY AND CONSUMPTION for BILLING CYCLE - JANUARY, 2016**

2016 - JANUARY BILLING WITH DECEMBER 2015 DATA BILLING UNITS

**PREVIOUS MONTH'S POWER BILLS - PURCHASED POWER KWH AND COST ALLOCATIONS BY DEMAND & ENERGY:**

DATA PERIOD	MONTH / YR	DAYS IN MONTH	MUNICIPAL PEAK					
AMP-Ohio Bill Month	NOVEMBER, 2015	30	23,136					
City-System Data Month	DECEMBER, 2015	31						
City-Monthly Billing Cycle	JANUARY, 2016	31						
			FREEMONT	JV-6	PRAIRIE STATE	JV-5	JV-2	AMP SOLAR
<b>PURCHASED POWER-RESOURCES -&gt;</b>	AMP CT	ENERGY	WIND	SCHED. @ PJMC	NYPA	HYDRO	PEAKING	PHASE 1
	SCHED. @ ATSI	SCHEDULED	SCHED. @ ATSI	REPLMT@ PJMC	SCHED. @ NYIS	7x24 @ ATSI	SCHED. @ ATSI	SCHED. @ ATSI
Delivered kWh (On Peak) ->	0	4,927,131	59,353	3,612,251	635,864	2,223,360	352	102,467
Delivered kWh (Off Peak) ->								
Delivered kWh (Replacement/Losses/Offset) ->						32,418		
Delivered kWh/Sale (Credits) ->								
<b>Net Total Delivered kWh as Billed -&gt;</b>	<b>0</b>	<b>4,927,131</b>	<b>59,353</b>	<b>3,612,251</b>	<b>635,864</b>	<b>2,255,778</b>	<b>352</b>	<b>102,467</b>
Percent % of Total Power Purchased->	0.0000%	37.7255%	0.4544%	27.6579%	4.8686%	17.2718%	0.0027%	0.7846%
<b>COST OF PURCHASED POWER:</b>								
<b>DEMAND CHARGES (+Debits)</b>								
Demand Charges	\$27,530.61	\$36,516.76	\$1,187.34	\$39,920.34	\$5,934.77	\$24,377.29	\$407.95	
Debt Services (Principal & Interest)		\$44,196.22		\$92,861.58		\$51,942.68		
<b>DEMAND CHARGES (-Credits)</b>								
Transmission Charges (Demand-Credits)	-\$28,307.02		-\$387.17			-\$9,792.95	-\$285.35	
Capacity Credit	-\$97,918.61	-\$93,525.75	-\$1,131.13	-\$14,999.33	-\$6,810.70	-\$33,531.82	-\$1,703.65	
<b>Sub-Total Demand Charges</b>	<b>-\$98,695.02</b>	<b>-\$12,812.77</b>	<b>-\$330.96</b>	<b>\$117,782.59</b>	<b>-\$875.93</b>	<b>\$32,995.20</b>	<b>-\$1,581.05</b>	<b>\$0.00</b>
<b>ENERGY CHARGES (+Debits):</b>								
Energy Charges - (On Peak)	\$0.00	\$114,095.03		\$41,931.33	\$7,220.33	\$53,589.61	\$9.11	\$8,709.67
Energy Charges - (Replacement/Off Peak)								
Net Congestion, Losses, FTR		\$8,274.96		\$8,222.76	\$3,003.37			
Transmission Charges (Energy-Debits)				\$21,123.15				
ESPP Charges								
Bill Adjustments (General & Rate Levelization)		\$188.92					\$7.88	
<b>ENERGY CHARGES (-Credits or Adjustments):</b>								
Energy Charges - On Peak (Sale or Rate Stabilization)								
Net Congestion, Losses, FTR								
Bill Adjustments (General & Rate Levelization)				\$45,788.80	\$4,518.19			
<b>Sub-Total Energy Charges</b>	<b>\$0.00</b>	<b>\$122,558.91</b>	<b>\$0.00</b>	<b>\$117,066.04</b>	<b>\$14,741.89</b>	<b>\$53,589.61</b>	<b>\$16.99</b>	<b>\$8,709.67</b>
<b>TRANSMISSION &amp; SERVICE CHARGES, MISC.:</b>								
RPM Charges Capacity - (+Debit)								
RPM Charges Capacity - (-Credit)								
Service Fees AMP-Dispatch Center - (+Debit/-Credit)								
Service Fees AMP-Part A - (+Debit/-Credit)								
Service Fees AMP-Part B - (+Debit/-Credit)								
Other Charges & Bill Adjustments - (+Debit/-Credit)								
<b>Sub-Total Service Fees &amp; Other Charges</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
<b>TOTAL - ALL COSTS OF PURCHASED POWER</b>	<b>-\$98,695.02</b>	<b>\$109,746.14</b>	<b>-\$330.96</b>	<b>\$234,848.63</b>	<b>\$13,865.96</b>	<b>\$86,584.81</b>	<b>-\$1,564.06</b>	<b>\$8,709.67</b>
<b>Purchased Power Resources - Cost per KWH-&gt;</b>	<b>\$0.000000</b>	<b>\$0.022274</b>	<b>-\$0.005576</b>	<b>\$0.065014</b>	<b>\$0.021806</b>	<b>\$0.038384</b>	<b>-\$4.443352</b>	<b>\$0.085000</b>

<b>BILLING SUMMARY AND CONS</b>							
<b>2016 - JANUARY BILLING WITH DECEMBER 2015</b>							
<b>PREVIOUS MONTH'S POWER BILLS - PL</b>							
<b>DATA PERIOD</b>							
AMP-Ohio Bill Month							
City-System Data Month							
City-Monthly Billing Cycle							
	( MORGAN STNLY	EFFNCY.SMART	NORTHERN	TRANSMISSION	SERVICE FEES	MISCELLANEOUS	TOTAL -
<b>PURCHASED POWER-RESOURCES -&gt;</b>	( REPLMNT.2015-20	POWER PLANT	POWER	CHARGES	DISPATCH, A & B	CHARGES &	ALL
	( 7x24 @ AD	2014 - 2017	POOL	Other Charges	Other Charges	LEVELIZATION	RESOURCES
Delivered kWh (On Peak) ->	2,736,000	0	64,382				14,361,160
Delivered kWh (Off Peak) ->			33,754				33,754
Delivered kWh (Replacement/Losses/Offset) ->							32,418
Delivered kWh/Sale (Credits) ->			-1,366,856				-1,366,856
<b>Net Total Delivered kWh as Billed -&gt;</b>	<b>2,736,000</b>	<b>0</b>	<b>-1,268,720</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13,060,476</b>
Percent % of Total Power Purchased->	20.9487%	0.0000%	-9.7142%	0.0000%	0.0000%	0.0000%	100.0000%
						Verification Total ->	100.0000%
<b>COST OF PURCHASED POWER:</b>							
<b>DEMAND CHARGES (+Debits)</b>							
Demand Charges				\$95,624.01			\$231,499.07
Debt Services (Principal & Interest)							\$189,000.48
<b>DEMAND CHARGES (-Credits)</b>							
Transmission Charges (Demand-Credits)							-\$38,772.49
Capacity Credit							-\$249,620.99
<b>Sub-Total Demand Charges</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$95,624.01</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$132,106.07</b>
<b>ENERGY CHARGES (+Debits):</b>							
Energy Charges - (On Peak)	\$172,231.20		\$2,553.38	\$11,264.27			\$411,603.93
Energy Charges - (Replacement/Off Peak)			\$903.14				\$903.14
Net Congestion, Losses, FTR	-\$1,574.78						\$17,926.31
Transmission Charges (Energy-Debits)							\$21,123.15
ESPP Charges		\$17,953.72					\$17,953.72
Bill Adjustments (General & Rate Levelization)						\$0.00	\$196.80
<b>ENERGY CHARGES (-Credits or Adjustments):</b>							
Energy Charges - On Peak (Sale or Rate Stabilization)			-\$34,156.80			\$0.00	-\$34,156.80
Net Congestion, Losses, FTR							\$0.00
Bill Adjustments (General & Rate Levelization)							\$50,306.99
<b>Sub-Total Energy Charges</b>	<b>\$170,656.42</b>	<b>\$17,953.72</b>	<b>-\$30,700.28</b>	<b>\$11,264.27</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$485,857.24</b>
<b>TRANSMISSION &amp; SERVICE CHARGES, MISC.:</b>							
RPM Charges Capacity - (+Debit)				\$310,800.64			\$310,800.64
RPM Charges Capacity - (-Credit)							\$0.00
Service Fees AMP-Dispatch Center - (+Debit/-Credit)					\$0.00		\$0.00
Service Fees AMP-Part A - (+Debit/-Credit)					\$2,921.91		\$2,921.91
Service Fees AMP-Part B - (+Debit/-Credit)					\$7,607.63		\$7,607.63
Other Charges & Bill Adjustments - (+Debit/-Credit)							\$0.00
<b>Sub-Total Service Fees &amp; Other Charges</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$310,800.64</b>	<b>\$10,529.54</b>	<b>\$0.00</b>	<b>\$321,330.18</b>
<b>TOTAL - ALL COSTS OF PURCHASED POWER</b>	<b>\$170,656.42</b>	<b>\$17,953.72</b>	<b>-\$30,700.28</b>	<b>\$417,688.92</b>	<b>\$10,529.54</b>	<b>\$0.00</b>	<b>\$939,293.49</b>
						Verification Total ->	\$939,293.49
<b>Purchased Power Resources - Cost per kWh-&gt;</b>	<b>\$0.062374</b>	<b>\$0.000000</b>	<b>-\$0.024198</b>	<b>\$0.000000</b>	<b>\$0.000000</b>	<b>\$0.000000</b>	<b>\$0.071919</b>
						(Northern Pool Power - On-Peak + Off-Peak - Energy Charge/kWh) = JV2 Electric Service Rate ->	\$0.035222
						(Northern Pool Power - On-Peak + Off-Peak - Energy Charge/kWh) = JV5 Electric Service Rate ->	\$0.035222



**AMERICAN MUNICIPAL POWER, INC.**

1111 Schrock Rd, Suite 100  
COLUMBUS, OHIO 43229  
PHONE: (614) 540-1111  
FAX: (614) 540-1078

**INVOICE NUMBER:** 190491  
**INVOICE DATE:** 12/11/2015  
**DUE DATE:** 12/28/2015  
**TOTAL AMOUNT DUE:** \$807,780.74  
**CUSTOMER NUMBER:** 5020  
**CUSTOMER P.O. #:** RG10046

**City of Napoleon**

Gregory J. Heath, Finance Director  
255 W. Riverview Ave., P.O. Box 151  
Napoleon, Ohio 43545-0151

PLEASE WRITE INVOICE NUMBER ON  
REMITTANCE AND RETURN YELLOW INVOICE  
COPY. MAKE CHECK PAYABLE TO AMP.

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**Northern Power Pool Billing - November, 2015**

MUNICIPAL PEAK: 23,136 kW  
TOTAL METERED ENERGY: 13,116,601 kWh

**DO NOT PAY - AMOUNT AUTOMATICALLY  
DEDUCTED FROM YOUR BANK ACCOUNT**

**EMAIL BILLING@AMPPARTNERS.ORG  
WITH ANY QUESTIONS**

Total Power Charges: \$379,562.28  
Total Transmission Charges: \$417,688.92  
Total Other Charges: \$10,529.54  
Total Miscellaneous Charges: \$0.00

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**GRAND TOTAL POWER INVOICE: \$807,780.74**

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DETAIL INFORMATION OF POWER CHARGES November , 2015

Napoleon

FOR THE MONTH OF:

November, 2015

Total Metered Load kWh: 13,116,601  
 Transmission Losses kWh: -56,125  
 Distribution Losses kWh: 0  
 Total Energy Req. kWh: 13,060,476

TIME OF FENTS PEAK: 11/23/2015 @ H.E. 19:00  
 TIME OF MUNICIPAL PEAK: 11/23/2015 @ H.E. 19:00  
 TRANSMISSION PEAK: September, 2014

COINCIDENT PEAK kW: 23,136  
 MUNICIPAL PEAK kW: 23,136  
 TRANSMISSION PEAK kW: 30,153  
 PJM Capacity Requirement kW: 28,312

**Napoleon Resources**

**AMP CT - Sched @ ATSI**

Demand Charge:	\$2.220210	/ kW *	12,400 kW =	\$27,530.61
Transmission Credit:	\$2.282824	/ kW *	-12,400 kW =	-\$28,307.02
Capacity Credit:	\$7.896662	/ kW *	-12,400 kW =	-\$97,918.61
<b>Subtotal</b>	<b>#N/A</b>	<b>/ kWh *</b>	<b>0 kWh =</b>	<b>-\$98,695.02</b>

**Fremont - sched @ Fremont**

Demand Charge:	\$4.165252	/ kW *	8,767 kW =	\$36,516.76
Energy Charge:	\$0.023156	/ kWh *	4,927,131 kWh =	\$114,095.03
Net Congestion, Losses, FTR:	\$0.001679	/ kWh *		\$8,274.96
Capacity Credit:	\$10.667931	/ kW *	-8,767 kW =	-\$93,525.75
Debt Service:	\$5.041202	/ kW	8,767 kW	\$44,196.22
Adjustment for prior month:				\$188.92
<b>Subtotal</b>	<b>\$0.022274</b>	<b>/ kWh *</b>	<b>4,927,131 kWh =</b>	<b>\$109,746.14</b>

**JV6 - Sched @ ATSI**

Demand Charge:			300 kW	
Energy Charge:			59,353 kWh	
Transmission Credit:	\$1.290567	/ kW *	-300 kW =	-\$387.17
Capacity Credit:	\$3.770433	/ kW *	-300 kW =	-\$1,131.13
<b>Subtotal</b>	<b>-\$0.025581</b>	<b>/ kWh *</b>	<b>59,353 kWh =</b>	<b>-\$1,518.30</b>

**Prairie State - Sched @ PJMC**

Demand Charge:	\$8.022576	/ kW *	4,976 kW =	\$39,920.34
Energy Charge:	\$0.011608	/ kWh *	3,612,251 kWh =	\$41,931.33
Net Congestion, Losses, FTR:	\$0.002276	/ kWh *		\$8,222.76
Capacity Credit:	\$3.014335	/ kW *	-4,976 kW =	-\$14,999.33
Debt Service:	\$18.661893	/ kW	4,976 kW	\$92,861.58
Transmission from PSEC to PJM/MISO, including non-Prairie State variable charges/credits	\$0.005848	/ kWh	3,612,251 kWh	\$21,123.15
Board Approved Rate Levelization				\$45,788.80
<b>Subtotal</b>	<b>\$0.065014</b>	<b>/ kWh *</b>	<b>3,612,251 kWh =</b>	<b>\$234,848.63</b>

**NYPA - Sched @ NYIS**

Demand Charge:	\$6.019037	/ kW *	986 kW =	\$5,934.77
Energy Charge:	\$0.011355	/ kWh *	635,864 kWh =	\$7,220.33
Net Congestion, Losses, FTR:	\$0.004723	/ kWh *		\$3,003.37
Capacity Credit:	\$7.567444	/ kW *	-900 kW =	-\$6,810.70
Adjustment for prior month:				\$4,518.19
<b>Subtotal</b>	<b>\$0.021806</b>	<b>/ kWh *</b>	<b>635,864 kWh =</b>	<b>\$13,865.96</b>

**JV5 - 7X24 @ ATSI**

Demand Charge:			3,088 kW	
Energy Charge:			2,223,360 kWh	
Transmission Credit:	\$3.171292	/ kW *	-3,088 kW =	-\$9,792.95
Capacity Credit:	\$10.858750	/ kW *	-3,088 kW =	-\$33,531.82
<b>Subtotal</b>	<b>-\$0.019486</b>	<b>/ kWh *</b>	<b>2,223,360 kWh =</b>	<b>-\$43,324.77</b>

**JV5 Losses - Sched @ ATSI**

Energy Charge:			32,418 kWh	
<b>Subtotal</b>	<b>#N/A</b>	<b>/ kWh *</b>	<b>32,418 kWh =</b>	<b>\$0.00</b>

**JV2 - Sched @ ATSI**

Demand Charge:			264 kW	
Energy Charge:	\$0.025902	/ kWh *	352 kWh =	\$9.11
Transmission Credit:	\$1.080871	/ kW *	-264 kW =	-\$285.35
Capacity Credit:	\$6.453220	/ kW *	-264 kW =	-\$1,703.65
<b>Subtotal</b>	<b>-\$5.629332</b>	<b>/ kWh *</b>	<b>352 kWh =</b>	<b>-\$1,979.89</b>

**AMP Solar Phase I - Sched @ ATSI**

Demand Charge:			1,040 kW	
Energy Charge:	\$0.085000	/ kWh *	102,467 kWh =	\$8,709.67
<b>Subtotal</b>	<b>\$0.085000</b>	<b>/ kWh *</b>	<b>102,467 kWh =</b>	<b>\$8,709.67</b>

**Morgan Stanley 2015-2020 - 7x24 @ AD**

Demand Charge:			3,800 kW	
Energy Charge:	\$0.062950	/ kWh *	2,736,000 kWh =	\$172,231.20
Net Congestion, Losses, FTR:	-\$0.000576	/ kWh *		-\$1,574.78
<b>Subtotal</b>	<b>\$0.062374</b>	<b>/ kWh *</b>	<b>2,736,000 kWh =</b>	<b>\$170,656.42</b>

**Efficiency Smart Power Plant 2014-2017**

ESPP 2014-2017 obligation @ \$1.400 /MWh x 153,889. MWh / 12				\$17,953.72
<b>Subtotal</b>	<b>#N/A</b>	<b>/ kWh *</b>	<b>0 kWh =</b>	<b>\$17,953.72</b>

**Northern Power Pool:**

On Peak Energy Charge: (M-F HE 08-23 EDT)	\$0.039660	/ kWh *	64,382 kWh =	\$2,553.38
Off Peak Energy Charge:	\$0.026756	/ kWh *	33,754 kWh =	\$903.14
Sale of Excess Non-Pool Resources to Pool	\$0.024989	/ kWh *	-1,366,856 kWh =	-\$34,156.80
<b>Subtotal</b>	<b>\$0.024198</b>	<b>/ kWh *</b>	<b>-1,268,720 kWh =</b>	<b>-\$30,700.28</b>

Total Demand Charges:

-\$41,433.20

Total Energy Charges:

\$420,995.48

DETAIL INFORMATION OF POWER CHARGES November , 2015

Napoleon

<b>Total Power Charges:</b>			<b>13,060,476 kWh</b>	<b>\$379,562.28</b>
<b>TRANSMISSION CHARGES:</b>				
Demand Charge:	\$3.171293	/ kW *	30,153 kW =	\$95,624.01
Energy Charge:	\$0.001039	/ kWh *	10,837,116 kWh =	\$11,264.27
RPM (Capacity) Charges:	\$10.977700	/ kW *	28,312 kW =	\$310,800.64
<b>TOTAL TRANSMISSION CHARGES:</b>	<b>\$0.038542</b>	<b>/ kWh *</b>	<b>10,837,116 kWh =</b>	<b>\$417,688.92</b>
<b>Service Fee Part A,</b>				
Based on Annual Municipal Sales	\$0.000229	/ kWh *	153,112,965 kWh 1/12 =	\$2,921.91
<b>Service Fee Part B,</b>				
Energy Purchases	\$0.000580	/ kWh *	13,116,601 kWh =	\$7,607.63
<b>TOTAL OTHER CHARGES:</b>				<b>\$10,529.54</b>
<b>GRAND TOTAL POWER INVOICE:</b>				<b>\$807,780.74</b>

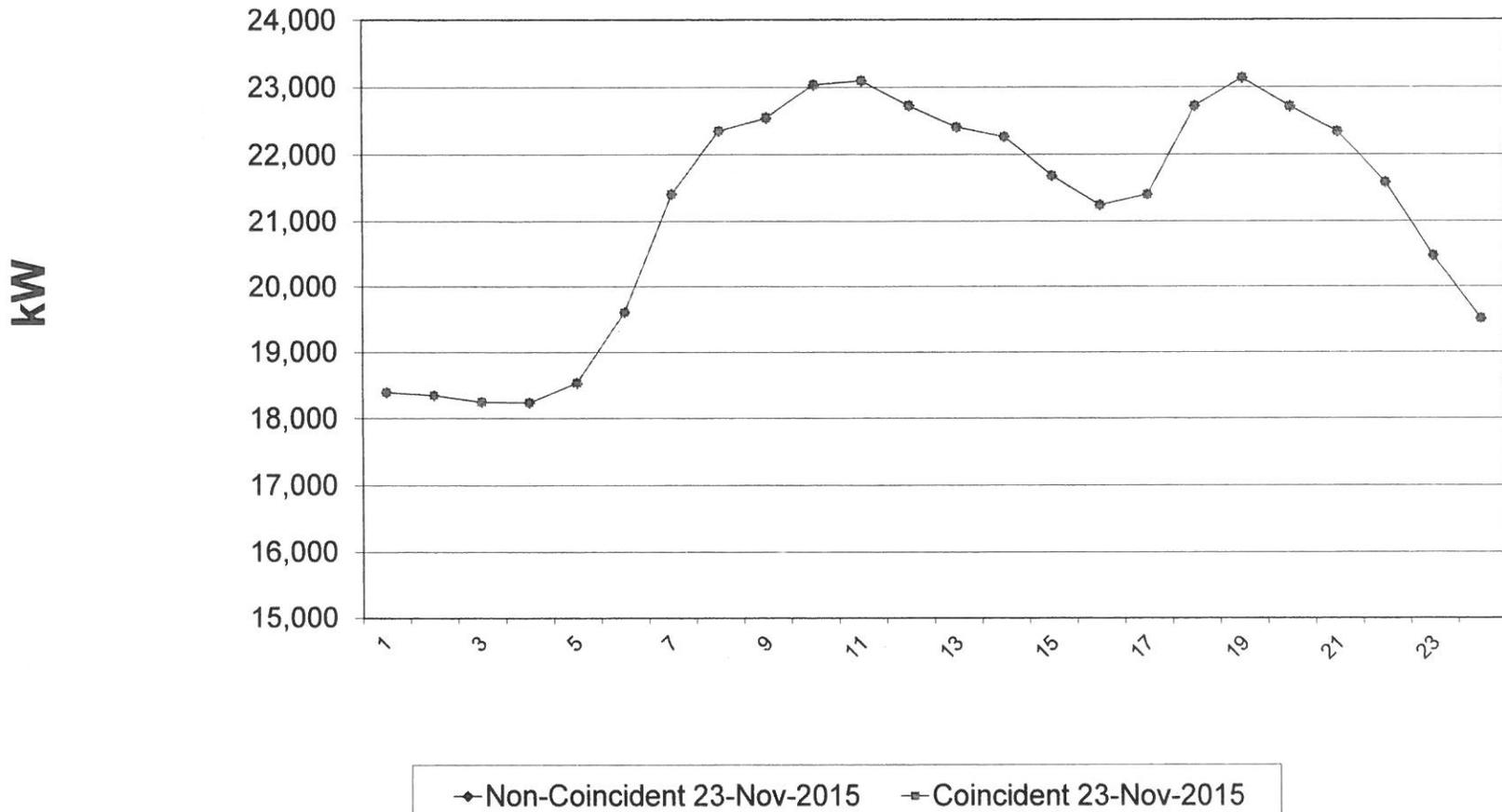
Napoleon Capacity Plan - Actual											
Nov 2015		ACTUAL DEMAND = 23.136 MW									
Days 30		ACTUAL ENERGY = 13,117 MWH									
SOURCE (1)		DEMAND MW (2)	ENERGY MWH (4)	LOAD FACTOR (5)	DEMAND RATE \$/KW (6)	ENERGY RATE \$/MWH (7)	DEMAND CHARGE (9)	ENERGY CHARGE (10)	TOTAL CHARGES (11)	EFFECTIVE RATE \$/MWH (12)	% OF DOLLARS (13)
1	NPP Pool Purchases	0.00	98	0%	\$0.00	\$35.22	\$0	\$3,457	\$3,457	\$35.22	0.4%
2	NPP Pool Sales	0.00	-1,367	0%	\$0.00	\$24.99	\$0	-\$34,157	-\$34,157	\$24.99	-3.6%
3	AFEC	8.77	4,927	78%	-\$1.44	\$24.84	-\$12,624	\$122,370	\$109,746	\$22.27	11.7%
4	Prairie State	4.98	3,612	101%	\$37.12	\$13.88	\$184,695	\$50,154	\$234,849	\$65.01	25.1%
5	NYPA - Ohio	0.99	636	90%	-\$0.89	\$23.18	-\$876	\$14,742	\$13,866	\$21.81	1.5%
6	JV5	3.09	2,223	100%	\$10.68	\$24.10	\$32,995	\$53,590	\$86,585	\$38.94	9.2%
7	JV5 Losses	0.00	32	0%	\$0.00	\$0.00	\$0	\$0	\$0	\$0.00	0.0%
8	JV6	0.30	59	27%	-\$1.10	\$0.00	-\$331	\$0	-\$331	-\$5.58	0.0%
9	AMP Solar Phase I	1.04	102	14%	\$0.00	\$85.00	\$0	\$8,710	\$8,710	\$85.00	0.9%
10	Morgan Stanley 2015-2020 7x24	3.80	2,736	100%	\$0.00	\$62.37	\$0	\$170,656	\$170,656	\$62.37	18.2%
11	AMPCT	12.40	0	0%	-\$7.96	\$0.00	-\$98,695	\$0	-\$98,695	\$0.00	-10.5%
12	JV2	0.26	0	0%	-\$5.96	\$25.90	-\$1,573	\$9	-\$1,564	-\$4,446.99	-0.2%
<b>POWER TOTAL</b>		<b>35.62</b>	<b>13,060</b>	<b>51%</b>			<b>\$103,591</b>	<b>\$389,531</b>	<b>\$493,121</b>	<b>\$37.76</b>	<b>52.7%</b>
13	Energy Efficiency		0		\$0.00	\$0.00	\$0	\$17,954	\$17,954	\$0.00	1.9%
14	Installed Capacity	28.31			\$10.98		\$310,801	\$0	\$310,801	\$23.70	33.2%
15	TRANSMISSION	30.15	10,837		\$3.17	\$1.04	\$95,624	\$11,264	\$106,888	\$8.15	11.4%
16	Distribution Charge	23.14			\$0.00	\$0.00	\$0	\$0	\$0	\$0.00	0.0%
17	Service Fee B		13,117			\$0.58		\$7,608	\$7,608	\$0.58	0.8%
18	Dispatch Charge		13,117			\$0.00		\$0	\$0	\$0.00	0.0%
<b>OTHER TOTAL</b>							<b>\$406,425</b>	<b>\$36,826</b>	<b>\$443,250</b>	<b>\$33.79</b>	<b>47.3%</b>
<b>GRAND TOTAL PURCHASED</b>			<b>13,060</b>				<b>\$510,015</b>	<b>\$426,356</b>	<b>\$936,372</b>		
Delivered to members		23.136	13,117	79%			\$510,015	\$426,356	\$936,372	\$71.39	100.0%
		DEMAND	ENERGY	L.F.				TOTAL \$	\$/MWh	Avg Temp	
2015 Forecast		23.80	13,278	77%				\$1,136,588	\$85.60	41.2	
2014 Actual		25.51	13,706	75%				\$945,499	\$68.99	35.1	
2013 Actual		23.82	13,289	77%				\$925,653	\$69.65	37.7	
								Actual Temp		45.0	

NAPOLEON

Date	Sunday 11/1/2015	Monday 11/2/2015	Tuesday 11/3/2015	Wednesday 11/4/2015	Thursday 11/5/2015	Friday 11/6/2015	Saturday 11/7/2015	Sunday 11/8/2015	Monday 11/9/2015	Tuesday 11/10/2015	Wednesday 11/11/2015	Thursday 11/12/2015	Friday 11/13/2015	Saturday 11/14/2015	Sunday 11/15/2015
Hour															
100	14,481	16,088	17,227	17,182	16,840	17,201	14,998	14,950	16,755	17,294	17,529	17,554	17,839	16,111	14,728
200	14,103	15,873	16,665	16,567	16,363	16,409	14,384	14,613	16,446	16,822	17,460	16,922	17,331	15,337	14,329
300	13,865	15,998	16,202	16,400	16,173	16,322	14,181	14,397	16,473	16,579	17,354	16,834	17,169	15,276	14,059
400	13,669	16,043	16,078	16,144	16,043	16,064	14,035	14,441	16,595	16,378	17,228	16,515	16,790	14,927	14,024
500	13,786	16,530	16,579	16,526	16,314	16,295	14,324	14,426	17,143	16,635	17,416	16,879	17,191	15,220	14,290
600	14,123	17,616	17,668	17,515	17,146	16,935	14,722	14,749	18,144	17,702	18,075	17,716	18,040	15,828	14,698
700	14,782	19,340	19,139	18,977	18,785	18,635	15,381	15,321	19,962	19,229	19,722	19,344	19,527	16,710	15,101
800	14,846	20,144	20,106	19,610	19,767	20,065	16,038	15,506	20,964	20,751	20,782	20,530	20,686	17,176	14,670
900	15,175	20,125	20,294	19,738	19,984	19,986	16,460	15,725	21,014	20,744	21,023	20,916	20,911	17,769	14,446
1000	15,480	20,089	20,241	19,868	20,519	20,154	16,625	15,801	20,747	20,758	20,623	21,086	21,252	18,202	15,555
1100	15,601	20,079	20,242	20,119	20,716	20,334	16,820	15,896	20,456	20,583	20,427	21,032	21,615	18,103	15,891
1200	15,652	20,233	20,105	20,268	20,717	20,228	16,711	15,943	20,388	20,707	20,235	21,212	21,219	17,589	15,856
1300	15,793	20,016	19,528	20,439	20,897	20,138	16,287	15,839	20,393	20,844	20,136	21,450	21,322	17,074	15,722
1400	15,529	19,960	20,170	20,380	20,769	19,860	16,116	15,734	20,256	20,582	19,848	21,692	21,175	16,945	15,304
1500	15,325	19,896	20,157	20,456	19,916	19,541	16,046	15,373	19,832	20,423	19,514	21,620	21,190	16,278	15,086
1600	15,807	19,637	19,813	20,316	19,916	18,613	16,044	15,617	19,592	20,027	19,392	21,361	20,813	15,988	15,121
1700	16,068	19,790	20,008	20,717	19,938	18,606	16,125	16,124	20,072	20,315	19,765	21,492	20,773	16,194	15,407
1800	16,868	20,193	20,389	21,089	20,792	19,187	16,773	17,247	21,074	20,875	20,741	21,993	21,479	17,335	16,716
1900	18,180	21,196	21,309	21,997	21,382	19,936	17,413	18,320	21,885	21,311	21,570	21,961	21,614	18,045	17,874
2000	17,825	20,821	20,979	21,263	20,870	19,367	17,160	18,149	21,307	20,943	21,099	21,438	21,014	17,713	17,752
2100	17,533	20,235	20,352	20,573	20,318	19,196	16,860	17,926	20,713	20,757	20,804	21,124	20,439	17,452	17,409
2200	16,853	19,449	19,371	19,646	19,325	18,626	16,744	17,718	19,847	20,035	19,887	20,017	19,810	17,161	17,133
2300	16,369	18,380	18,183	18,492	18,439	17,304	16,158	16,972	18,687	18,894	18,943	19,009	18,705	16,034	16,254
2400	16,425	17,570	17,496	17,559	17,680	15,761	15,470	16,811	17,899	17,900	17,953	18,441	17,255	15,301	15,908
Total	374,138	455,301	458,301	461,841	441,929	444,763	381,875	383,598	466,644	467,088	467,526	478,138	475,159	399,768	373,333

Date	Monday 11/16/2015	Tuesday 11/17/2015	Wednesday 11/18/2015	Thursday 11/19/2015	Friday 11/20/2015	Saturday 11/21/2015	Sunday 11/22/2015	Monday 11/23/2015	Tuesday 11/24/2015	Wednesday 11/25/2015	Thursday 11/26/2015	Friday 11/27/2015	Saturday 11/28/2015	Sunday 11/29/2015	Monday 11/30/2015	Tuesday 12/1/2015
Hour																
100	15,922	16,905	17,146	17,203	18,389	16,216	16,210	18,388	18,959	18,713	13,457	12,494	13,911	14,602	17,193	-
200	15,739	16,322	16,701	16,722	17,834	15,634	15,768	18,343	18,316	18,292	12,703	12,163	13,535	13,900	16,597	-
300	15,616	16,386	16,529	16,485	17,492	15,394	15,519	18,243	18,174	18,159	12,469	11,984	13,369	13,627	16,590	-
400	15,587	16,050	16,297	16,174	17,444	15,436	15,548	18,234	17,877	17,718	12,210	11,993	13,247	13,564	16,877	-
500	16,226	16,481	16,645	16,485	17,900	15,710	15,534	18,530	18,644	18,178	12,324	12,287	13,611	13,654	17,760	-
600	17,461	17,348	17,798	17,812	19,217	16,164	15,934	19,606	19,718	19,166	13,350	12,912	14,294	14,090	18,754	-
700	19,370	19,030	19,235	19,298	20,711	16,965	16,501	21,414	21,236	20,559	13,500	13,481	14,988	14,786	20,543	-
800	20,465	20,057	20,577	20,217	21,717	17,971	17,101	22,355	22,140	21,882	14,202	14,291	15,964	15,252	22,189	-
900	20,661	19,946	20,267	20,100	21,871	18,349	17,040	22,550	22,039	22,127	14,785	14,618	16,539	15,372	22,015	-
1000	20,297	19,958	20,276	19,976	21,767	18,942	17,028	23,035	21,867	22,164	15,491	15,158	16,952	15,856	21,758	-
1100	20,146	19,903	20,527	20,387	21,669	19,187	17,317	23,097	21,612	22,111	15,737	15,331	17,399	15,820	21,368	-
1200	19,801	19,742	20,516	20,410	21,577	19,039	17,330	22,725	21,429	21,808	15,292	15,491	17,261	15,759	20,979	-
1300	19,832	19,907	20,872	20,445	21,336	18,757	17,403	22,414	21,285	21,562	14,315	15,767	16,506	15,910	20,891	-
1400	19,607	19,923	20,824	20,183	20,909	18,737	17,365	22,272	21,047	21,065	13,569	15,503	15,946	15,844	20,609	-
1500	19,304	19,593	20,513	19,955	20,382	18,468	16,937	21,694	20,777	20,622	13,050	15,379	15,906	15,604	20,143	-
1600	18,990	19,322	20,420	19,732	19,836	18,058	17,025	21,247	20,312	20,234	12,808	15,714	15,631	15,945	20,468	-
1700	19,225	19,571	21,041	20,090	20,004	18,136	17,407	21,409	20,747	20,063	12,963	16,017	16,130	16,647	21,341	-
1800	20,255	20,725	22,184	21,129	21,125	19,284	19,076	22,721	21,874	20,986	13,886	16,936	17,239	18,197	22,568	-
1900	20,844	20,643	21,948	21,938	21,140	19,445	20,041	23,136	22,103	21,471	14,176	16,776	17,342	18,536	22,718	-
2000	20,474	20,420	21,156	21,696	20,563	19,254	19,860	22,713	21,904	20,837	14,702	16,181	17,311	18,177	22,368	-
2100	20,022	20,073	20,597	21,289	20,420	18,875	19,638	22,346	21,387	20,463	14,444	16,107	16,944	18,280	22,185	-
2200	19,256	19,150	19,772	20,398	19,889	18,279	19,411	21,590	20,579	19,509	13,997	15,744	16,522	18,151	21,241	-
2300	18,201	18,113	18,519	19,632	18,520	17,622	18,682	20,477	19,719	17,504	13,664	14,905	15,903	17,150	20,010	-
2400	17,344	17,370	17,529	18,730	17,048	16,713	18,626	19,505	19,233	18,869	12,965	14,328	15,229	16,940	18,655	-
Total	450,645	435,568	467,889	466,486	478,760	426,635	418,301	508,044	492,978	480,062	330,059	351,560	377,679	381,663	485,820	-
											Maximum	23,136	Minimum	11,984	Grand Total	13,116,601

# Napoleon Peak Day Load Curve





**Omega Joint Venture Two**

1111 Schrock Rd, Suite 100

COLUMBUS, OHIO 43229

PHONE: (614) 540-1111

FAX: (614) 540-1078

**City of Napoleon**

Gregory J. Heath, Finance Director  
255 W. Riverview Ave., P.O. Box 151  
Napoleon, Ohio 43545-0151

**INVOICE NUMBER:** 190708

**INVOICE DATE:** 12/7/2015

**DUE DATE:** 12/17/2015

**TOTAL AMOUNT DUE:** \$415.83

**CUSTOMER NUMBER:** 5020

**CUSTOMER P.O. #:**

PLEASE WRITE INVOICE NUMBER ON  
REMITTANCE AND RETURN YELLOW INVOICE  
COPY. MAKE CHECK PAYABLE TO OMEGA JV 2

**OMEGA JV2 POWER INVOICE -**

**November, 2015**

**DO NOT PAY - AMOUNT AUTOMATICALLY  
DEDUCTED FROM YOUR BANK ACCOUNT**

**EMAIL BILLING@AMPPARTNERS.ORG  
WITH ANY QUESTIONS**

FIXED RATE CHARGE:	264 kW *	\$1.55 / kW =	\$407.95
ENERGY CHARGE:	0 kWh *	\$0.000000 / kWh =	\$0.00
SERVICE FEES:	0 kWh *	\$0.000000 / kWh =	\$0.00
Fuel Costs that were not recovered through Energy Sales to Market		=	\$7.89

**TOTAL CHARGES**

**\$415.83**



1111 Schrock Rd, Suite 100  
 Columbus, Ohio 43229  
 Phone: (614) 540-1111  
 Fax: (614) 540-1078

DO NOT PAY - AMOUNT AUTOMATICALLY  
 DEDUCTED FROM YOUR BANK ACCOUNT

EMAIL BILLING@AMPPARTNERS.ORG  
 WITH ANY QUESTIONS

**City of Napoleon**  
 Gregory J. Heath, Finance Director  
 255 W. Riverview Ave., P.O. Box 151  
 Napoleon, Ohio 43545-0151



INVOICE NUMBER: 190637  
 INVOICE DATE: 12/11/2015  
 DUE DATE: 12/11/2015  
 TOTAL AMOUNT DUE: \$77,966.90  
 CUSTOMER NUMBER: 5020  
 CUSTOMER P.O. NUMBER: BL980397  
 MAKE CHECKS PAYABLE TO: OMEGA JV5

PLEASE WRITE INVOICE NUMBER ON REMITTANCE  
 AND RETURN YELLOW INVOICE COPY.

**FOR THE MONTH/YEAR OF: November, 2015**

**DEMAND CHARGES:**

Base Financing Demand Charge: (Invoiced seperately as of 1/1/07)

Base Operating Expense Demand Charge:	\$7.894200	/ kW *	3,088 kW =	\$24,377.29
Seca Associated with JV5.	\$0.000000	/ kW *	3,088 kW =	\$0.00
<b>TOTAL DEMAND CHARGES:</b>	<b>\$7.894200</b>	<b>/ kW *</b>	<b>3,088 kW =</b>	<b>\$24,377.29</b>

**ENERGY CHARGES:**

JV5 Repl. Pwr. & Variable (Budgeted Rate):	\$0.024103	/ kWh *	2,223,360 kWh =	\$53,589.61
JV5 Fuel Cost (Actual Expense):	\$0.000000	/ kWh *	2,223,360 kWh =	\$0.00
<b>TOTAL ENERGY CHARGES:</b>	<b>\$0.024103</b>	<b>/ kWh *</b>	<b>2,223,360 kWh =</b>	<b>\$53,589.61</b>

**SUB-TOTAL** **\$77,966.90**

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**Total OMEGA JV5 Invoice:** **\$77,966.90**

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**OMEGA** JV5  
OHIO MUNICIPAL ELECTRIC  
GENERATING ASSOCIATION  
1111 Schrock Rd, Suite 100  
Columbus, Ohio 43229  
Phone: (614) 540-1111  
Fax: (614) 540-1078

DO NOT PAY - AMOUNT AUTOMATICALLY  
DEDUCTED FROM YOUR BANK ACCOUNT

EMAIL BILLING@AMPPARTNERS.ORG  
WITH ANY QUESTIONS

**City of Napoleon**  
Gregory J. Heath, Finance Director  
255 W. Riverview Ave., P.O. Box 151  
Napoleon, Ohio 43545-0151

INVOICE NUMBER: 190679  
INVOICE DATE: 12/1/2015  
DUE DATE: 12/11/2015  
TOTAL AMOUNT DUE: \$51,942.68  
CUSTOMER NUMBER: 5020  
CUSTOMER P.O. NUMBER: BL980397  
MAKE CHECKS PAYABLE TO: OMEGA JV5

PLEASE WRITE INVOICE NUMBER ON REMITTANCE  
AND RETURN YELLOW INVOICE COPY.



**Debt Service - OMEGA JV5**

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**FOR THE MONTH/YEAR OF: December, 2015**

Financing CHARGES:  
Debt Service \$16.820817 / kW \* 3,088 kW = \$51,942.68

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**Total OMEGA JV5 Financing Invoice:**

**\$51,942.68**

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AMERICAN MUNICIPAL POWER, INC.  
 1111 Schrock Rd, Suite 100  
 COLUMBUS, OHIO 43229  
 PHONE: (614) 540-1111  
 FAX: (614) 540-1078

INVOICE NUMBER: 190806  
 INVOICE DATE: 12/1/2015  
 DUE DATE: 12/15/2015  
 TOTAL AMOUNT DUE: \$1,187.34  
 CUSTOMER NUMBER: 5020  
 CUSTOMER P.O. #:

City of Napoleon  
 Gregory J. Heath, Finance Director  
 255 W. Riverview Ave., P.O. Box 151  
 Napoleon, OH 43545-0151

PLEASE WRITE INVOICE NUMBER ON  
 REMITTANCE AND RETURN YELLOW INVOICE  
 COPY. MAKE CHECK PAYABLE TO AMP, INC.

**Omega JV6**

Project Capacity: 300 kW

Year 2015

Electric Fixed

300 kW \* 3.96 per kW-Month

Total

December, 2015 - Electric Fixed \$1,187.34  
 AMOUNT DUE FOR :

**TOTAL CHARGES \$1,187.34**

\* To avoid a delayed payment charge, payment must be made to provide available funds for use by AMP, Inc on or before the due date.

Wire or ACH Transfer Information :  
 Huntington National Bank  
 Columbus, Ohio  
 Account: 0189-2204055  
 ABA: #044 000024

Mailing Address :  
 AMP, Inc.  
 Dept. L614  
 Columbus, Ohio 43260

	AMOUNT
Bank Lock Box Deposit	
66	\$1,187.34
General Fund 0189-2204055	\$1,187.34
TOTAL DEPOSIT	\$1,187.34



TO: Brian O'Connell/Bowling Green  
Monica Irelan/Napoleon  
Mike Dougherty/Cuyahoga Falls  
Robert Patrick/Wadsworth  
Steve Dupee/Oberlin  
Pam Lucas/Montpelier  
Thomas Gray/Monroeville  
Buck Stoiber/Elmore  
Kevin Brooks/Edgerton  
Al Fiser/Pioneer

FROM: Marc S. Gerken, P.E., President/CEO *MSG*

RE: JV6 Debt Payoff and Refund

DATE: November 25, 2015

As you know, the final payment of the OMEGA JV6 Wind Farm debt was made in August 2015. The original 2004 projections for the Project had assumed a 15 year financing period. The actual debt payment schedule ended up being less than 11 years.

Per the direction of the JV6 Participants, the revenue from the Renewable Energy Credits (RECs) has been used to fund a maintenance and contingency fund. This fund currently has a balance of approximately \$1 million. The fund was established for future major maintenance, particularly for the replacement of the gear boxes which are anticipated to have an estimated 15 year life expectancy. The replacement cost for a gear box is approximately \$550,000 per wind turbine. Two out of the four wind turbines are currently operating with original 2003 installation gear boxes. Two gear boxes were replaced due to failures in 2009 (wind turbine #1) and 2010 (wind turbine #4).

AMP recommends that the maintenance and contingency fund stay fully funded and that an additional \$100,000 / year be invoiced to the participants through project rates in order to further build contingency funds.

AMP also recommends that any future revenue from the sale of Renewable Energy Credits (RECs) be distributed back to the participants based on their pro rata ownership share as the revenue is realized.

Prior to the final debt service payment, there was an over-collection of about \$191,387. AMP recommends that this over-collection be refunded to the financing Participants in accordance with their pro rata ownership.

Finally, there is an operating cash fund of approximately \$1.79 million. We recommend that \$1.70 million of this cash fund be refunded to all JV6 Participants in accordance with their pro rata ownership share.

There is a JV6 participants meeting scheduled for December 10, 2015, to review these recommendations and to revise the 2016 JV6 Operating Budget if the recommendations are approved.

If the distribution of the refund is approved by the participants, the refund could be credited to the Participants via the JV6 power invoice, through a rate levelization credit or through a check presentation at an upcoming Council/Board meeting. The method chosen would be determined by each Participant. Please contact Harry Phillips ([hphillips@amppartners.org](mailto:hphillips@amppartners.org)) to advise your preferred method.

The amount of the total refund per Participant is shown on Attachment A.

The energy rate for 2016 is projected to be approximately \$6/MWh after the REC, transmission and capacity credits.

cc: AMP Executive Management Team  
Harry Phillips, Director of Marketing/Member Relations

Attachment A

**JV6**

**Proposed distribution of Debt Service Over-Collection and  
Excess Project Operating Cash**

Participant	Financed kW	Pro-Rata Share of Debt Service over-collection	Ownership kW	Pro-Rata Share of excess operating cash
City of Bowling Green	4,100	\$110,519.33	4,100	\$968,055.56
City of Cuyahoga Falls	1,800	\$48,520.68	1,800	\$425,000.00
City of Napoleon	300	\$8,086.78	300	\$70,833.33
City of Wadsworth	250	\$6,738.98	250	\$59,027.78
City of Oberlin	250	\$6,738.98	250	\$59,027.78
Village of Elmore	100	\$2,695.59	100	\$23,611.11
Village of Montpelier	100	\$2,695.59	100	\$23,611.11
Village of Edgerton	100	\$2,695.59	100	\$23,611.11
Village of Pioneer	100	\$2,695.59	100	\$23,611.11
Village of Monroeville		\$0.00	100	\$23,611.11
Total	7,100	\$191,387.11	7,200	\$1,700,000.00

Operating cash on hand as of September 30, 2015 was approximately is \$1,789,000  
\$1,700,000 is the proposed amount to be distributed to the participants based on their pro-rata  
ownership share of the project

<b>BILLING SUMMARY AND CONSUMPTION for BILLING CYCLE - JANUARY, 2016</b>																
<b>JANUARY, 2016</b>																
<b>2016 - JANUARY BILLING WITH DECEMBER 2015 DATA BILLING UNITS</b>																
Class and/or Schedule	Rate Code	Dec-15		Dec-15 Billed (kWh Usage)	Dec-15 Billed	Billed kVA of Demand	Cost / kWh For Month	Cost / kWh Prior 12 Mo Average	Jan-15			Cost / kWh For Month	Feb-15			
		# of Bills							# of Bills	Jan-15 (kWh Usage)	Jan-15 Billed		Jan-15 For Month	# of Bills	Feb-15 (kWh Usage)	Feb-15 Billed
Residential (Dom-In)	E1	3,356		1,798,371	\$184,274.36	0	\$0.1025	\$0.1068	3,341	2,090,119	\$231,507.44	\$0.1108	3,343	2,460,842	\$277,049.48	\$0.1126
Residential (Dom-In) w/Ecosmart	E1E	10		4,126	\$436.57	0	\$0.1058	\$0.1089	10	4,694	\$534.93	\$0.1140	10	5,535	\$638.05	\$0.1153
Residential (Dom-In - All Electric)	E2	608		377,629	\$38,115.47	0	\$0.1009	\$0.1055	605	626,280	\$66,980.81	\$0.1070	609	759,081	\$82,901.38	\$0.1092
Res. (Dom-In - All Elec.) w/Ecosmart	E2E	1		616	\$62.21	0	\$0.1010	\$0.1062	1	486	\$55.17	\$0.1135	1	602	\$68.88	\$0.1144
<b>Total Residential (Domestic)</b>		<b>3,975</b>		<b>2,180,742</b>	<b>\$222,888.61</b>	<b>0</b>	<b>\$0.1022</b>	<b>\$0.1066</b>	<b>3,957</b>	<b>2,721,579</b>	<b>\$299,078.35</b>	<b>\$0.1099</b>	<b>3,963</b>	<b>3,226,060</b>	<b>\$360,657.79</b>	<b>\$0.1118</b>
Residential (Rural-Out)	ER1	758		639,997	\$69,004.14	0	\$0.1078	\$0.1127	741	786,245	\$90,634.81	\$0.1153	743	920,136	\$107,806.83	\$0.1172
Residential (Rural-Out) w/Ecosmart	ER1E	4		2,380	\$268.56	0	\$0.1128	\$0.1177	4	3,216	\$380.67	\$0.1184	4	4,010	\$477.81	\$0.1192
Residential (Rural-Out - All Electric)	ER2	387		392,331	\$41,522.79	0	\$0.1058	\$0.1112	386	542,347	\$61,253.20	\$0.1129	389	637,576	\$73,427.20	\$0.1152
Res. (Rural-Out - All Electric) w/Ecosmart	ER2E	2		1,653	\$178.64	0	\$0.1081	\$0.1139	2	2,293	\$262.79	\$0.1146	2	3,047	\$352.55	\$0.1157
Residential (Rural-Out w/Dmd)	ER3	15		54,195	\$5,333.52	524	\$0.0984	\$0.1071	15	179,869	\$19,060.99	\$0.1060	15	81,985	\$9,062.40	\$0.1105
Residential (Rural-Out - All Electric w/Dmd)	ER4	9		28,708	\$2,837.96	220	\$0.0989	\$0.1091	9	31,504	\$3,417.19	\$0.1085	9	12,102	\$1,410.41	\$0.1165
<b>Total Residential (Rural)</b>		<b>1,175</b>		<b>1,119,264</b>	<b>\$119,145.61</b>	<b>744</b>	<b>\$0.1064</b>	<b>\$0.1119</b>	<b>1,157</b>	<b>1,545,474</b>	<b>\$175,009.65</b>	<b>\$0.1132</b>	<b>1,162</b>	<b>1,658,856</b>	<b>\$192,537.20</b>	<b>\$0.1161</b>
Commercial (1 Ph-In - No Dmd)	EC2	74		46,142	\$5,915.34	15	\$0.1282	\$0.1344	74	47,636	\$6,546.57	\$0.1374	73	51,946	\$7,203.69	\$0.1387
Commercial (1 Ph-Out - No Dmd)	EC2O	43		10,729	\$1,686.33	0	\$0.1572	\$0.1706	42	15,118	\$2,302.25	\$0.1523	43	10,842	\$1,842.35	\$0.1699
<b>Total Commercial (1 Ph) No Dmd</b>		<b>117</b>		<b>56,871</b>	<b>\$7,601.67</b>	<b>15</b>	<b>\$0.1337</b>	<b>\$0.1404</b>	<b>116</b>	<b>62,754</b>	<b>\$8,848.82</b>	<b>\$0.1410</b>	<b>116</b>	<b>62,788</b>	<b>\$9,046.04</b>	<b>\$0.1441</b>
Commercial (1 Ph-In - w/Demand)	EC1	255		279,725	\$37,007.69	1862	\$0.1323	\$0.1322	262	299,212	\$40,914.08	\$0.1367	260	318,336	\$44,230.24	\$0.1389
Commercial (1 Ph-Out - w/Demand)	EC1O	24		25,782	\$3,300.75	146	\$0.1280	\$0.1282	25	39,221	\$5,103.98	\$0.1301	25	43,725	\$5,738.12	\$0.1312
<b>Total Commercial (1 Ph) w/Demand</b>		<b>279</b>		<b>305,507</b>	<b>\$40,308.44</b>	<b>2,008</b>	<b>\$0.1319</b>	<b>\$0.1318</b>	<b>287</b>	<b>338,433</b>	<b>\$46,018.06</b>	<b>\$0.1360</b>	<b>285</b>	<b>362,061</b>	<b>\$49,968.36</b>	<b>\$0.1380</b>
Commercial (3 Ph-Out - No Dmd)	EC4O	2		40	\$40.37	1	\$1.0093	\$0.1339	2	15,280	\$1,848.85	\$0.1210	2	11,240	\$1,405.73	\$0.1251
<b>Total Commercial (3 Ph) No Dmd</b>		<b>2</b>		<b>40</b>	<b>\$40.37</b>	<b>1</b>	<b>\$1.0093</b>	<b>\$0.1339</b>	<b>2</b>	<b>15,280</b>	<b>\$1,848.85</b>	<b>\$0.1210</b>	<b>2</b>	<b>11,240</b>	<b>\$1,405.73</b>	<b>\$0.1251</b>
Commercial (3 Ph-In - w/Demand)	EC3	206		1,511,932	\$165,693.78	5613	\$0.1096	\$0.1145	207	1,489,862	\$175,738.76	\$0.1180	206	1,484,549	\$179,779.52	\$0.1211
Commercial (3 Ph-Out - w/Demand)	EC3O	39		556,051	\$58,181.67	1877	\$0.1046	\$0.1144	39	509,276	\$60,103.49	\$0.1180	39	441,177	\$54,737.85	\$0.1241
Commercial (3 Ph-In - w/Dmd.&Sub-St.C	EC3S	0		0	\$0.00	0	\$0.0000	\$0.1071	2	28,920	\$3,489.22	\$0.1207	2	35,160	\$4,376.14	\$0.1245
Commercial (3 Ph-Out - w/Dmd.&Sub-St	E3SO	3		135,280	\$13,741.63	512	\$0.1016	\$0.1075	3	134,720	\$14,815.71	\$0.1100	3	142,800	\$15,978.00	\$0.1119
Commercial (3 Ph-In - w/Demand, No Ta	EC3T	1		2,400	\$284.95	13	\$0.1187	\$0.1186	1	1,720	\$212.77	\$0.1237	1	1,760	\$220.15	\$0.1251
<b>Total Commercial (3 Ph) w/Demand</b>		<b>249</b>		<b>2,205,663</b>	<b>\$237,902.03</b>	<b>8,015</b>	<b>\$0.1079</b>	<b>\$0.1137</b>	<b>252</b>	<b>2,164,498</b>	<b>\$254,359.95</b>	<b>\$0.1175</b>	<b>251</b>	<b>2,105,446</b>	<b>\$255,091.66</b>	<b>\$0.1212</b>
Large Power (In - w/Dmd & Rct)	EL1	21		2,693,896	\$220,257.42	5831	\$0.0818	\$0.0909	21	2,714,966	\$260,835.25	\$0.0961	20	2,012,124	\$202,074.39	\$0.1004
Large Power (In - w/Dmd & Rct, w/SbCr)	EL2	3		1,099,839	\$82,880.55	2011	\$0.0754	\$0.0779	0	0	\$0.00	\$0.0000	1	833,540	\$69,635.03	\$0.0835
Large Power (Out - w/Dmd & Rct)	EL1O	0		0	\$0.00	0	\$0.0000	\$0.0000	0	0	\$0.00	\$0.0000	0	0	\$0.00	\$0.0000
Large Power (Out - w/Dmd & Rct, w/SbCr)	EL2O	1		332,400	\$28,057.68	771	\$0.0844	\$0.0965	1	286,800	\$29,892.25	\$0.1042	1	230,400	\$26,226.17	\$0.1138
Large Power (In - w/Dmd & Rct, w/SbCr)	EL3	2		79,597	\$5,934.15	136	\$0.0746	\$0.1174	2	82,105	\$7,896.64	\$0.0962	2	88,088	\$7,543.29	\$0.0856
<b>Total Large Power</b>		<b>27</b>		<b>4,205,732</b>	<b>\$337,129.80</b>	<b>8,749</b>	<b>\$0.0802</b>	<b>\$0.0893</b>	<b>24</b>	<b>3,083,871</b>	<b>\$298,624.14</b>	<b>\$0.0968</b>	<b>24</b>	<b>3,164,152</b>	<b>\$305,478.88</b>	<b>\$0.0965</b>
Industrial (In - w/Dmd & Rct, w/SbCr)	E1I	1		1,206,433	\$83,318.08	1979	\$0.0691	\$0.0785	1	995,447	\$84,801.83	\$0.0852	1	847,503	\$79,203.45	\$0.0935
Industrial (In - w/Dmd & Rct, No/SbCr)	E1I2	1		1,128,579	\$79,886.73	1939	\$0.0708	\$0.0770	1	1,025,085	\$83,073.20	\$0.0810	1	1,013,882	\$84,741.29	\$0.0836
<b>Total Industrial</b>		<b>2</b>		<b>2,335,012</b>	<b>\$163,204.81</b>	<b>3,918</b>	<b>\$0.0699</b>	<b>\$0.0777</b>	<b>2</b>	<b>2,020,532</b>	<b>\$167,875.03</b>	<b>\$0.0831</b>	<b>2</b>	<b>1,861,385</b>	<b>\$163,944.74</b>	<b>\$0.0881</b>
Interdepartmental (In - No Dmd)	ED1	8		34,464	\$3,802.92	179	\$0.1103	\$0.0975	48	152,891	\$14,484.81	\$0.0947	48	168,336	\$16,489.89	\$0.0980
Interdepartmental (Out - No Dmd)	ED1O	0		0	\$0.00	0	\$0.0000	\$0.0919	1	0	\$0.00	\$0.0000	1	0	\$0.00	\$0.0000
Interdepartmental (Out - w/Dmd)	ED2O	2		327	\$59.81	0	\$0.1829	\$0.1439	0	0	\$0.00	\$0.0000	0	0	\$0.00	\$0.0000
Interdepartmental (In - w/Dmd)	ED2	29		36,570	\$4,336.96	0	\$0.1186	\$0.0945	20	323,713	\$29,965.96	\$0.0926	20	366,684	\$35,085.73	\$0.0957
Interdepartmental (3Ph-In - w/Dmd)	ED3	11		214,542	\$21,414.53	721	\$0.0998	\$0.1044	0	0	\$0.00	\$0.0000	0	0	\$0.00	\$0.0000
Interdepartmental (Street Lights)	EDSL	7		62,879	\$5,862.30	0	\$0.0932	\$0.0931	0	0	\$0.00	\$0.0000	0	0	\$0.00	\$0.0000
Interdepartmental (Traffic Signals)	EDTS	15		1,974	\$182.51	0	\$0.0925	\$0.0924	0	0	\$0.00	\$0.0000	0	0	\$0.00	\$0.0000
Generators (JV2 Power Cost Only)	GJV2	1		17,671	\$862.84	61	\$0.0375	\$0.0000	1	18,971	\$624.34	\$0.0329	1	21,158	\$710.91	\$0.0336
Generators (JV5 Power Cost Only)	GJV5	1		12,297	\$461.26	19	\$0.0375	\$0.0000	1	14,576	\$479.70	\$0.0329	1	17,958	\$603.39	\$0.0336
<b>Total Interdepartmental</b>		<b>74</b>		<b>380,724</b>	<b>\$36,783.13</b>	<b>980</b>	<b>\$0.0966</b>	<b>\$0.0934</b>	<b>71</b>	<b>510,151</b>	<b>\$45,554.81</b>	<b>\$0.0893</b>	<b>71</b>	<b>574,136</b>	<b>\$52,889.92</b>	<b>\$0.0921</b>
<b>SUB-TOTAL CONSUMPTION &amp; DEMAND</b>		<b>5,900</b>		<b>12,789,555</b>	<b>\$1,165,004.47</b>	<b>24,430</b>	<b>\$0.0911</b>	<b>\$0.0992</b>	<b>5,868</b>	<b>12,462,572</b>	<b>\$1,297,217.66</b>	<b>\$0.1041</b>	<b>5,876</b>	<b>13,026,124</b>	<b>\$1,391,020.32</b>	<b>\$0.1068</b>
Street Lights (In)	SLO	15		0	\$13.59	0	\$0.0000	\$0.0000	15	0	\$13.58	\$0.0000	15	0	\$13.58	\$0.0000
Street Lights (Out)	SLOO	2		0	\$0.77	0	\$0.0000	\$0.0000	2	0	\$0.77	\$0.0000	2	0	\$0.77	\$0.0000
<b>Total Street Light Only</b>		<b>17</b>		<b>0</b>	<b>\$14.36</b>	<b>0</b>	<b>\$0.0000</b>	<b>\$0.0000</b>	<b>17</b>	<b>0</b>	<b>\$14.35</b>	<b>\$0.0000</b>	<b>17</b>	<b>0</b>	<b>\$14.35</b>	<b>\$0.0000</b>
<b>TOTAL CONSUMPTION &amp; DEMAND</b>		<b>5,917</b>		<b>12,789,555</b>	<b>\$1,165,018.83</b>	<b>24,430</b>	<b>\$0.0911</b>	<b>\$0.0992</b>	<b>5,885</b>	<b>12,462,572</b>	<b>\$1,297,232.01</b>	<b>\$0.1041</b>	<b>5,893</b>	<b>13,026,124</b>	<b>\$1,391,034.67</b>	<b>\$0.1068</b>

**BILLING SUMMARY AND COA**

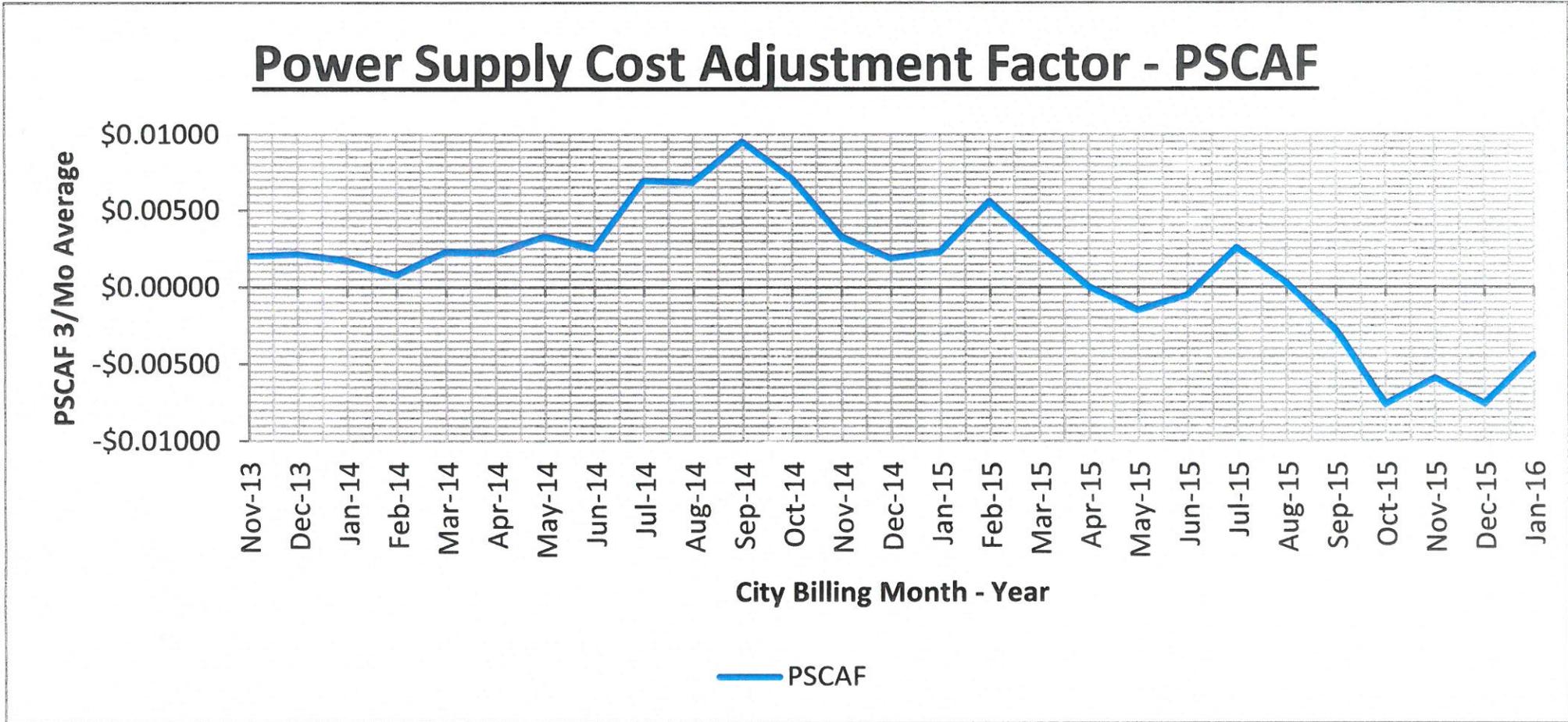
JANUARY, 2016

2016 - JANUARY BILLING WITH DECEMBER 2015

Class and/or Schedule	Rate Code	Mar-15				Apr-15				May-15				Jun-15			
		# of Bills	Mar-15 (kWh Usage)	Mar-15 Billed	Cost / kWh For Month	# of Bills	Apr-15 (kWh Usage)	Apr-15 Billed	Cost / kWh For Month	# of Bills	May-15 (kWh Usage)	May-15 Billed	Cost / kWh For Month	# of Bills	Jun-15 (kWh Usage)	Jun-15 Billed	Cost / kWh For Month
Residential (Dom-In)	E1	3,339	2,519,592	\$275,884.01	\$0.1095	3,353	2,258,877	\$243,502.44	\$0.1078	3,348	1,980,302	\$212,898.74	\$0.1075	3,349	1,643,997	\$181,771.12	\$0.1106
Residential (Dom-In) w/Ecosmart	E1E	10	5,285	\$596.76	\$0.1129	10	4,713	\$526.09	\$0.1116	10	4,422	\$490.55	\$0.1109	10	4,021	\$455.42	\$0.1133
Residential (Dom-In - All Electric)	E2	605	856,052	\$90,527.43	\$0.1057	609	790,810	\$81,820.65	\$0.1035	607	563,183	\$58,474.50	\$0.1038	608	367,420	\$39,775.31	\$0.1083
Res. (Dom-In - All Elec.) w/Ecosmart	E2E	1	584	\$65.32	\$0.1118	1	566	\$61.97	\$0.1095	1	615	\$65.88	\$0.1071	1	461	\$51.33	\$0.1113
<b>Total Residential (Domestic)</b>		<b>3,955</b>	<b>3,381,513</b>	<b>\$367,073.52</b>	<b>\$0.1086</b>	<b>3,973</b>	<b>3,054,966</b>	<b>\$325,911.15</b>	<b>\$0.1067</b>	<b>3,966</b>	<b>2,548,522</b>	<b>\$271,929.67</b>	<b>\$0.1067</b>	<b>3,968</b>	<b>2,015,899</b>	<b>\$222,053.18</b>	<b>\$0.1102</b>
Residential (Rural-Out)	ER1	744	919,993	\$105,142.88	\$0.1143	744	845,069	\$94,938.92	\$0.1123	744	723,533	\$81,281.84	\$0.1123	748	562,029	\$65,398.07	\$0.1164
Residential (Rural-Out) w/Ecosmart	ER1E	4	2,956	\$354.25	\$0.1198	4	2,722	\$322.15	\$0.1184	4	2,446	\$289.81	\$0.1185	4	2,057	\$252.09	\$0.1226
Residential (Rural-Out - All Electric)	ER2	388	661,524	\$74,112.64	\$0.1120	386	610,864	\$67,063.80	\$0.1098	387	493,251	\$54,202.13	\$0.1099	388	346,446	\$39,581.00	\$0.1142
Res. (Rural-Out - All Electric) w/Ecosmart	ER2E	2	3,211	\$361.20	\$0.1125	2	2,810	\$311.12	\$0.1107	2	2,217	\$246.28	\$0.1111	2	1,345	\$158.58	\$0.1179
Residential (Rural-Out w/Dmd)	ER3	16	34,185	\$3,784.23	\$0.1107	14	18,613	\$2,065.16	\$0.1110	15	22,023	\$2,394.91	\$0.1087	15	38,586	\$4,115.04	\$0.1066
Residential (Rural-Out - All Electric w/Dm)	ER4	9	12,137	\$1,378.93	\$0.1136	9	11,828	\$1,314.56	\$0.1111	9	9,698	\$1,079.90	\$0.1114	9	7,050	\$816.43	\$0.1158
<b>Total Residential (Rural)</b>		<b>1,163</b>	<b>1,634,006</b>	<b>\$185,134.13</b>	<b>\$0.1133</b>	<b>1,159</b>	<b>1,491,706</b>	<b>\$166,015.51</b>	<b>\$0.1113</b>	<b>1,161</b>	<b>1,253,168</b>	<b>\$139,494.87</b>	<b>\$0.1113</b>	<b>1,166</b>	<b>957,513</b>	<b>\$110,321.21</b>	<b>\$0.1152</b>
Commercial (1 Ph-In - No Dmd)	EC2	72	53,616	\$7,253.04	\$0.1353	73	49,146	\$6,602.06	\$0.1343	73	48,143	\$6,412.51	\$0.1332	72	40,831	\$5,602.99	\$0.1372
Commercial (1 Ph-Out - No Dmd)	EC2O	42	10,778	\$1,791.54	\$0.1662	43	11,360	\$1,842.30	\$0.1622	43	10,492	\$1,725.43	\$0.1645	43	7,705	\$1,411.91	\$0.1832
<b>Total Commercial (1 Ph) No Dmd</b>		<b>114</b>	<b>64,394</b>	<b>\$9,044.58</b>	<b>\$0.1405</b>	<b>116</b>	<b>60,506</b>	<b>\$8,444.36</b>	<b>\$0.1396</b>	<b>116</b>	<b>58,635</b>	<b>\$8,137.94</b>	<b>\$0.1388</b>	<b>115</b>	<b>48,536</b>	<b>\$7,014.90</b>	<b>\$0.1445</b>
Commercial (1 Ph-In - w/Demand)	EC1	263	358,653	\$47,446.55	\$0.1323	261	337,480	\$44,282.75	\$0.1312	260	328,539	\$42,760.94	\$0.1302	259	284,829	\$38,606.84	\$0.1355
Commercial (1 Ph-Out - w/Demand)	EC1O	25	49,390	\$6,199.88	\$0.1255	25	45,917	\$5,650.20	\$0.1231	25	42,980	\$5,320.61	\$0.1238	25	33,206	\$4,345.55	\$0.1309
<b>Total Commercial (1 Ph) w/Demand</b>		<b>288</b>	<b>408,043</b>	<b>\$53,646.43</b>	<b>\$0.1315</b>	<b>286</b>	<b>383,397</b>	<b>\$49,932.95</b>	<b>\$0.1302</b>	<b>285</b>	<b>371,519</b>	<b>\$48,081.55</b>	<b>\$0.1294</b>	<b>284</b>	<b>318,035</b>	<b>\$42,952.39</b>	<b>\$0.1351</b>
Commercial (3 Ph-Out - No Dmd)	EC4O	2	2,120	\$289.03	\$0.1363	2	40	\$40.87	\$1.0168	2	1,160	\$169.60	\$0.1462	2	160	\$54.59	\$0.3412
<b>Total Commercial (3 Ph) No Dmd</b>		<b>2</b>	<b>2,120</b>	<b>\$289.03</b>	<b>\$0.1363</b>	<b>2</b>	<b>40</b>	<b>\$40.87</b>	<b>\$1.0168</b>	<b>2</b>	<b>1,160</b>	<b>\$169.60</b>	<b>\$0.1462</b>	<b>2</b>	<b>160</b>	<b>\$54.59</b>	<b>\$0.3412</b>
Commercial (3 Ph-In - w/Demand)	EC3	206	1,553,843	\$182,632.23	\$0.1175	206	1,532,298	\$176,808.22	\$0.1154	207	1,441,600	\$165,075.33	\$0.1145	207	1,452,965	\$168,573.29	\$0.1160
Commercial (3 Ph-Out - w/Demand)	EC3O	39	431,972	\$50,528.66	\$0.1170	39	416,052	\$47,645.15	\$0.1145	39	369,784	\$41,976.45	\$0.1135	39	338,498	\$40,047.49	\$0.1183
Commercial (3 Ph-In - w/Dmd.&Sub-St.C)	EC3S	2	59,760	\$6,997.97	\$0.1171	2	71,760	\$8,159.09	\$0.1137	2	106,680	\$11,375.57	\$0.1066	4	132,480	\$15,824.02	\$0.1194
Commercial (3 Ph-Out - w/Dmd.&Sub-St)	E3SO	3	145,880	\$16,065.70	\$0.1101	3	141,160	\$15,333.57	\$0.1086	3	132,720	\$14,380.98	\$0.1084	3	140,520	\$15,336.38	\$0.1091
Commercial (3 Ph-In - w/Demand, No Tariff)	EC3T	1	1,880	\$228.87	\$0.1217	1	1,720	\$204.83	\$0.1191	1	1,560	\$187.94	\$0.1205	1	1,800	\$215.71	\$0.1198
<b>Total Commercial (3 Ph) w/Demand</b>		<b>251</b>	<b>2,193,335</b>	<b>\$256,453.43</b>	<b>\$0.1169</b>	<b>251</b>	<b>2,162,990</b>	<b>\$248,150.86</b>	<b>\$0.1147</b>	<b>252</b>	<b>2,052,344</b>	<b>\$232,996.27</b>	<b>\$0.1135</b>	<b>254</b>	<b>2,066,263</b>	<b>\$239,996.89</b>	<b>\$0.1162</b>
Large Power (In - w/Dmd & Rct)	EL1	20	2,226,845	\$211,633.90	\$0.0950	20	2,108,673	\$202,315.27	\$0.0959	20	2,284,380	\$207,502.78	\$0.0908	21	2,385,981	\$220,519.73	\$0.0924
Large Power (In - w/Dmd & Rct, w/SbCr)	EL2	1	759,238	\$62,063.40	\$0.0817	1	700,316	\$57,506.54	\$0.0821	1	670,523	\$51,650.04	\$0.0770	1	662,477	\$51,806.61	\$0.0782
Large Power (Out - w/Dmd & Rct)	EL1O	0	0	\$0.00	\$0.0000	0	0	\$0.00	\$0.0000	0	0	\$0.00	\$0.0000	0	0	\$0.00	\$0.0000
Large Power (Out - w/Dmd & Rct, w/SbCr)	EL2O	1	337,200	\$32,659.20	\$0.0969	1	295,200	\$29,423.85	\$0.0997	1	286,800	\$27,782.97	\$0.0969	1	319,200	\$30,456.43	\$0.0954
Large Power (In - w/Dmd & Rct, w/SbCr)	EL3	2	88,046	\$7,302.78	\$0.0829	2	82,101	\$6,908.38	\$0.0841	2	55,869	\$6,524.97	\$0.1168	2	41,376	\$5,522.76	\$0.1335
<b>Total Large Power</b>		<b>24</b>	<b>3,411,329</b>	<b>\$313,659.28</b>	<b>\$0.0919</b>	<b>24</b>	<b>3,186,290</b>	<b>\$296,154.04</b>	<b>\$0.0929</b>	<b>24</b>	<b>3,297,572</b>	<b>\$293,460.76</b>	<b>\$0.0890</b>	<b>25</b>	<b>3,409,034</b>	<b>\$308,305.53</b>	<b>\$0.0904</b>
Industrial (In - w/Dmd & Rct, w/SbCr)	EI1	1	1,123,360	\$91,332.81	\$0.0813	1	1,013,401	\$83,488.50	\$0.0824	1	1,030,321	\$80,038.20	\$0.0777	1	1,070,789	\$83,886.09	\$0.0783
Industrial (In - w/Dmd & Rct, No/SbCr)	EI2	1	1,101,193	\$88,302.30	\$0.0802	1	991,550	\$77,788.63	\$0.0785	1	1,107,400	\$83,449.52	\$0.0754	1	1,059,232	\$81,867.50	\$0.0773
<b>Total Industrial</b>		<b>2</b>	<b>2,224,553</b>	<b>\$179,635.11</b>	<b>\$0.0808</b>	<b>2</b>	<b>2,004,951</b>	<b>\$161,277.13</b>	<b>\$0.0804</b>	<b>2</b>	<b>2,137,721</b>	<b>\$163,487.72</b>	<b>\$0.0765</b>	<b>2</b>	<b>2,130,021</b>	<b>\$165,753.59</b>	<b>\$0.0778</b>
Interdepartmental (In - No Dmd)	ED1	48	174,867	\$16,615.11	\$0.0950	48	159,637	\$14,757.99	\$0.0924	48	138,905	\$12,636.25	\$0.0910	48	91,122	\$8,411.66	\$0.0923
Interdepartmental (Out - No Dmd)	ED1O	1	0	\$0.00	\$0.0000	1	0	\$0.00	\$0.0000	1	9	\$0.83	\$0.0922	1	244	\$22.43	\$0.0919
Interdepartmental (Out - w/Dmd)	ED2O	0	0	\$0.00	\$0.0000	0	0	\$0.00	\$0.0000	0	0	\$0.00	\$0.0000	0	0	\$0.00	\$0.0000
Interdepartmental (In - w/Dmd)	ED2	20	374,462	\$34,779.41	\$0.0929	20	346,492	\$31,272.53	\$0.0903	20	276,255	\$24,506.50	\$0.0887	20	207,191	\$18,542.20	\$0.0895
Interdepartmental (3Ph-In - w/Dmd)	ED3	0	0	\$0.00	\$0.0000	0	0	\$0.00	\$0.0000	0	0	\$0.00	\$0.0000	0	0	\$0.00	\$0.0000
Interdepartmental (Street Lights)	EDSL	0	0	\$0.00	\$0.0000	0	0	\$0.00	\$0.0000	0	0	\$0.00	\$0.0000	0	0	\$0.00	\$0.0000
Interdepartmental (Traffic Signals)	EDTS	0	0	\$0.00	\$0.0000	0	0	\$0.00	\$0.0000	0	0	\$0.00	\$0.0000	0	0	\$0.00	\$0.0000
Generators (JV2 Power Cost Only)	GJV2	1	24,620	\$1,085.50	\$0.0441	1	20,605	\$1,068.78	\$0.0519	1	19,378	\$1,034.98	\$0.0534	1	17,280	\$748.40	\$0.0433
Generators (JV5 Power Cost Only)	GJV5	1	18,650	\$822.28	\$0.0441	1	15,792	\$819.13	\$0.0519	1	9,449	\$504.67	\$0.0534	1	0	\$0.00	\$0.0000
<b>Total Interdepartmental</b>		<b>71</b>	<b>592,599</b>	<b>\$53,302.30</b>	<b>\$0.0899</b>	<b>71</b>	<b>542,526</b>	<b>\$47,918.43</b>	<b>\$0.0883</b>	<b>71</b>	<b>443,996</b>	<b>\$38,683.23</b>	<b>\$0.0871</b>	<b>71</b>	<b>315,837</b>	<b>\$27,724.69</b>	<b>\$0.0878</b>
<b>SUB-TOTAL CONSUMPTION &amp; DEMAND</b>		<b>5,870</b>	<b>13,911,892</b>	<b>\$1,418,237.81</b>	<b>\$0.1019</b>	<b>5,884</b>	<b>12,887,372</b>	<b>\$1,303,845.10</b>	<b>\$0.1012</b>	<b>5,879</b>	<b>12,164,277</b>	<b>\$1,196,441.61</b>	<b>\$0.0984</b>	<b>5,887</b>	<b>11,261,298</b>	<b>\$1,124,176.97</b>	<b>\$0.0998</b>
Street Lights (In)	SLO	15	0	\$13.59	\$0.0000	15	0	\$13.59	\$0.0000	15	0	\$13.58	\$0.0000	15	0	\$13.58	\$0.0000
Street Lights (Out)	SLOO	2	0	\$0.77	\$0.0000	2	0	\$0.77	\$0.0000	2	0	\$0.77	\$0.0000	2	0	\$0.77	\$0.0000
<b>Total Street Light Only</b>		<b>17</b>	<b>0</b>	<b>\$14.36</b>	<b>\$0.0000</b>	<b>17</b>	<b>0</b>	<b>\$14.36</b>	<b>\$0.0000</b>	<b>17</b>	<b>0</b>	<b>\$14.35</b>	<b>\$0.0000</b>	<b>17</b>	<b>0</b>	<b>\$14.35</b>	<b>\$0.0000</b>
<b>TOTAL CONSUMPTION &amp; DEMAND</b>		<b>5,887</b>	<b>13,911,892</b>	<b>\$1,418,252.17</b>	<b>\$0.1019</b>	<b>5,901</b>	<b>12,887,372</b>	<b>\$1,303,859.46</b>	<b>\$0.1012</b>	<b>5,896</b>	<b>12,164,277</b>	<b>\$1,196,455.96</b>	<b>\$0.0984</b>	<b>5,904</b>	<b>11,261,298</b>	<b>\$1,124,191.32</b>	<b>\$0.0998</b>

<b>BILLING SUMMARY AND COA</b>																		
<b>JANUARY, 2016</b>																		
<b>2016 - JANUARY BILLING WITH DECEMBER 2015</b>																		
Class and/or Schedule	Rate Code	Jul-15			Aug-15			Sep-15			Oct-15			Nov-15				
		# of Bills	(kWh Usage)	Billed	Cost / kWh For Month	# of Bills	(kWh Usage)	Billed	Cost / kWh For Month	# of Bills	(kWh Usage)	Billed	Cost / kWh For Month	# of Bills	(kWh Usage)	Billed	Cost / kWh For Month	
Residential (Dom-In)	E1	3,351	2,075,385	\$230,585.66	\$0.1111	3,345	2,432,992	\$261,151.97	\$0.1073	3,357	3,009,830	\$309,195.73	\$0.1027	3,342	2,616,403	\$258,762.94	\$0.0989	3,344
Residential (Dom-In) w/Ecosmart	E1E	10	5,539	\$621.73	\$0.1122	10	6,313	\$685.86	\$0.1086	10	8,544	\$880.66	\$0.1031	10	6,667	\$668.28	\$0.1002	10
Residential (Dom-In - All Electric)	E2	611	371,740	\$41,369.32	\$0.1113	607	401,010	\$43,387.95	\$0.1082	608	475,200	\$49,287.93	\$0.1037	611	420,610	\$42,035.32	\$0.0999	611
Res. (Dom-In - All Elec.) w/Ecosmart	E2E	1	677	\$74.67	\$0.1103	1	917	\$96.91	\$0.1057	1	1,019	\$103.88	\$0.1019	1	889	\$87.10	\$0.0980	1
<b>Total Residential (Domestic)</b>		<b>3,973</b>	<b>2,453,341</b>	<b>\$272,651.38</b>	<b>\$0.1111</b>	<b>3,963</b>	<b>2,841,232</b>	<b>\$305,322.69</b>	<b>\$0.1075</b>	<b>3,976</b>	<b>3,494,593</b>	<b>\$359,468.20</b>	<b>\$0.1029</b>	<b>3,964</b>	<b>3,044,569</b>	<b>\$301,553.64</b>	<b>\$0.0990</b>	<b>3,966</b>
Residential (Rural-Out)	ER1	749	679,680	\$79,620.30	\$0.1171	752	731,539	\$83,480.22	\$0.1141	752	856,818	\$93,834.18	\$0.1095	751	785,000	\$82,819.91	\$0.1055	754
Residential (Rural-Out) w/Ecosmart	ER1E	4	2,199	\$273.52	\$0.1244	4	2,524	\$302.24	\$0.1197	4	3,050	\$347.44	\$0.1139	4	2,854	\$313.96	\$0.1100	4
Residential (Rural-Out - All Electric)	ER2	386	386,537	\$44,881.69	\$0.1161	386	389,872	\$44,339.94	\$0.1137	389	459,500	\$50,180.31	\$0.1092	388	429,237	\$45,060.90	\$0.1050	386
Res. (Rural-Out - All Electric) w/Ecosmart	ER2E	2	1,153	\$142.35	\$0.1235	2	1,201	\$144.72	\$0.1205	2	1,369	\$157.93	\$0.1154	2	1,268	\$141.65	\$0.1117	2
Residential (Rural-Out w/Dmd)	ER3	15	30,981	\$3,430.53	\$0.1107	15	17,878	\$2,003.96	\$0.1121	15	9,622	\$1,118.35	\$0.1162	15	20,298	\$2,093.89	\$0.1032	15
Residential (Rural-Out - All Electric w/Dmd)	ER4	9	7,011	\$834.01	\$0.1190	9	7,864	\$906.42	\$0.1153	9	9,346	\$1,031.20	\$0.1103	9	8,917	\$945.17	\$0.1060	9
<b>Total Residential (Rural)</b>		<b>1,165</b>	<b>1,107,561</b>	<b>\$129,182.40</b>	<b>\$0.1166</b>	<b>1,168</b>	<b>1,150,878</b>	<b>\$131,177.50</b>	<b>\$0.1140</b>	<b>1,171</b>	<b>1,339,705</b>	<b>\$146,669.41</b>	<b>\$0.1095</b>	<b>1,169</b>	<b>1,247,574</b>	<b>\$131,375.48</b>	<b>\$0.1053</b>	<b>1,170</b>
Commercial (1 Ph-In - No Dmd)	EC2	74	45,227	\$6,275.38	\$0.1388	75	43,780	\$6,014.28	\$0.1374	75	45,629	\$6,090.42	\$0.1335	77	46,878	\$6,031.02	\$0.1287	74
Commercial (1 Ph-Out - No Dmd)	EC2O	42	7,061	\$1,346.71	\$0.1907	42	7,054	\$1,329.85	\$0.1885	42	7,671	\$1,378.18	\$0.1797	42	7,182	\$1,288.03	\$0.1793	43
<b>Total Commercial (1 Ph) No Dmd</b>		<b>116</b>	<b>52,288</b>	<b>\$7,622.09</b>	<b>\$0.1458</b>	<b>117</b>	<b>50,834</b>	<b>\$7,344.13</b>	<b>\$0.1445</b>	<b>117</b>	<b>53,300</b>	<b>\$7,468.60</b>	<b>\$0.1401</b>	<b>119</b>	<b>54,060</b>	<b>\$7,319.05</b>	<b>\$0.1354</b>	<b>117</b>
Commercial (1 Ph-In - w/Demand)	EC1	257	300,429	\$42,301.06	\$0.1408	256	339,892	\$45,546.10	\$0.1340	257	380,148	\$48,330.68	\$0.1271	257	393,299	\$48,938.68	\$0.1244	255
Commercial (1 Ph-Out - w/Demand)	EC1O	25	30,768	\$4,240.82	\$0.1378	25	33,702	\$4,489.48	\$0.1332	24	34,571	\$4,404.97	\$0.1274	24	31,736	\$3,922.40	\$0.1236	24
<b>Total Commercial (1 Ph) w/Demand</b>		<b>282</b>	<b>331,197</b>	<b>\$46,541.88</b>	<b>\$0.1405</b>	<b>281</b>	<b>373,594</b>	<b>\$50,035.58</b>	<b>\$0.1339</b>	<b>281</b>	<b>414,719</b>	<b>\$52,735.65</b>	<b>\$0.1272</b>	<b>281</b>	<b>425,035</b>	<b>\$52,861.08</b>	<b>\$0.1244</b>	<b>279</b>
Commercial (3 Ph-Out - No Dmd)	EC4O	2	80	\$45.54	\$0.5693	2	40	\$40.68	\$1.0170	2	80	\$45.11	\$0.5639	2	40	\$40.37	\$1.0093	2
<b>Total Commercial (3 Ph) No Dmd</b>		<b>2</b>	<b>80</b>	<b>\$45.54</b>	<b>\$0.5693</b>	<b>2</b>	<b>40</b>	<b>\$40.68</b>	<b>\$1.0170</b>	<b>2</b>	<b>80</b>	<b>\$45.11</b>	<b>\$0.5639</b>	<b>2</b>	<b>40</b>	<b>\$40.37</b>	<b>\$1.0093</b>	<b>2</b>
Commercial (3 Ph-In - w/Demand)	EC3	207	1,555,155	\$185,286.12	\$0.1191	208	1,667,068	\$193,578.75	\$0.1161	209	1,788,777	\$199,840.42	\$0.1117	207	1,964,197	\$210,975.13	\$0.1074	208
Commercial (3 Ph-Out - w/Demand)	EC3O	38	410,615	\$48,498.64	\$0.1181	38	351,305	\$41,198.22	\$0.1173	39	369,943	\$42,978.63	\$0.1162	39	490,615	\$51,407.18	\$0.1048	39
Commercial (3 Ph-In - w/Dmd.&Sub-St.C	EC3S	2	148,920	\$16,349.54	\$0.1098	2	164,520	\$17,424.80	\$0.1059	2	204,960	\$20,921.37	\$0.1021	2	186,840	\$18,491.86	\$0.0990	2
Commercial (3 Ph-Out - w/Dmd.&Sub-St.	E3SO	3	200,400	\$21,574.45	\$0.1077	3	141,360	\$15,487.53	\$0.1096	3	106,600	\$11,944.61	\$0.1121	3	225,600	\$21,815.93	\$0.0967	3
Commercial (3 Ph-In - w/Demand, No Ta	EC3T	1	2,000	\$274.19	\$0.1371	1	2,960	\$362.43	\$0.1224	1	3,280	\$414.79	\$0.1265	1	4,720	\$498.23	\$0.1056	1
<b>Total Commercial (3 Ph) w/Demand</b>		<b>251</b>	<b>2,317,090</b>	<b>\$271,982.94</b>	<b>\$0.1174</b>	<b>252</b>	<b>2,327,213</b>	<b>\$268,051.73</b>	<b>\$0.1152</b>	<b>254</b>	<b>2,473,560</b>	<b>\$276,099.82</b>	<b>\$0.1116</b>	<b>252</b>	<b>2,871,972</b>	<b>\$303,188.33</b>	<b>\$0.1056</b>	<b>253</b>
Large Power (In - w/Dmd & Rct)	EL1	21	2,481,914	\$235,268.97	\$0.0948	21	2,483,390	\$232,286.37	\$0.0935	21	2,809,626	\$244,150.03	\$0.0869	21	2,879,666	\$240,200.95	\$0.0834	21
Large Power (In - w/Dmd & Rct, w/SbCr)	EL2	1	753,680	\$60,286.30	\$0.0800	1	713,392	\$56,261.96	\$0.0789	1	840,500	\$64,298.04	\$0.0765	1	919,537	\$66,154.60	\$0.0719	1
Large Power (Out - w/Dmd & Rct)	EL1O	0	0	\$0.00	\$0.0000	0	0	\$0.00	\$0.0000	0	0	\$0.00	\$0.0000	0	0	\$0.00	\$0.0000	0
Large Power (Out - w/Dmd & Rct, w/SbCr)	EL2O	1	313,200	\$31,319.52	\$0.1000	1	265,200	\$27,074.00	\$0.1021	1	321,600	\$28,453.60	\$0.0885	1	296,400	\$27,432.02	\$0.0926	1
Large Power (In - w/Dmd & Rct, w/SbCr)	EL3	2	81,846	\$16,481.63	\$0.2014	2	77,483	\$14,751.37	\$0.1904	2	79,802	\$9,925.82	\$0.1244	2	78,359	\$12,388.66	\$0.1581	2
<b>Total Large Power</b>		<b>25</b>	<b>3,630,640</b>	<b>\$343,356.42</b>	<b>\$0.0946</b>	<b>25</b>	<b>3,539,465</b>	<b>\$330,373.70</b>	<b>\$0.0933</b>	<b>25</b>	<b>4,051,528</b>	<b>\$346,827.49</b>	<b>\$0.0856</b>	<b>25</b>	<b>4,173,962</b>	<b>\$346,176.23</b>	<b>\$0.0829</b>	<b>25</b>
Industrial (In - w/Dmd & Rct, w/SbCr)	EI1	1	1,152,988	\$93,054.84	\$0.0807	1	998,762	\$82,701.17	\$0.0828	1	1,197,585	\$90,044.76	\$0.0752	1	1,179,109	\$83,199.02	\$0.0706	1
Industrial (In - w/Dmd & Rct, No/SbCr)	EI2	1	1,077,121	\$88,456.90	\$0.0821	1	1,052,393	\$85,875.61	\$0.0816	1	1,268,977	\$93,848.76	\$0.0740	1	1,186,209	\$83,569.80	\$0.0705	1
<b>Total Industrial</b>		<b>2</b>	<b>2,230,109</b>	<b>\$181,511.74</b>	<b>\$0.0814</b>	<b>2</b>	<b>2,051,155</b>	<b>\$168,576.78</b>	<b>\$0.0822</b>	<b>2</b>	<b>2,466,562</b>	<b>\$183,893.52</b>	<b>\$0.0746</b>	<b>2</b>	<b>2,365,318</b>	<b>\$166,768.82</b>	<b>\$0.0705</b>	<b>2</b>
Interdepartmental (In - No Dmd)	ED1	8	49,074	\$5,581.34	\$0.1137	8	51,229	\$5,640.62	\$0.1101	8	53,261	\$5,694.67	\$0.1069	8	45,505	\$4,669.28	\$0.1026	8
Interdepartmental (Out - No Dmd)	ED1O	0	0	\$0.00	\$0.0000	0	0	\$0.00	\$0.0000	0	0	\$0.00	\$0.0000	0	0	\$0.00	\$0.0000	0
Interdepartmental (Out - w/Dmd)	ED2O	2	825	\$122.51	\$0.1485	2	885	\$127.65	\$0.1442	2	1,033	\$141.76	\$0.1372	2	961	\$128.94	\$0.1342	2
Interdepartmental (In - w/Dmd)	ED2	30	23,382	\$3,137.40	\$0.1342	31	21,096	\$2,841.84	\$0.1347	27	25,195	\$3,193.85	\$0.1268	27	22,259	\$2,753.37	\$0.1237	27
Interdepartmental (3Ph-In - w/Dmd)	ED3	11	168,823	\$18,902.11	\$0.1120	11	216,189	\$23,641.06	\$0.1094	11	201,469	\$21,275.17	\$0.1056	11	207,274	\$20,069.48	\$0.0968	11
Interdepartmental (Street Lights)	EDSL	7	62,879	\$5,850.15	\$0.0930	7	62,879	\$5,850.15	\$0.0930	7	62,879	\$5,850.15	\$0.0930	7	62,879	\$5,848.05	\$0.0930	7
Interdepartmental (Traffic Signals)	EDTS	15	1,782	\$164.29	\$0.0922	15	1,676	\$154.50	\$0.0922	15	1,657	\$153.18	\$0.0924	14	1,707	\$157.86	\$0.0925	14
Generators (JV2 Power Cost Only)	GJV2	1	16,671	\$695.01	\$0.0417	1	15,739	\$712.35	\$0.0453	1	14,697	\$625.95	\$0.0426	1	15,735	\$630.97	\$0.0401	1
Generators (JV5 Power Cost Only)	GJV5	1	28,010	\$1,167.74	\$0.0417	1	11,638	\$526.74	\$0.0453	1	11,234	\$478.46	\$0.0426	1	12,197	\$489.10	\$0.0401	1
<b>Total Interdepartmental</b>		<b>75</b>	<b>351,446</b>	<b>\$35,620.55</b>	<b>\$0.1014</b>	<b>76</b>	<b>381,331</b>	<b>\$39,494.91</b>	<b>\$0.1036</b>	<b>72</b>	<b>371,425</b>	<b>\$37,413.19</b>	<b>\$0.1007</b>	<b>71</b>	<b>368,517</b>	<b>\$34,747.05</b>	<b>\$0.0943</b>	<b>71</b>
<b>SUB-TOTAL CONSUMPTION &amp; DEMAND</b>		<b>5,891</b>	<b>12,473,752</b>	<b>\$1,288,514.94</b>	<b>\$0.1033</b>	<b>5,886</b>	<b>12,715,742</b>	<b>\$1,300,417.70</b>	<b>\$0.1023</b>	<b>5,900</b>	<b>14,665,472</b>	<b>\$1,410,620.99</b>	<b>\$0.0962</b>	<b>5,885</b>	<b>14,551,047</b>	<b>\$1,344,030.05</b>	<b>\$0.0924</b>	<b>5,885</b>
Street Lights (In)	SLO	15	0	\$13.59	\$0.0000	15	0	\$13.59	\$0.0000	15	0	\$13.59	\$0.0000	15	0	\$13.59	\$0.0000	14
Street Lights (Out)	SLOO	2	0	\$0.77	\$0.0000	2	0	\$0.77	\$0.0000	2	0	\$0.77	\$0.0000	2	0	\$0.77	\$0.0000	2
<b>Total Street Light Only</b>		<b>17</b>	<b>0</b>	<b>\$14.36</b>	<b>\$0.0000</b>	<b>16</b>												
<b>TOTAL CONSUMPTION &amp; DEMAND</b>		<b>5,908</b>	<b>12,473,752</b>	<b>\$1,288,529.30</b>	<b>\$0.1033</b>	<b>5,903</b>	<b>12,715,742</b>	<b>\$1,300,432.06</b>	<b>\$0.1023</b>	<b>5,917</b>	<b>14,665,472</b>	<b>\$1,410,635.35</b>	<b>\$0.0962</b>	<b>5,902</b>				

<b>BILLING SUMMARY AND COM</b>													
JANUARY, 2016													
2016 - JANUARY BILLING WITH DECEMBER 2015													
Class and/or Schedule	Rate Code	Nov-15	Nov-15	Cost / kWh	Dec-15	Dec-15	Dec-15	Cost / kWh	TOTAL	TOTAL	Avg.Cost	Avg.Num.	Avg.Per.%
		(kWh Usage)	Billed	For Month	# of Bills	(kWh Usage)	Billed	For Month	KWH USEAGE	BILLING	Per kWh	of Bills	of Bills
									PRIOR 12 MO	PRIOR 12 MO	For Period	For Period	For Period
Residential (Dom-In)	E1	1,988,662	\$204,893.24	\$0.1030	3,356	1,798,371	\$184,274.36	\$0.1025	26,875,372	\$2,871,477.13	\$0.1068	3,347	56.7232%
Residential (Dom-In) w/Ecosmart	E1E	4,698	\$496.63	\$0.1057	10	4,126	\$436.57	\$0.1058	64,557	\$7,031.53	\$0.1089	10	0.1695%
Residential (Dom-In - All Electric)	E2	341,222	\$35,380.27	\$0.1037	608	377,629	\$38,115.47	\$0.1009	6,350,237	\$670,056.34	\$0.1055	608	10.3073%
Res. (Dom-In - All Elec.) w/Ecosmart	E2E	781	\$78.58	\$0.1006	1	616	\$62.21	\$0.1010	8,213	\$871.90	\$0.1062	1	0.0169%
<b>Total Residential (Domestic)</b>		<b>2,335,363</b>	<b>\$240,848.72</b>	<b>\$0.1031</b>	<b>3,975</b>	<b>2,180,742</b>	<b>\$222,888.61</b>	<b>\$0.1022</b>	<b>33,298,379</b>	<b>\$3,549,436.90</b>	<b>\$0.1066</b>	<b>3,967</b>	<b>67.2169%</b>
Residential (Rural-Out)	ER1	599,673	\$66,098.28	\$0.1102	758	639,997	\$69,004.14	\$0.1078	9,049,712	\$1,020,060.38	\$0.1127	748	12.6811%
Residential (Rural-Out) w/Ecosmart	ER1E	2,178	\$252.82	\$0.1161	4	2,380	\$268.56	\$0.1128	32,592	\$3,835.32	\$0.1177	4	0.0678%
Residential (Rural-Out - All Electric)	ER2	347,574	\$37,798.14	\$0.1087	387	392,331	\$41,522.79	\$0.1058	5,696,859	\$633,423.54	\$0.1112	387	6.5608%
Res. (Rural-Out - All Electric) w/Ecosmar	ER2E	1,369	\$153.87	\$0.1122	2	1,653	\$178.64	\$0.1081	22,936	\$2,611.48	\$0.1139	2	0.0339%
Residential (Rural-Out w/Dmd)	ER3	18,711	\$1,972.49	\$0.1054	15	54,195	\$5,333.52	\$0.0984	526,946	\$56,435.47	\$0.1071	15	0.2542%
Residential (Rural-Out - All Electric w/Dm	ER4	9,782	\$1,044.46	\$0.1068	9	28,708	\$2,837.96	\$0.0989	155,947	\$17,016.64	\$0.1091	9	0.1525%
<b>Total Residential (Rural)</b>		<b>979,287</b>	<b>\$107,319.86</b>	<b>\$0.1096</b>	<b>1,175</b>	<b>1,119,264</b>	<b>\$119,145.61</b>	<b>\$0.1064</b>	<b>15,484,992</b>	<b>\$1,733,382.83</b>	<b>\$0.1119</b>	<b>1,166</b>	<b>19.7503%</b>
Commercial (1 Ph-In - No Dmd)	EC2	44,720	\$5,835.07	\$0.1305	74	46,142	\$5,915.34	\$0.1282	563,694	\$75,782.37	\$0.1344	74	1.2512%
Commercial (1 Ph-Out - No Dmd)	EC2O	6,331	\$1,218.01	\$0.1924	43	10,729	\$1,686.33	\$0.1572	112,323	\$19,162.89	\$0.1706	43	0.7202%
<b>Total Commercial (1 Ph) No Dmd</b>		<b>51,051</b>	<b>\$7,053.08</b>	<b>\$0.1382</b>	<b>117</b>	<b>56,871</b>	<b>\$7,601.67</b>	<b>\$0.1337</b>	<b>676,017</b>	<b>\$94,945.26</b>	<b>\$0.1404</b>	<b>116</b>	<b>1.9714%</b>
Commercial (1 Ph-In - w/Demand)	EC1	350,282	\$44,482.88	\$0.1270	255	279,725	\$37,007.69	\$0.1323	3,970,824	\$524,848.49	\$0.1322	259	4.3805%
Commercial (1 Ph-Out - w/Demand)	EC1O	29,420	\$3,757.18	\$0.1277	24	25,782	\$3,300.75	\$0.1280	440,418	\$56,473.94	\$0.1282	25	0.4180%
<b>Total Commercial (1 Ph) w/Demand</b>		<b>379,702</b>	<b>\$48,240.06</b>	<b>\$0.1270</b>	<b>279</b>	<b>305,507</b>	<b>\$40,308.44</b>	<b>\$0.1319</b>	<b>4,411,242</b>	<b>\$581,322.43</b>	<b>\$0.1318</b>	<b>283</b>	<b>4.7985%</b>
Commercial (3 Ph-Out - No Dmd)	EC4O	80	\$44.86	\$0.5608	2	40	\$40.37	\$1.0093	30,360	\$4,065.40	\$0.1339	2	0.0339%
<b>Total Commercial (3 Ph) No Dmd</b>		<b>80</b>	<b>\$44.86</b>	<b>\$0.5608</b>	<b>2</b>	<b>40</b>	<b>\$40.37</b>	<b>\$1.0093</b>	<b>30,360</b>	<b>\$4,065.40</b>	<b>\$0.1339</b>	<b>2</b>	<b>0.0339%</b>
Commercial (3 Ph-In - w/Demand)	EC3	1,707,544	\$189,181.38	\$0.1108	206	1,511,932	\$165,693.78	\$0.1096	19,149,790	\$2,193,162.93	\$0.1145	207	3.5078%
Commercial (3 Ph-Out - w/Demand)	EC3O	396,941	\$44,312.51	\$0.1116	39	556,051	\$58,181.67	\$0.1046	5,082,229	\$581,615.94	\$0.1144	39	0.6581%
Commercial (3 Ph-In - w/Dmd.&Sub-St.C	EC3S	203,880	\$20,524.88	\$0.1007	0	0	\$0.0000	\$0.0000	1,343,880	\$143,934.46	\$0.1071	2	0.0339%
Commercial (3 Ph-Out - w/Dmd.&Sub-St.	E3SO	89,680	\$10,157.73	\$0.1133	3	135,280	\$13,741.63	\$0.1016	1,736,720	\$186,632.22	\$0.1075	3	0.0508%
Commercial (3 Ph-In - w/Demand, No Ta	EC3T	4,280	\$461.32	\$0.1078	1	2,400	\$284.95	\$0.1187	30,080	\$3,566.18	\$0.1186	1	0.0169%
<b>Total Commercial (3 Ph) w/Demand</b>		<b>2,402,325</b>	<b>\$264,637.82</b>	<b>\$0.1102</b>	<b>249</b>	<b>2,205,663</b>	<b>\$237,902.03</b>	<b>\$0.1079</b>	<b>27,342,699</b>	<b>\$3,108,911.73</b>	<b>\$0.1137</b>	<b>252</b>	<b>4.2675%</b>
Large Power (In - w/Dmd & Rct)	EL1	2,689,846	\$229,516.76	\$0.0853	21	2,693,896	\$220,257.42	\$0.0818	29,771,307	\$2,706,561.82	\$0.0909	21	0.3502%
Large Power (In - w/Dmd & Rct, w/SbCr)	EL2	878,844	\$65,588.24	\$0.0746	3	1,099,839	\$82,880.55	\$0.0754	8,831,886	\$688,131.31	\$0.0779	1	0.0184%
Large Power (Out - w/Dmd & Rct)	EL1O	0	\$0.00	\$0.0000	0	0	\$0.0000	\$0.0000	0	\$0.00	\$0.0000	0	0.0000%
Large Power (Out - w/Dmd & Rct, w/SbC	EL2O	307,200	\$27,818.14	\$0.0906	1	332,400	\$28,057.68	\$0.0844	3,591,600	\$346,595.83	\$0.0965	1	0.0169%
Large Power (In - w/Dmd & Rct, w/SbCr)	EL3	78,297	\$6,047.70	\$0.0772	2	79,597	\$5,934.15	\$0.0746	912,969	\$107,228.15	\$0.1174	2	0.0339%
<b>Total Large Power</b>		<b>3,954,187</b>	<b>\$328,970.84</b>	<b>\$0.0832</b>	<b>27</b>	<b>4,205,732</b>	<b>\$337,129.80</b>	<b>\$0.0802</b>	<b>43,107,762</b>	<b>\$3,848,517.11</b>	<b>\$0.0893</b>	<b>25</b>	<b>0.4194%</b>
Industrial (In - w/Dmd & Rct, w/SbCr)	EI1	1,127,275	\$81,054.43	\$0.0719	1	1,206,433	\$83,318.08	\$0.0691	12,942,973	\$1,016,123.18	\$0.0785	1	0.0169%
Industrial (In - w/Dmd & Rct, No/SbCr)	EI2	1,158,099	\$83,221.66	\$0.0719	1	1,128,579	\$79,886.73	\$0.0708	13,169,360	\$1,014,081.90	\$0.0770	1	0.0169%
<b>Total Industrial</b>		<b>2,285,374</b>	<b>\$164,276.09</b>	<b>\$0.0719</b>	<b>2</b>	<b>2,335,012</b>	<b>\$163,204.81</b>	<b>\$0.0699</b>	<b>26,112,333</b>	<b>\$2,030,205.08</b>	<b>\$0.0777</b>	<b>2</b>	<b>0.0339%</b>
Interdepartmental (In - No Dmd)	ED1	32,267	\$3,472.77	\$0.1076	8	34,464	\$3,802.92	\$0.1103	1,151,558	\$112,257.31	\$0.0975	28	0.4745%
Interdepartmental (Out - No Dmd)	ED1O	0	\$0.00	\$0.0000	0	0	\$0.00	\$0.0000	253	\$23.26	\$0.0919	1	0.0085%
Interdepartmental (Out - w/Dmd)	ED2O	743	\$106.42	\$0.1432	2	327	\$59.81	\$0.1829	4,774	\$687.09	\$0.1439	1	0.0169%
Interdepartmental (In - w/Dmd)	ED2	25,670	\$3,168.51	\$0.1234	29	36,570	\$4,336.96	\$0.1186	2,048,969	\$193,584.26	\$0.0945	24	0.4109%
Interdepartmental (3Ph-In - w/Dmd)	ED3	161,092	\$16,726.53	\$0.1038	11	214,542	\$21,414.53	\$0.0998	1,169,389	\$122,028.88	\$0.1044	6	0.0932%
Interdepartmental (Street Lights)	EDSL	62,879	\$5,849.08	\$0.0930	7	62,879	\$5,862.30	\$0.0932	377,274	\$35,109.88	\$0.0931	4	0.0593%
Interdepartmental (Traffic Signals)	EDTS	1,820	\$168.31	\$0.0925	15	1,974	\$182.51	\$0.0925	10,616	\$980.65	\$0.0924	7	0.1243%
Generators (JV2 Power Cost Only)	GJV2	17,347	\$621.37	\$0.0358	1	17,671	\$662.84	\$0.0375	219,872	\$9,221.40	\$0.0419	1	0.0169%
Generators (JV5 Power Cost Only)	GJV5	11,408	\$408.63	\$0.0358	1	12,297	\$461.26	\$0.0375	163,209	\$6,761.10	\$0.0414	1	0.0169%
<b>Total Interdepartmental</b>		<b>313,226</b>	<b>\$30,521.62</b>	<b>\$0.0974</b>	<b>74</b>	<b>380,724</b>	<b>\$36,783.13</b>	<b>\$0.0966</b>	<b>5,145,914</b>	<b>\$480,653.83</b>	<b>\$0.0934</b>	<b>72</b>	<b>1.2215%</b>
<b>SUB-TOTAL CONSUMPTION &amp; DEMAND</b>		<b>12,700,595</b>	<b>\$1,191,912.95</b>	<b>\$0.0938</b>	<b>5,900</b>	<b>12,789,555</b>	<b>\$1,165,004.47</b>	<b>\$0.0911</b>	<b>155,609,698</b>	<b>\$15,431,440.57</b>	<b>\$0.0992</b>	<b>5,884</b>	<b>99.7133%</b>
Street Lights (In)	SLO	0	\$13.43	\$0.0000	15	0	\$13.59	\$0.0000	0	\$162.88	\$0.0000	15	0.2528%
Street Lights (Out)	SLOO	0	\$0.77	\$0.0000	2	0	\$0.77	\$0.0000	0	\$9.24	\$0.0000	2	0.0339%
<b>Total Street Light Only</b>		<b>0</b>	<b>\$14.20</b>	<b>\$0.0000</b>	<b>17</b>	<b>0</b>	<b>\$14.36</b>	<b>\$0.0000</b>	<b>0</b>	<b>\$172.12</b>	<b>\$0.0000</b>	<b>17</b>	<b>0.2867%</b>
<b>TOTAL CONSUMPTION &amp; DEMAND</b>		<b>12,700,595</b>	<b>\$1,191,927.15</b>	<b>\$0.0938</b>	<b>5,917</b>	<b>12,789,555</b>	<b>\$1,165,018.83</b>	<b>\$0.0911</b>	<b>155,609,698</b>	<b>\$15,431,612.69</b>	<b>\$0.0992</b>	<b>5,901</b>	<b>100.0000%</b>



**RATE REVIEW COMPARISONS - Current to Prior Month and Prior Year**

<b>2016 JANUARY - ELECTRIC PSCAF - BILLING COMPARISONS TO PRIOR PERIODS</b>										
Rate Comparisons to Prior Month and Prior Year for Same Period										
	Service Usage	Service Units	Current January 2016 Rate	Prior Month December 2015 Rate	Prior Year January 2015 Rate	Service Usage	Service Units	Current January 2016 Rate	Prior Month December 2015 Rate	Prior Year January 2015 Rate
<b>Customer Type -&gt;</b>	<b>RESIDENTIAL USER - (w/Gas Heat)</b>					<b>RESIDENTIAL USER - (All Electric)</b>				
Customer Charge			\$6.00	\$6.00	\$6.00			\$6.00	\$6.00	\$6.00
Distribution Energy Charge			\$20.93	\$20.93	\$20.93			\$33.39	\$33.39	\$33.39
Distribution Demand Charge										
Power Supply Energy Charge	978	kWh	\$71.20	\$71.20	\$71.20	1,976	kWh	\$143.85	\$143.85	\$143.85
Power Supply Demand Charge										
PSCAF - Monthly Factor	978	kWh	-\$4.30	-\$7.41	\$2.28	1,976	kWh	-\$8.69	-\$14.98	\$4.60
kWH Tax- Level 1	978	kWh	\$4.55	\$4.55	\$4.55	1,976	kWh	\$9.19	\$9.19	\$9.19
kWH Tax- Level 2										
kWH Tax- Level 3										
<b>Total Electric</b>			<b>\$98.38</b>	<b>\$95.27</b>	<b>\$104.96</b>			<b>\$183.74</b>	<b>\$177.45</b>	<b>\$197.03</b>
Water	6	CCF	\$41.37	\$41.37	\$39.57	11	CCF	\$66.37	\$66.37	\$63.07
Sewer (w/Stm.Sew. & Lat.)	6	CCF	\$64.63	\$64.63	\$54.58	11	CCF	\$90.08	\$90.08	\$76.78
Storm Water (Rate/ERU)			\$9.50	\$9.50	\$9.50			\$9.50	\$9.50	\$9.50
Refuse (Rate/Service)			\$18.00	\$18.00	\$18.00			\$18.00	\$18.00	\$18.00
<b>Sub-Other Services</b>			<b>\$133.50</b>	<b>\$133.50</b>	<b>\$121.65</b>			<b>\$183.95</b>	<b>\$183.95</b>	<b>\$167.35</b>
<b>Total Billing - All Services</b>			<b>\$231.88</b>	<b>\$228.77</b>	<b>\$226.61</b>			<b>\$367.69</b>	<b>\$361.40</b>	<b>\$364.38</b>
Verification Totals->			\$231.88	\$228.77	\$226.61			\$367.69	\$361.40	\$364.38
				<u>Cr.Mo to Pr.Mo</u>	<u>Cr.Yr to Pr.Yr</u>				<u>Cr.Mo to Pr.Mo</u>	<u>Cr.Yr to Pr.Yr</u>
Dollar Chg.to Prior Periods				\$3.11	\$5.27				\$6.29	\$3.31
% Inc/Dec(-) to Prior Periods				1.36%	2.33%				1.74%	0.91%
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
Cost/kWH - Electric	978	kWh	\$0.10059	\$0.09741	\$0.10732	1,976	kWh	\$0.09299	\$0.08980	\$0.09971
% Inc/Dec(-) to Prior Periods				3.26%	-6.27%				3.55%	-6.74%
Cost/CCF - Water	6	CCF	\$6.89500	\$6.89500	\$6.59500	2	CCF	\$33.18500	\$33.18500	\$31.53500
Cost/GALLONS - Water	4,488	GAL	\$0.00922	\$0.00922	\$0.00882	1,496	GAL	\$0.04436	\$0.04436	\$0.04216
% Inc/Dec(-) to Prior Periods				0.00%	4.55%				0.00%	5.23%
Cost/CCF - Sewer	6	CCF	\$10.77167	\$10.77167	\$9.09667	2	CCF	\$45.04000	\$45.04000	\$38.39000
Cost/GALLON - Sewer	4,488	GAL	\$0.01440	\$0.01440	\$0.01216	1,496	GAL	\$0.06021	\$0.06021	\$0.05132
% Inc/Dec(-) to Prior Periods				0.00%	18.41%				0.00%	17.32%
<i>(Listed Accounts Assume SAME USAGE for kWh and Water (CCF) for All Billing Periods)</i>										
<i>(One "1" Unit CCF of Water = "Hundred Cubic Foot" = 748 Gallons)</i>										

**RATE REVIEW COMPARISONS - Current to Prior Month and Prior Year**

<b>2016 JANUARY - ELECTRIC P</b>											
<b>Rate Comparisons to Prior Month a</b>											
	<u>Service Usage</u>	<u>Service Units</u>	<u>Current January 2016 Rate</u>	<u>Prior Month December 2015 Rate</u>	<u>Prior Year January 2015 Rate</u>		<u>Service Usage</u>	<u>Service Units</u>	<u>Current January 2016 Rate</u>	<u>Prior Month December 2015 Rate</u>	<u>Prior Year January 2015 Rate</u>
<u>Customer Type</u>											
<u>Customer Type -&gt;</u>	<u>COMMERCIAL USER - (3 Phase w/Demand)</u>					<u>INDUSTRIAL USER - (3 Phase w/Demand)</u>					
Customer Charge			\$18.00	\$18.00	\$18.00				\$100.00	\$100.00	\$100.00
Distribution Energy Charge	7,040	kWh	\$38.02	\$38.02	\$38.02	98,748	Reactive	\$2,303.85	\$2,303.85	\$2,303.85	\$2,303.85
Distribution Demand Charge	20.32	kW/Dmd	\$92.86	\$92.86	\$92.86	1510.1	kW/Dmd	\$8,215.30	\$8,215.30	\$8,215.30	\$8,215.30
Power Supply Energy Charge	7,040	kWh	\$623.04	\$623.04	\$623.04	866,108	kWh	\$39,165.42	\$39,165.42	\$39,165.42	\$39,165.42
Power Supply Demand Charge								\$15,296.55	\$15,296.55	\$15,296.55	\$15,296.55
PSCAF - Monthly Factor	7,040	kWh	-\$30.98	-\$53.36	\$16.40			-\$3,620.33	-\$6,236.85	\$1,917.13	\$1,917.13
kWH Tax- Level 1			\$9.66	\$9.66	\$9.66			\$9.66	\$9.66	\$9.66	\$9.66
kWH Tax- Level 2			\$20.80	\$20.80	\$20.80			\$56.24	\$56.24	\$56.24	\$56.24
kWH Tax- Level 3								\$3,087.71	\$3,087.71	\$3,087.71	\$3,087.71
<b>Total Electric</b>			<b>\$771.40</b>	<b>\$749.02</b>	<b>\$818.78</b>			<b>\$64,614.40</b>	<b>\$61,997.88</b>	<b>\$70,151.86</b>	<b>\$70,151.86</b>
Water	25	CCF	\$133.57	\$133.57	\$126.07	300	CCF	\$1,510.51	\$1,510.51	\$1,420.51	\$1,420.51
Sewer (w/Stm.Sew. & Lat.)	25	CCF	\$162.74	\$162.74	\$138.94	300	CCF	\$1,562.49	\$1,562.49	\$1,359.94	\$1,359.94
Storm Water (Rate/ERU)			\$9.50	\$9.50	\$9.50			\$330.00	\$330.00	\$330.00	\$330.00
Refuse (Rate/Service)			\$5.00	\$5.00	\$5.00			\$5.00	\$5.00	\$5.00	\$5.00
<b>Sub-Other Services</b>			<b>\$310.81</b>	<b>\$310.81</b>	<b>\$279.51</b>			<b>\$3,408.00</b>	<b>\$3,408.00</b>	<b>\$3,115.45</b>	<b>\$3,115.45</b>
<b>Total Billing - All Services</b>			<b>\$1,082.21</b>	<b>\$1,059.83</b>	<b>\$1,098.29</b>			<b>\$68,022.40</b>	<b>\$65,405.88</b>	<b>\$73,267.31</b>	<b>\$73,267.31</b>
<i>Verification Totals-&gt;</i>			\$1,082.21	\$1,059.83	\$1,098.29			\$68,022.40	\$65,405.88	\$73,267.31	\$73,267.31
				<u>Cr.Mo to Pr.Mo</u>	<u>Cr.Yr to Pr.Yr</u>				<u>Cr.Mo to Pr.Mo</u>	<u>Cr.Yr to Pr.Yr</u>	<u>Cr.Yr to Pr.Yr</u>
Dollar Chg.to Prior Periods				\$22.38	-\$16.08				\$2,616.52	-\$5,244.91	-\$5,244.91
% Inc/Dec(-) to Prior Periods				2.11%	-1.46%				4.00%	-7.16%	-7.16%
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
Cost/kWH - Electric	7,040	kWh	\$0.10957	\$0.10639	\$0.11630	866,108	kWh	\$0.07460	\$0.07158	\$0.08100	\$0.08100
% Inc/Dec(-) to Prior Periods				2.99%	-5.79%				4.22%	-7.90%	-7.90%
Cost/CCF - Water	6	CCF	\$22.26167	\$22.26167	\$21.01167	250	CCF	\$6.04204	\$6.04204	\$5.68204	\$5.68204
Cost/GALLONS - Water	4,488	GAL	\$0.02976	\$0.02976	\$0.02809	187,013	GAL	\$0.00808	\$0.00808	\$0.00760	\$0.00760
% Inc/Dec(-) to Prior Periods				0.00%	5.95%				0.00%	6.34%	6.34%
Cost/CCF - Sewer	6	CCF	\$27.12333	\$27.12333	\$23.15667	250	CCF	\$6.24996	\$6.24996	\$5.43976	\$5.43976
Cost/GALLON - Sewer	4,488	GAL	\$0.03626	\$0.03626	\$0.03096	187,013	GAL	\$0.00835	\$0.00835	\$0.00727	\$0.00727
% Inc/Dec(-) to Prior Periods				0.00%	17.13%				0.00%	14.89%	14.89%
<i>(Listed Accounts Assume SAME USA</i>											
<i>(One "1" Unit CCF of Water = "Hundre</i>											

# Electric Department Report December 2015

There were 14 callouts/outages during the month of December. 2 callouts were to turn on electricity for customers at various locations. 1 outage was to replace poles, transformers and services tore down by semi-truck. 2 callouts were to hook up secondary services. 1 outage was due to a bad fuse. 1 callout was to do a locate for a water main break. 2 outages were customer problems behind the meter. 2 callouts were requests for meter pulls due to house fires. 2 callouts were broken phone poles. 1 outage was caused by a squirrel.

**Line Department / Service Truck:** Line crews installed a 3 phase service on Rd. U. Crews attended a monthly safety meeting. Crews also worked on a lighting project on East Clinton street. Crews installed a new recloser at Industrial and Independence. Crews installed a new URD on Rd. 12 between B&C. Linemen removed a pole at Commerce and Riverview and removed an anchor at RR crossing (Haley) and Jahns @ Riverview. Crews pulled old poles for rebuild to Huddle Farms. Crews repaired secondary service on Woodlawn (truck hit phone cable under electric drop). Crews did system voltage check for specialized switching for Industrial Substation to be taken out of service. Crews repaired service damaged by Fire at 60 Lemans. Crews upgraded a service and trimmed a tree on Pontious. Linemen transferred a 3 phase service to new pole at Baughman Farms.

**Substation Department:** Todd and Nikk worked on relay upgrade project at Industrial Substation. They also worked on NERC compliance and testing. They also performed monthly inspections and routine maintenance at all substations

**Forestry Division:** Jamie Howe and Jerry Courtney performed tree maintenance on West Washington, East Riverview, Haley, Sheffield and Fifth St. They also helped line crews as needed and performed maintenance on the chipper and saws. Jerry also helped Shawn with yearly inventory count.

**Storeroom/Inventory/Metering Department:** Shawn Druhot read meters and counted yearly inventory.

The Peak Load for December, 2015 was 23.94 MW occurring on the 17<sup>th</sup> at 7:00 PM. This was a decrease of .27 MW from December, 2014. The average load for December, 2015 was 18.17 MW. This was a decrease of .55 MW from December 2014. JV 2 and JV 5 ran on 12/18/2015 and produced 1.1 and .84 MW. The Gas Turbines did not run in December. The AMP Solar Field showed a peak of 3.05 MW and the output was 164.61 MWH.

# City of Napoleon, Ohio



## SUMMARY OF DECEMBER 2015 OUTAGE/STANDBY CALL-OUTS

### **December 2, 2015:**

One employee was dispatched by City Hall at 3:48 p.m. to do several turn ons of electricity.

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### **December 5, 2015:**

Electric personnel were dispatched at 10:08 a.m. due to a semi that tore three poles and two transformers down on the corner of Scott St. & Lagrange St. The outage lasted ten hours & affected five customers. The personnel replaced three poles and two transformers and several services.

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### **December 6, 2015:**

Electric personnel were dispatched at 9:30 a.m. to 1205 Scott St. to re-install service from the accident from the day before.

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### **December 6, 2015:**

Electric personnel were dispatched at 11:30 a.m. to V246 State Route 108 due to a power outage. The outage lasted thirty minutes and affected one customer. The outage was due to a bad fuse. The personnel replaced the fuse.

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### **December 6, 2015:**

Electric personnel were dispatched at 2:16 p.m. to 916 Woodlawn Ct. to do an electric locate for a water main break.

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### **December 6, 2015:**

Electric personnel were dispatched at 5:40 p.m. to 512 E. Washington St. due to a power outage. The outage lasted twenty minutes and affected one customer. The outage was due to a breaker that was blown. The personnel turned the breaker off and then back on.

**December 11, 2015:**

Electric personnel were dispatched at 4:45 p.m. to 60 Lemans due to a house fire. The personnel pulled the electric meter.

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**December 14, 2015:**

Electric personnel were dispatched at 9:27 p.m. to 12207 County Road C due to a house fire. The personnel pulled the electric meter.

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**December 23, 2015:**

Electric personnel were dispatched at 8:21 p.m. to 412 E. Main St. due to a phone pole leaning.

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**December 24, 2015:**

Electric personnel were dispatched at 12:03 p.m. to 872 E. Riverview Ave. due to a power outage. The outage lasted one half hour and affected four customers. The outage was due to an animal that blew a fuse. The personnel replaced the fuse.

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**December 24, 2015:**

Electric personnel were dispatched at 12:30 p.m. to the intersection of Wayne Park Dr. & County Road M1 to inspect a broken pole, upon their arrival it was a telephone pole.

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**December 24, 2015:**

Electric personnel were dispatched at 12:50 p.m. to 730 Strong St. due to a mast that was pulled off the house. The personnel made new connections at the house and fixed the mast.

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**December 26, 2015:**

Electric personnel were dispatched at 7:51 p.m. to 780 Sheffield Ave. due to electric problems. The personnel inspected the meter base and all connections and everything was working properly. The personnel explained it was an inside problem and to call an electrician.

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**December 31, 2015:**

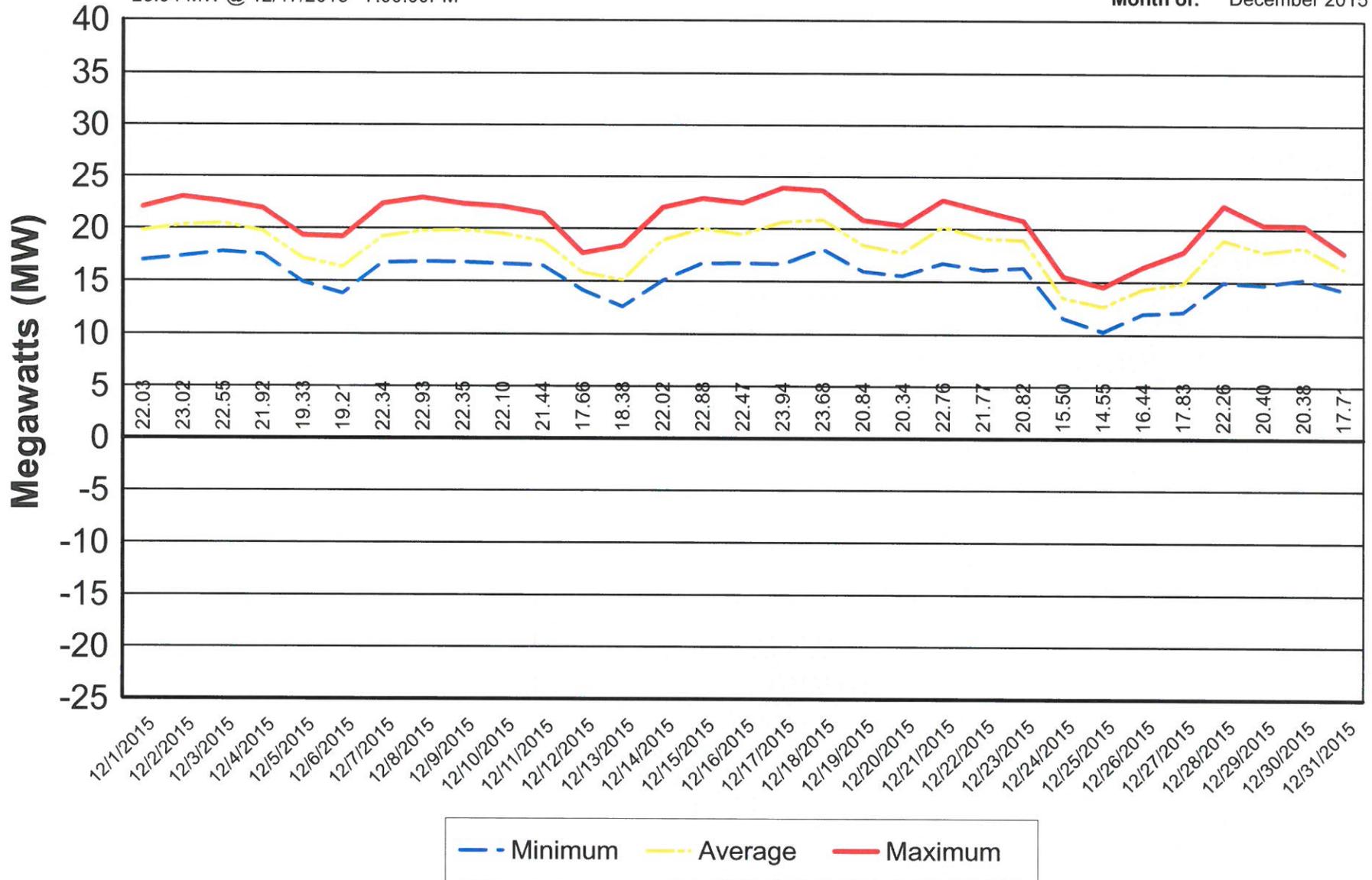
One employee was dispatched at 4:30 p.m. to 78 Valleybrook Ln. to turn on electricity.

# Napoleon Power & Light

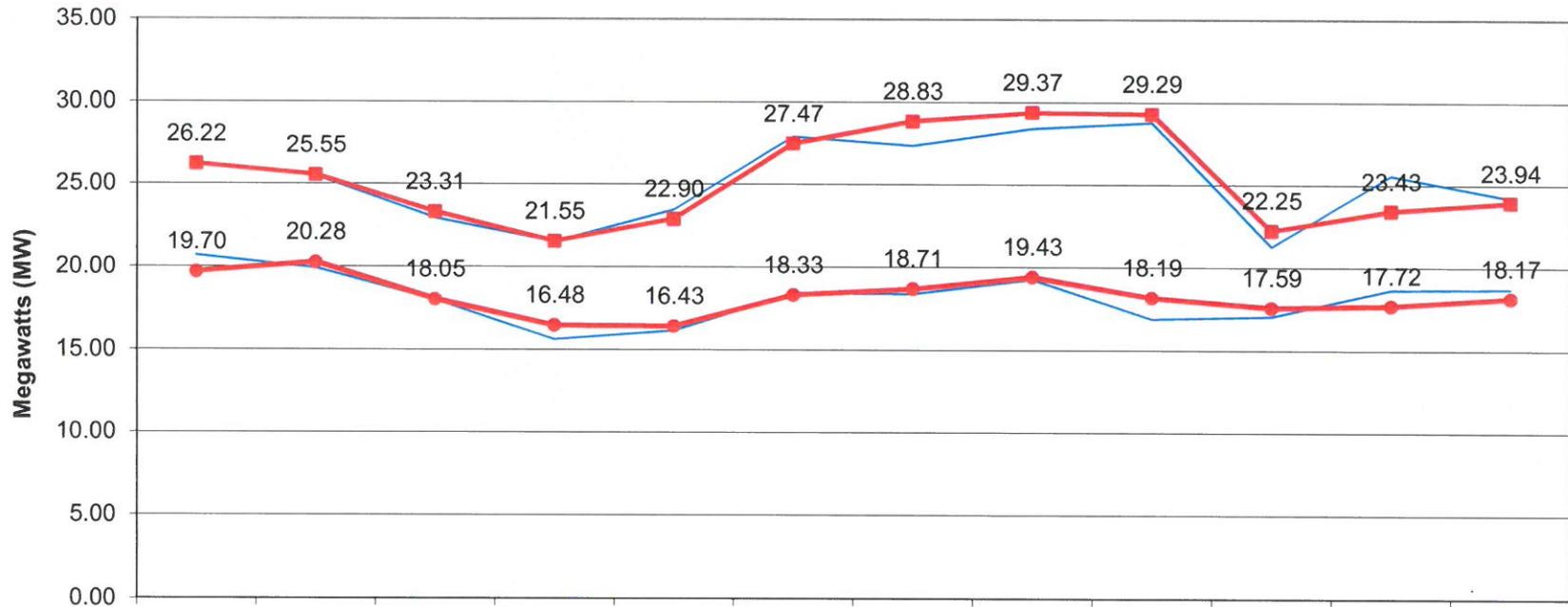
## System Load

Peak Load:  
23.94 MW @ 12/17/2015 7:00:00PM

Month of: December 2015



# NAPOLEON POWER & LIGHT



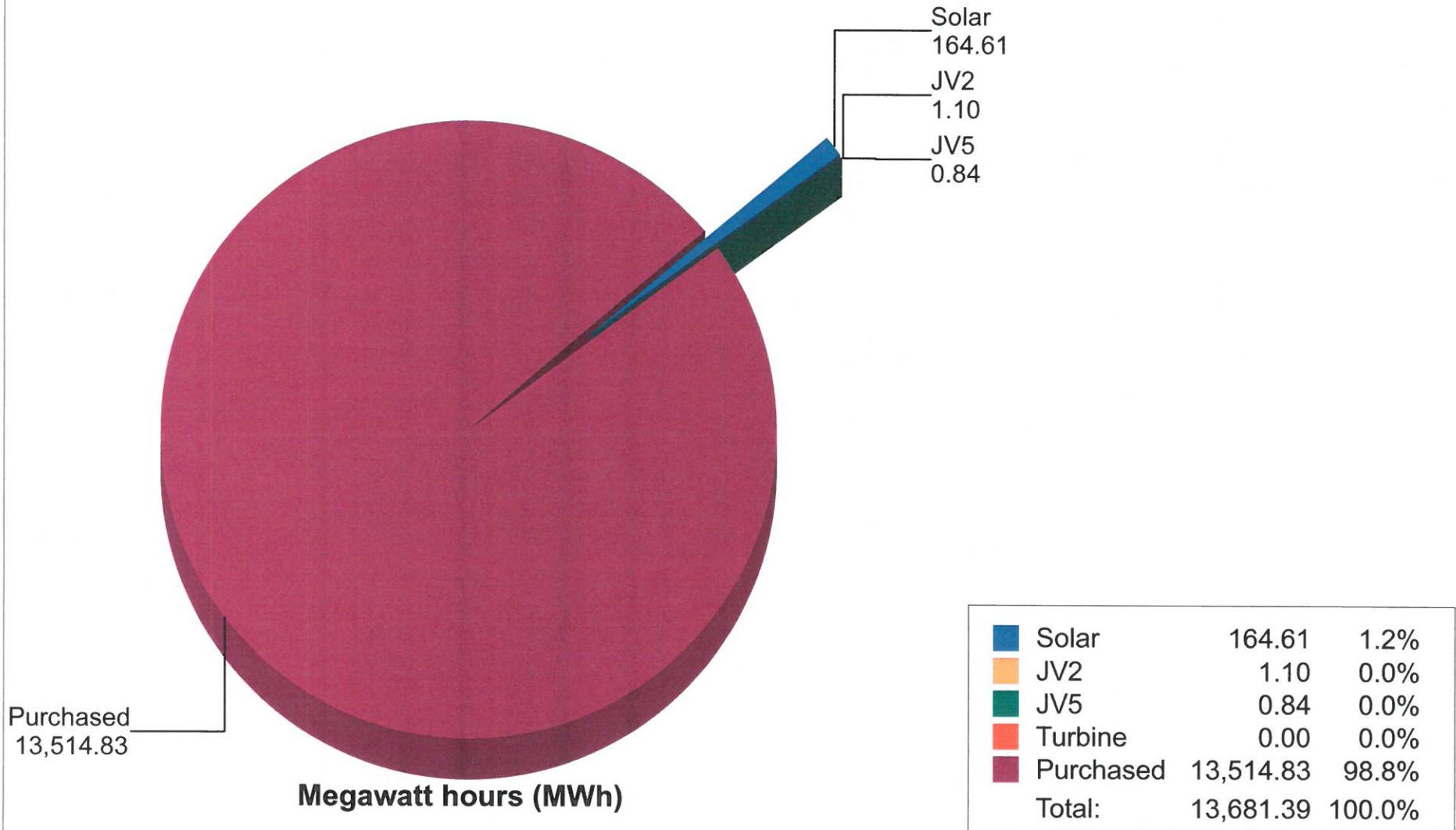
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1/1/2015	26.19	25.47	22.93	21.54	23.45	27.89	27.35	28.40	28.77	21.26	25.57	24.21
2/1/2015	20.68	19.91	18.02	15.61	16.15	18.46	18.41	19.29	16.92	17.07	18.67	18.72
3/1/2015	26.22	25.55	23.31	21.55	22.90	27.47	28.83	29.37	29.29	22.25	23.43	23.94
4/1/2015	19.70	20.28	18.05	16.48	16.43	18.33	18.71	19.43	18.19	17.59	17.72	18.17
5/1/2015												
6/1/2015												
7/1/2015												
8/1/2015												
9/1/2015												
10/1/2015												
11/1/2015												
12/1/2015												



# Napoleon Power & Light

## Power Portfolio

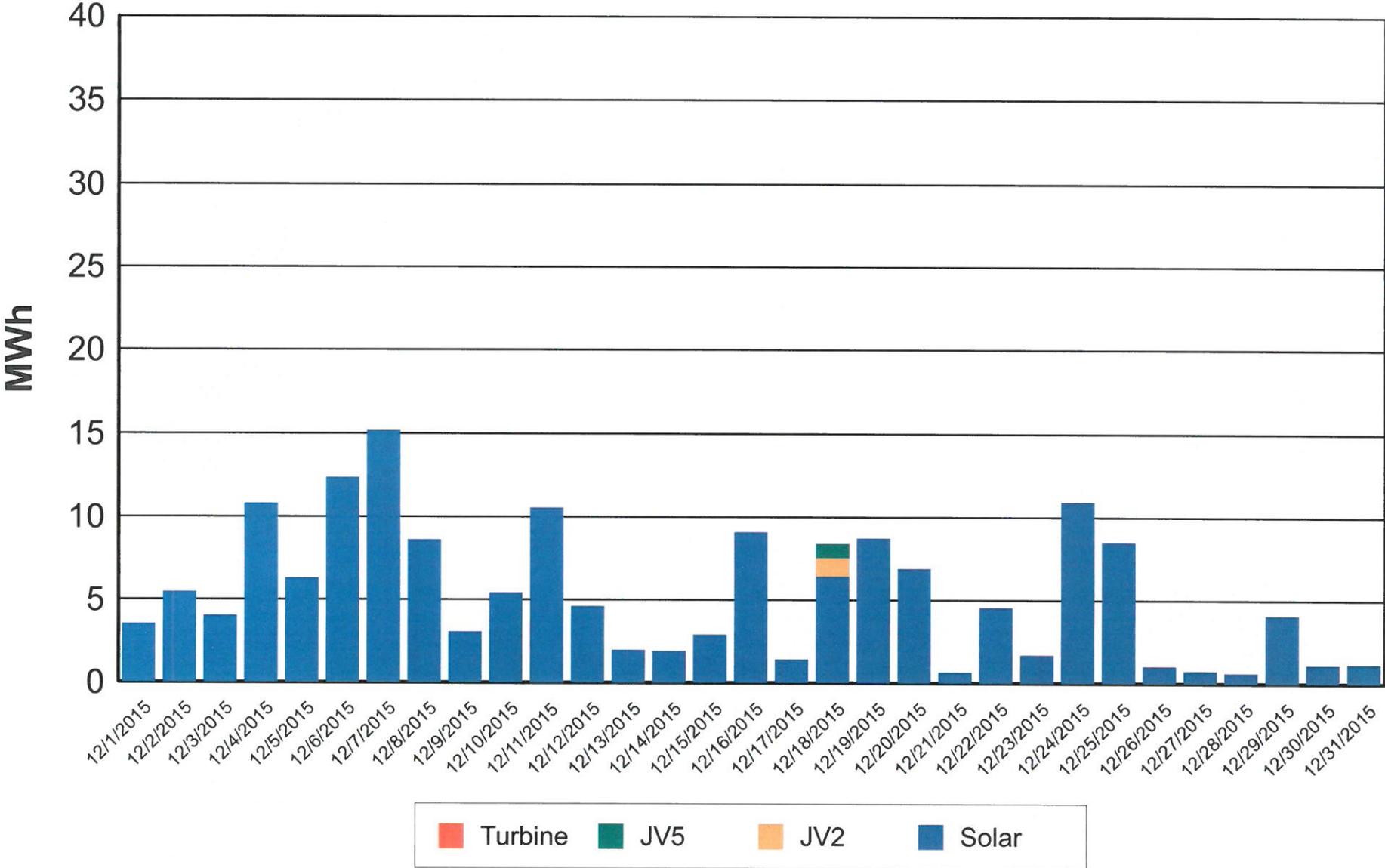
December 2015



# Napoleon Power & Light

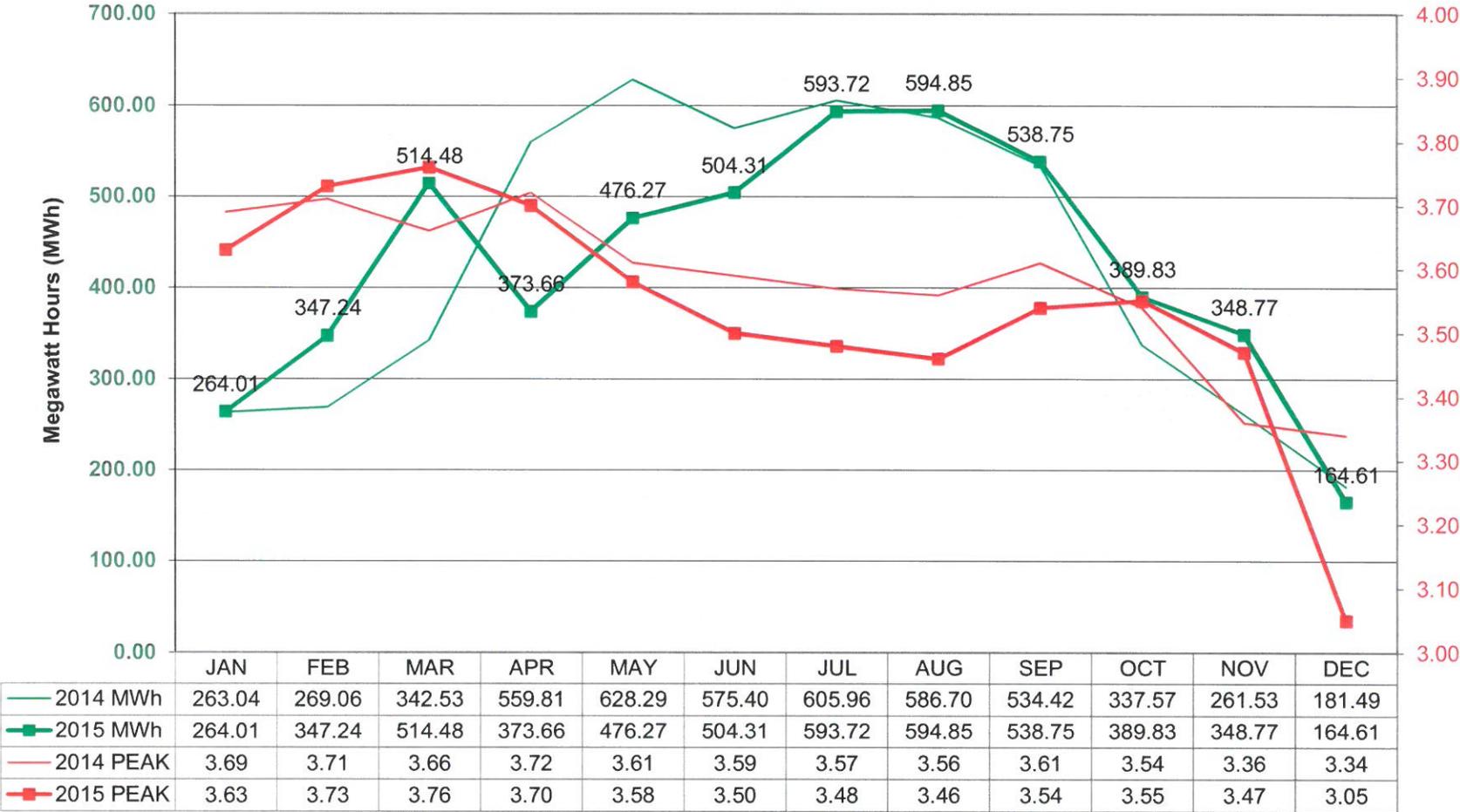
## Daily Generation Output

December 2015



# NAPOLEON POWER & LIGHT

Solar Field Output Trend



City of Napoleon, Ohio  
Board of Public Affairs (BOPA)

LOCATION: Council Chambers, 255 West Riverview Avenue, Napoleon, Ohio

Meeting Agenda  
Monday, January 11, 2016 at 6:30pm

- I. Election of Chairman
- II. Approval of Minutes (*In the absence of any objections or corrections, the Minutes shall stand approved*)
- III. Review/Approval of the Power Supply Cost Adjustment Factor for January 2016:  
PSCAF three (3) month averaged factor:  $-\$0.00440$   
JV2:  $\$0.035222$   
JV5:  $\$0.035222$
- IV. Electric Department Report
- V. Any other matters to come before the Board
- VI. Adjournment

---

Gregory J. Heath, Finance Director/Clerk of Council



**Electric Department Report**

Clapp gave the Electric Department Report, adding that there are now cameras to replace timers at some traffic lights in the City. Maassel asked how many items are in the inventory to be counted; Clapp estimated that there are thousands of parts that are inventoried by two (2) employees. Travis thanked Clapp and his employees for cleaning up the area where a semi pulled down electric wires on Scott Street recently. Irelan reported that AMP sent the City a signed copy of the note that was paid off early.

**Any Other Matters To Come Before The Board**

None

**Any Other Matters Assigned To The Committee**

None

**BOPA Motion To Adjourn**

Motion: DeWit Second: Cordes  
To adjourn the meeting at 6:42pm

**Passed**

**Yea- 2**

**Nay- 0**

Roll call vote on above motion:  
Yea- Cordes, DeWit  
Nay-

**Electric Motion To Adjourn**

Motion: Maassel Second: Cordes  
To adjourn the Electric Committee meeting at 6:42pm

**Passed**

**Yea- 3**

**Nay- 0**

Roll call vote on above motion:  
Yea- Sheaffer, Maassel, Helberg  
Nay

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**Date**

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Mike DeWit, Acting Chair

City of Napoleon, Ohio  
Water, Sewer, Refuse, Recycling & Litter Committee

LOCATION: Council Chambers, 255 West Riverview Avenue, Napoleon, Ohio

Meeting Agenda  
Monday, January 11, 2016 at 7:00pm

- I. Approval of Minutes (*In the absence of any objections or corrections, the Minutes shall stand approved*)
- II. Review of Unlimited Pickup procedures (Tabled)
- III. Review of Water Contract Proposals with Satellite Customers
- IV. Any other matters currently assigned to the Committee
- V. Adjournment

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Gregory J. Heath, Finance Director/Clerk of Council

City of Napoleon, Ohio  
**Water, Sewer, Refuse, Recycling & Litter Committee**  
**Meeting Minutes**

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Monday, November 9, 2015 at 7:00pm

**PRESENT**  
**Water & Sewer Committee**  
**BOPA**  
**City Staff**

Chris Ridley – Chair, John Helberg, Jeff Comadoll  
Keith Engler – Chair, Mike DeWit, Dr. David Cordes  
Monica Irelan, City Manager  
Dennis Clapp, Electric Superintendent  
Roxanne Dietrich, Administrative Assistant  
Gregory Heath, Finance Director/Clerk of Council  
Lisa Nagel, Law Director  
Tammy Fein  
News Media; Jason Maassel; Mike DeWit; Travis Sheaffer; Jeff Rathge

**Recorder**  
**Others**

**ABSENT**

**Call To Order**

Chairperson Ridley called the meeting to order at 7:08pm.

**Approval Of Minutes**

The October 12 regular and October 20 special meeting minutes stand approved as presented with no objections or corrections.

**Review Of Unlimited Pick-Up Procedures**

Lulfs distributed a summary of the 2015 Spring and Fall pick-up; the Spring 2015 total was approximately \$2,000 more than the Spring 2014 pick-up, and the Fall 2015 total was approximately \$16,000 more than the Fall 2014 pick-up. Lulfs reminded the Committee that the Fall 2015 pick-up varied from the norm due to the inability to rent garbage trucks, and the compacting cost increased.

Ridley asked if Spring pick-up used three (3) of the City trucks; Rathge replied yes. Ridley asked why the Fall pick-up involves a cost of using the City equipment but the Spring pick-up does not; Rathge stated that the City equipment used in the Spring was only the metal truck while additional equipment was used in the Fall including end-loaders, dump trucks, and garbage trucks among other equipment, adding that the trucks rented in the Spring were compacting trucks. Helberg asked getting garbage trucks for use would continue to be an issue in the future; Rathge stated that he attempted to get a commitment for garbage trucks however cannot get this commitment at this time, adding that there were previously thirty (30) trucks in the area but now there are none. Rathge stated that the City is required to pay by the yard in Defiance for refuse and Wood County had an even higher rate. Helberg asked if a private refuse company spare truck could be rented; Rathge stated this was done as well as using City equipment, and three (3) crews were required. Helberg believes having the pick-up twice a year is important, though not at this cost. Ridley asked what other communities do; Rathge stated Defiance does an unlimited pick-up almost every day; Bryan does this on Tuesdays with a second truck and a dump truck and end loader, though their landfill is a lot closer, adding that this may take the entire Street Department to complete the pick-up. Ridley believes unlimited pick-up should have a scheduled week due to the refuse being placed at the front yard of the

**Review Of Unlimited Pick-Up Procedures (Continued)**

residence; Lulfs and Rathge agreed. Comadoll believes there is not enough employees to have unlimited pick-up on a more frequent basis. Rathge has researched rollout prices; Lulfs added that this causes less control as this would be residents using, adding that the Department will continue to try to get the garbage trucks. Ridley asked if the equipment sharing program was an option; Ireland stated the only community that has this equipment is Bryan and their truck is not a spare as they do unlimited pick-up each week. Ireland does not recommend increasing this service due to the lack of control, adding that Spring is heavier used than Fall though if Fall is discontinued Spring will increase and will need additional bodies. Helberg believes this program improves the look of the community. Lulfs stated that calls are made by the Zoning Official to use this program when nuisances begin to occur; Rathge added that he calls residents if they have the refuse out too early as well. Comadoll believes the City should wait to see if the trustees will be available to help with this program; Ridley stated that within five (5) years the trustee issue should be decided. Ireland and Nagel stated that they are on the Regional Board to monitor the trustee issue and will pass along any information as it is available. Ridley asked if a refuse fee adjustment should be researched, or if there should be a special fee for residents participating in the seasonal cleanup; Ireland stated that the Fund is healthy and this may have been a fluke, suggesting researching the future use before increasing the fee; Lulfs added they will continue to work with local landfills to decrease costs.

**WSRRL Motion To Table Review Of Unlimited Pick-Up Procedures**

Motion: Comadoll Second: Helberg  
To table the review of unlimited pick-up procedures

**Passed**  
**Yea- 3**  
**Nay- 0**

Roll call vote on above motion:  
Yea- Comadoll, Ridley, Helberg  
Nay-

**Any Other Matters Assigned To The Committee**

None

**WSRRL Motion To Adjourn**

Motion: Comadoll Second: Helberg  
To adjourn the meeting at 7:30pm

**Passed**  
**Yea- 3**  
**Nay- 0**

Roll call vote on above motion:  
Yea- Comadoll, Ridley, Helberg  
Nay-

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
Jeffrey Comadoll, Chair



# City of Napoleon, Ohio

## DEPARTMENT OF MANAGEMENT

255 West Riverview Avenue, P.O. Box 151  
Napoleon, OH 43545  
Telephone: (419) 592-4010 Fax: (419) 599-8393  
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## Memorandum

**To:** Water, Sewer, Refuse, Recycling, and Litter Committee  
**From:** Monica Irelan, City Manager  
**RE:** 2015 Water Decisions

Welcome to the Water, Sewer, Refuse, Recycling, and Litter Committee! There were some big water decisions made in 2015 that I would like to review with you.

In February of 2015, the City Council approved hiring URS as our design consultant for the water treatment rehabilitation. For your information below is an outline of the URS/AECOM team that is working on this project and some of their past projects:

### Key Personnel:

- 1) Robert Shoaf, PE, BCEE, Project Manager (23 year)
  - a. Project Engineers:
    - i. Jeremy Cook, PE (17 years)
    - ii. Roger Basker, PE (48 years)
    - iii. John Krinks, PE
  - b. Brian Walker, PE, Electrical/ SCADA and I/C Engineer
  - c. Brett Libbe, PE, CEM, CPMP, LEEP AP, Mechanical Engineer
  - d. Steve Hoyt, PE, Structural Engineer
  - e. Rich Piloseno, AIA, Architect
- 2) Porter Rivers, PE, Technical Advisor/ QA/QC (30 years)
- 3) Greg Otey, Project Specialist/ Funding Specialist
- 4) Brian Benedict, Construction Management
- 5) Geotechnical- URS or Qualified Firm
- 6) Marvin Gnagy, PE, Plan Evaluation/ Preliminary Engineering- PMG Consulting, Inc.

### Experiences:

- 1) Upper Sandusky- Similarities include: flash mix, flocculators, sedimentation basins, clearwell, and high service pumps
- 2) Washington CH- Similarities include: Lime Slakers/ chemical feed, sedimentation basin, dual-media filter, gallery piping rehab, clearwell, high service pumps
- 3) Archbold- lime soda softening, anion exchange contactors
- 4) Delaware- existing plant, horizontal flocculators, sedimentation basin, clearwell, high service pump
- 5) Pickerington- Compliance with OEPA Findings
- 6) Paulding- low service pumps, flocculation, TOC removal/ DBP Issues, clearwell, high service pumps

## **Water Highlights in 2015 for this Committee:**

February 9, 2015: Water, Sewer, Refuse, Recycling, and Litter Committee

Rob Shoaf from URS (now AECOM) came to the meeting to discuss the items from January 19 meeting that were tabled for further investigation.

After going through all the items, the Committee moved to recommend to Council to approve the City Manager's recommendation to go with Option 2. (Minutes attached for your review)

This recommendation went to Council on February 16 and was approved. (Minutes attached for your review)

May 11, 2015: Water, Sewer, Refuse, Recycling, and Litter Committee

John Courtney from Courtney and Associates was invited to discuss how the City does its current water rates. John explained the base-extra capacity model and the declining block rate to the Committee. No action was taken. (Minutes attached for your review)

August of 2015, the committee reviewed the architectural design of the building and decided on Option 1. That recommendation went to Council. On September 21, 2015 Council approved the recommendation with amendments. Use Option 1 but make the top look like the bottom using two-toned split-face block and smaller windows. (Council Minutes attached for your review)

October 20, 2015: Joint Meeting City Council and Water, Sewer, Refuse, Recycling, and Litter Committee

Rob Shoaf from URS came to update council on the design of the plant. He brought a presentation to show council updates on chemicals and treatment. (Minutes attached for your review.)

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## **Satellite Customers:**

I have been in contract negotiations with the satellite customers for several months. I am at a point where I need to ask for further direction from the Committee and Council. I will put together a presentation that outlines the negotiations and where we currently stand. I will also bring one recommendation to the Committee to review. I will have that presentation ready for Monday night's meeting. For now, if there are any questions or concerns about the information within this memo, please feel free to call, email, or come in to see me.

February 9, 2015

Water, Sewer, Refuse, Recycling, and Litter  
Committee Minutes

City of Napoleon, Ohio  
**Water, Sewer, Refuse, Recycling & Litter Committee**

**Meeting Minutes**

Monday, February 9, 2015 at 7:00pm

**PRESENT**

**Water, Sewer Committee  
City Staff**

Chris Ridley - Chair, John Helberg, Jeff Comadoll  
Monica S. Irelan, City Manager  
Dennis Clapp, Electric Superintendent  
Gregory J. Heath, Finance Director/Clerk of Council  
Trevor M. Hayberger, Law Director  
Scott Hoover, Water Treatment Plant Superintendent  
Chad Lulfs, Director of Public Works

**Recorder  
Others**

Tammy Fein  
News Media; Robert Shoaf, AECOM (formerly URS Corporation); Mike DeWit

**ABSENT**

**WSSRL Call To Order**

Chairperson Ridley called the meeting to order at 7:11pm.

**Approval Of Minutes**

The January 19 meeting minutes stand approved as presented with no objections or corrections.

**Water Plant Update**

**WSRRL Motion To Untable  
Water Plant Update**

Motion: Comadoll Second: Helberg  
To untable Water Plant update

**Passed  
Yea- 3  
Nay- 0**

Roll call vote on above motion:  
Yea- Helberg, Comadoll, Ridley  
Nay-

**Discussion**

Rob Shoaf, Vice President of AECOM (formerly URS Corporation), was asked, of the three (3) rehabilitation options for the current Water Treatment Plant, which option would benefit the satellite customers the most; Shoaf replied that the nanofiltration membrane process would be less expensive, but the granular activated carbon (GAC) process would remove more contaminants; Shoaf added that by adding a skid of tighter membranes to the nanofiltration membrane process, the result will equal the amount of contaminants removed by the GAC process. Shoaf reported that comparisons were made between the GAC and the nanofiltration membrane processes, and the results found that loose nanofiltration membranes do not remove nitrates effectively; however since the option suggested three (3) loose skids, one (1) skid could be changed to tight membranes and this would remove nitrates from the processed water. Shoaf reported that the GAC process has higher operational costs than the nanofiltration membrane process, partly due to the rising cost of lime and lime disposal.

Shoaf stated that the city of Delaware, Ohio uses the nanofiltration membrane process with colder water, and it could be done here as well.

**Water Plant Update  
(Continued)**

Helberg asked if Delaware used the tight membranes or loose membranes; Shoaf replied that they use the tight membranes due to required nitrates and atrazine removal, and Delaware has no reservoir to draw from. Helberg stated that he thought the nanofiltration membrane process would not work properly using cold water; Shoaf stated that there could be more skids of loose membranes and one (1) skid of tight membranes if there is a nitrate concern; adding that Paulding uses the loose membrane nanofiltration process and that removes ninety five percent (95%) of the total organic carbon (TOC) and maintains the proper pressure, and Upper Sandusky uses the nanofiltration membrane process for treating river water as well. Heath asked how long the Delaware plant has been in operation; Shoaf replied only a few months, while Upper Sandusky has been operational for approximately three (3) years. Shoaf stated that membranes are less expensive to run operationally. DeWit asked if more membrane plants are currently being used; Shoaf stated there is an increase in membrane plants being used due to the technology, adding that there are approximately twenty eight (28) membrane plants in Ohio, and Shoaf has designed nineteen (19) of them, as well as conventional treatment plants.

Shoaf stated that he reviewed the original pilot study, and a new pilot study would not be required if the City chose to use nanofiltration membranes and not hollow fiber membranes, however the City must prove that the process is not being using for organics removal. Shoaf stated that the reverse osmosis membranes would require the MIEX system remain available until the plant could prove that it works effectively without it, and would not require a new pilot study; Ireland added that this was discussed in the operational presentation previously.

Ridley asked Shoaf which option would produce a better quality of water once it reaches the satellite customer; Shoaf replied that the nanofiltration membrane process will remove more organics than the GAC process, however the GAC can remove almost the same amount. Shoaf stated that running water through the GAC process runs the equipment more often and is expensive to regenerate. Helberg asked if the costs were different for the two options; Shoaf stated that the capital costs were similar, but the operational costs were higher using the GAC process, including the cost of purchasing lime, lime disposal, and chemicals; Shoaf added that nanofiltration membrane plants have higher electric costs as well as some chemical costs, and the membranes are replaced every five (5) years. Shoaf stated that the estimated costs listed for the GAC process include all satellites issues, and membrane replacement are both included in the listed cost for the nanofiltration membrane process as well.

Helberg asked which option is more flexible in case the amount of satellite customers were increased or decreased in the future; Shoaf stated that there would be three (3) or four (4) skids of membranes which can be increased if more customers are added, but the GAC process is slightly more expandable due to not having membrane skids. DeWit asked if either process used the MIEX system; Ireland stated that the assumption is that the MIEX system will not be used for any option. Hoover added the basin would be used for algae pretreatment, adding that the chemicals

**Water Plant Update  
(Continued)**

would be dispersed better using this basin. Hoover stated that he would like to be able to keep treating off the river, which would help Wauseon as well. Ridley asked Hoover which option he favored; Hoover replied that he must meet filter standards with either option. Shoaf stated that processes can be adjusted as necessary. Helberg believes that the professionals must be trusted and Irelan should make the recommendation as to which option to choose; Ridley agreed. Irelan stated that the water in both options would be filtered before reaching whichever process is chosen. Comadoll asked for a diagram to see the plan of both options; Irelan displayed the diagram showing the difference in the nanofiltration membrane process and the GAC process, stating that the difference is the location of the contactors, and the building would be the same size for both processes. Helberg asked if any potential expansion of the building would be to the South; Irelan stated there is room to expand as necessary, and bypassing the GAC process or the nanofiltration membrane process could be handled if the number of satellite customers decreases. DeWit asked if either option had an advantage to customers regarding retreatment of the water; Irelan stated that the plan assumed the lowering of organics to the satellites by both options. Shoaf stated that both options are similar and both are far better than what is being used now. Irelan stated that the City is trying to build the trust with the satellites again.

Ridley asked for a recommendation from Irelan regarding the options, including the advantage of having lower operating costs in case the number of customers decreases; Helberg added that there are also capital costs to be considered as well. Irelan recommended the nanofiltration membrane process from a business point of view, adding that there will be a learning curve with either of the new processes and the engineering contract includes an operational manual as well as training.

Hoover stated that he leans toward the traditional operation of the GAC process, adding that he and the Water Treatment Plant Staff are willing to learn and operate whichever process is decided on. Helberg stated he requires a recommendation from Irelan; Irelan restated that she recommends the nanofiltration membrane process as the best business decision for this project. Heath asked Shoaf if the GAC process would continue to be used in the future; Shoaf replied that he believes the GAC process would remain usable, though the lime water softening may not; Shoaf restated that the GAC process is a viable option but expensive to regenerate. Hoover added that membranes will be purchased every five (5) years at a cost of approximately \$100,000 per year. DeWit asked if either option had an advantage while making the existing plant live; Shoaf believes that maintaining the lime softening would be easier but either option could be done effectively. Hoover stated that Long Term 2 (LT2) compliance must be met by October 2016. Ridley asked if there are upcoming additional regulations regarding pharmaceuticals; Shoaf stated that the nanofiltration membrane process could also remove pharmaceuticals, but this issue is not expected on the horizon. Helberg asked if the Water Treatment Plant Operators would be willing to learn how to run the process using a hybrid of skids of membranes; Irelan stated that two (2) out of three (3) of the operators have experience with a membrane facility; Hoover added that they have seen the conditions and



February 16, 2015  
City Council Meeting Minutes

**Approval Of  
Nanofiltration System  
Water Plant  
(Option 2)**

Ridley stated that the Water, Sewer, Refuse, Recycling & Litter Committee met on Monday, February 9 and Rob Shoaf, Vice President of AECOM (formerly URS) presented both remaining Water Treatment Plant rehabilitation options; a lime based plant (GAC) and a nanofiltration membrane plant. Ridley stated that the findings were that the GAC process costs more to operate, while the nanofiltration membrane process costs less to build and operate with the same quality of water for the residents and the satellite customers, however there are some minor risks with the nanofiltration membrane process that were outlined in the presentation.

Irelan stated that Nick Rettig, Henry County Water & Sewer, sent an email to Irelan asking what the most effective and efficient option would be; Irelan stated the GAC process and the nanofiltration membrane process will both be functional in the future, but the lime soda ash will eventually be unavailable due to the increasing expense of purchasing and disposing of the lime, and this expense is not required if the nanofiltration membrane process is chosen. Marihugh stated that one issue that was not discussed at the presentation was the cost of filtration bags required for the nanofiltration membrane process; Irelan stated the cost to which Marihugh is referring was discussed during the presentation, and is approximately \$96,000 annually to purchase replacement membranes every five (5) years; saving the amount annually will ensure there are enough funds when the membranes are required to be purchased; Irelan added that this was outlined in the analysis presented to compare both options. Marihugh stated that the cost of filter bags cannot be predicted for future years; Irelan reminded Marihugh that neither the cost of lime or membranes was inflated in the presentation to make a better comparison.

Marihugh stated his concern regarding taking out a process before the water is created, and noted for the record that he is not in favor of the nanofiltration membrane process option.

Behm asked if Option 3 was taken off the table due to creating the water directly without filtration first; Irelan replied yes. Behm asked if the water in Option 2 was filtered through a sand filtration process before the water is created; Irelan replied that the water will go through a pretreatment process in the MIEX building. Hoover stated that the filtration process for both Options 1 and 2 are the same, the pretreatment is what differentiates the different processes; alum would be used for both processes, but the lime would be taken away using the nanofiltration membrane process since the process itself will soften the water instead of the lime. Irelan stated that Option 3 would have been similar to the nanofiltration membrane process but instead of using sand filtration, another membrane would have been used. Behm added that a requirement of building a new plant would have been to remain with the filtration system listed on the pilot study. Behm asked if there is only one company that can be utilized for the nanofiltration membrane process option; Irelan stated that there could be other companies selected, but Shoaf suggested that the filter that was tested is a good filter for this option, but the pilot study suggested that the pretreatment process before the water reaches the filter should be more effective; Irelan added that the plan is to remain with the current filter and to design the plant more effectively. Marihugh stated that the Water Treatment Plant is currently required to report the turbidity readings coming off the filter, and asked if the removal of the lime soda ash meet the turbidity requirements; Irelan stated that how the water is treated will be different and the coagulated water will look different to the Operators without the lime, but the turbidity requirements will still be met. Irelan stated that the Operators are capable of operating the Water Plant as well as any process that is

**Approval Of  
Nanofiltration System  
Water Plant  
(Option 2) (Continued)**

chosen, even the process without lime. Hoover agreed that the coagulated water would look different with using alum without lime; the pilot study used ferric for the process, and the only difference is the appearance of the coagulated water. Hoover stated that he has only seen the coagulated water using lime, however the Waste Water Treatment Plant currently uses alum alone. Marihugh asked if the ferric is being changed; Hoover stated that no decision has been made at this time. Wilson believes there are two (2) viable options, however Wilson stated that she is uncomfortable choosing the GAC process using lime merely on a comfort factor, and updating to the new technology would be an asset to the City. Wilson believes that Council has been given more than enough facts to make an educated decision. Ridley added that a skid of tighter membranes could be added to filter out more organics and nitrates from the water, and should provide better water quality to the satellite customers. Hoover added that the approach on the membranes was researched for the satellites and found to be the option that would remove the most organics from the water. Helberg believes there would be more unknowns in the future regarding the GAC process; the nanofiltration membrane process plant would be more easily adaptable. DeWit disagreed, stating that the nanofiltration membrane process is newer, and DeWit is concerned of the cost regarding the filters with only one company providing the membranes and no competitive bidding being used. DeWit stated that he is also concerned with the potential for risk using the nanofiltration membrane process, and asked what would happen if the nanofiltration membrane process didn't work, and what cost would be incurred if the process had to be changed; Irelan stated that if the membrane didn't work for filtration, there will still be the MIEX system operating to fall back on. DeWit believes this will not work for over a year, as it is too costly. Irelan stated that the City went through the quality based selection process and AECOM must be trusted to complete the project and to dispose of the MIEX system. Irelan added that both processes have risks; the GAC process is more expensive to operate and the cost of lime and the disposal of lime is increasing, as well as the process beginning to be used less, while the nanofiltration membrane process has a minute chance that the total organic carbon (TOC) removal will not be high enough, though Irelan believes that adding the tighter skids will handle this issue.

Irelan restated that the savings of approximately \$100,000 per year in operational costs, along with the quality of water leans toward the nanofiltration membrane process. Sheaffer stated that he has faith in the City Operators and is comfortable with Shoaf's recommendation. Maassel asked for the capital cost for the GAC process; Irelan replied that the cost is approximately \$4.2 million with an annual operating cost of approximately \$433,000; the capital cost for the nanofiltration membrane process is approximately \$3.9 million with an annual operating cost of approximately \$333,000. Helberg reminded Council that these costs consider only the differences between the two options; Maassel stated that Option 2 has approximately thirty percent (30%) of leeway to meet the cost of Option 1. Irelan added that the City of Delaware, Ohio has been utilizing Option 2 using river water for a few months and the process is running well, even using cold water, adding that Shoaf is part of that project so any issues that may arise can be predicted. Irelan stated that Flint, Michigan is using the GAC process and are having issues; adding that the option is not as important as the design of the prepared water before it reaches the membrane. Hoover added that the pilot study was based on high pressure membranes; the membranes being used will be the loose membranes and adding a skid of tighter membranes for nitrate and organics removal. Marihugh asked if the Cincinnati area used the GAC process since this area is considered a nationally recognized leader in water production standards; Hoover was not aware of the processes being used.

**Motion To Approve  
Nanofiltration  
System Water Plant  
(Option 2)**

Motion: Ridley Second: Wilson  
To approve the Nanofiltration System Water Plant (Option 2)

**Passed**  
**Yea- 6**  
**Nay- 1**

Roll call vote on above motion:  
Yea- Wilson, Ridley, Maassel, Sheaffer, Helberg, Comadoll  
Nay- Marihugh

**Specifications And  
Contract Wording For  
Future Projects**

Sheaffer reported that no action was taken on the Specifications and Contract wording for future projects by the Municipal Properties, Buildings, Land Use & Economic Development Committee; no action was taken by Council.

**No Action Taken On  
Specifications And  
Contract Wording For  
Future Projects**

**Good Of The City**  
**(Cont.)**

**Irelan**

Irelan stated that Glenn Miller, County Commissioner would like to address Council.

**Marihugh**

Marihugh asked if Lulfs looked at the guardrail at the boat ramp; Irelan stated this has been handled.

**Behm**

Behm appointed Ridley and Sheaffer to the Housing Council, and appointed Maassel and Sheaffer to the Tax Incentive Review Council (TIRC), adding that the TIRC will meet on March 19, 2015.

**Motion To Appoint  
Ridley And Sheaffer  
To The Housing  
Council, And To  
Appoint Maassel And  
Sheaffer To The  
TIRC**

Motion: Wilson Second: Comadoll  
To appoint Ridley and Sheaffer to the Housing Council and to appoint Maassel and Sheaffer to the TIRC

**Passed**  
**Yea- 7**  
**Nay- 0**

Roll call vote on above motion:  
Yea- Wilson, Ridley, Maassel, Sheaffer, Helberg, Marihugh, Comadoll  
Nay-

**Sheaffer**

Sheaffer stated that he recently toured the Four County Career Center, and it has a fine program regarding technology options.

Sheaffer stated that he recently toured the High School and noticed the improvements that are being made, adding that they and are making good use of tax dollars and creating a nice facility.

**Maassel**

None

**Wilson**

Wilson thanked all City Staff for their hard work during this winter weather.

May 11, 2015

Joint Meeting

Water, Sewer, Refuse, Recycling, and Litter  
Committee

And

City Council

City of Napoleon, Ohio  
**Water, Sewer, Refuse, Recycling & Litter Committee**  
in Joint Session with  
**City Council**

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**Meeting Minutes**

Monday, May 11, 2015 at 7:00pm

<b>PRESENT</b>	
<b>Water &amp; Sewer Committee Council</b>	Chris Ridley – Chair, John Helberg, Jeff Comadoll Travis Sheaffer – President, Jason Maassel – President Pro Tem, Jeff Comadoll, John Helberg, Jeffrey Marihugh, Chris Ridley, Heather Wilson
<b>City Staff</b>	Monica S. Irelan, City Manager Gregory J. Heath, Finance Director/Clerk of Council Trevor M. Hayberger, Law Director Dennis Clapp, Electric Superintendent Chad Lulfs, Director of Public Works Scott Hoover, Water Treatment Plant Superintendent
<b>Recorder</b>	Tammy Fein
<b>Others</b>	News Media; John Courtney and John Wiesing, Courtney & Associates; Frank Godwin, Village of Liberty Center; Nick Rettig, Henry County Water/Sewer
<b>Absent</b>	Jeffrey Marihugh
<b>Call To Order</b>	Chairman Ridley called the meeting to order at 7:00pm. Council President Sheaffer called the meeting to order at 7:00pm.
<b>Approval Of Minutes</b>	The March 9 WSRRL meeting minutes stand approved as presented with no objections or corrections.
<b>Review Of City Water Rate Structure And Allocations</b>	Irelan stated that the purpose of this meeting is to define the process of obtaining the water rate structure, including inside rates, outside rates and contractual rates for the satellite customers.  John Courtney and Scott Wiesing from Courtney & Associates explained a presentation regarding the Water Cost of Service Study and developing the model for the rates. Courtney reported that there are revenue requirements, which are a projection of the required cost to operate and maintain the City water system built upon historical data, anticipated future changes, inflation factors, allowances for capital improvements, and a new water treatment plant in the future. Courtney reported that 2016 was used as the test year for the Cost of Service model, which is before the water treatment plant will be online, leading to the approximately three percent (3%) increases for the years 2014 through 2016 and Courtney recommends using the same model beyond those years.  Courtney reported that the Revenue Requirements are functionalized into ten (10) different functions including: <b>Supply</b> – the costs associated with the process of taking the water from the river to the treatment plant, including pretreatment; <b>Utilities</b> – the costs associated with operating the water system; <b>Chemicals</b> – the costs associated with treating the water;

**Review Of City Water Rate Structure And Allocations (Continued)**

**Treatment** – the costs including labor and materials associated with operating and maintaining the treatment plant;

**Distribution Mains** – the cost of maintaining the water distribution system;

**Distribution Storage** – the costs of the elevated towers;

**Meters** – the costs of installing, operating, and maintaining the meters throughout the system;

**Services** – service line related costs for the lines that run from the mains to the individual customers;

**Meter Reading** – these costs are covered in electric rates and no meter reading costs are allocated to Water or Waste Water; and

**Billing Collection** – the costs associated with sending out the bills and collecting the payments.

Courtney reported that the costs are figured from information provided by the City as well as annual labor information.

Courtney reported that the next step in the process is to allocate the Revenue Requirements as determined by the Base Extra Capacity Method, which is one of the methods recommended by the American Water Works Association (AWWA) in the M1 Water Rate Manual which is a standard approach to establishing water rates, to different Cost Categories including:

**Base** – the costs associated with providing service to a customer using water on a constant basis throughout the year to meet continuous usage on the system;

**Max Day** – the costs associated with treating and supplying water for the maximum daily requirement of the system; this cost is several times that of the Average Day and is different for each rate class;

**Max Hour** – the costs associated with maintaining capacity at certain portions of the system to meet the Average Day and the Max Day with a maximum hour demand on such factors as pumping requirements and storage devices;

**Meters and Services** – the costs associated with meters and services combined into one (1) cost to be allocated based on customer meter size; and

**Meter Reading and Billing Collection** – the costs assigned to customers based on number of customers.

Courtney reported that the Cost by Category gives a relative magnitude of figures based on 2016 as the test year; the Base category, supplying water on a round the clock basis, represents approximately sixty percent (60%) of the overall Cost of Service, the Max Day category represents approximately twelve percent (12%) of the overall Cost of Service, the Max Hour category represents approximately sixteen percent (16%) of the overall Cost of Service, the Meters and Services category represents approximately twelve percent (12%) of the overall Cost of Service, and the Billing and Collection category represents approximately one percent (1%) of the overall Cost of Service. Courtney reported that the Base cost is allocated to customer classes based on usage, established by the meter based on a one hundred cubic foot basis (CCF); the class usage is divided by the total usage to figure the percentage of cost for that class, taking into account that the different classes contribute differently to the peaks; these

**Review Of City Water Rate  
Structure And Allocations  
(Continued)**

figures are used by Design Engineers when designing new treatment plants as well, adding that the AWWA M1 Rate Manual states that the Residential Class Capacity Factor for the Max Hour demand is approximately four (4) times the Average Demand, and the Residential Class has a much higher contribution to the Max Day than the Commercial Class, while the M1 Manual suggests that the Wholesale Class customers should have a 3.75 Max Hour demand, however the City Cost of Study Model used a lower percentage for the Wholesale Customer Class than the recommendation, using 3.25, which is the same capacity factor as the Commercial Class. Courtney stated that the Weighted Capacity Factor excluding the Wholesale Class average totals for the system were researched and the Max Hour Capacity Factor totaled approximately 3.4 which is higher than the figure that was used in the Cost of Service analysis. Courtney stated that the Residential Class are the customers that contribute most to the peak demand on the system, while the Industrial Class and the Commercial Class usages are more spread out throughout the day causing lower Capacity Factors; Courtney added that another reason the Residential Class has a bigger contribution to the Max Hour and Max Day Capacity Factors is due to seasonal usage; more water will be used in the summer and less water will be used in the nonsummer months. Courtney reported that these factors are what is used to determine the allocation of Max Day and Max Hour; adding that only the extra capacity is used for these allocations.

Courtney reported that the Meters and Services costs are allocated to each Class based on a weighted meter size, adding that weighting adjustment figures are used to allocate the cost and this is reflected in rates by higher capacity charges for bigger meters.

Courtney reported that the Billing Collection cost is assigned to each class based on the actual number of customers per class with no weighted factor involved. Courtney reported that more cost will be allocated to the Residential Class due to the higher Capacity Factors; the Commercial Class will have a lower allocation of cost and the Wholesale Class will have an even lower allocation.

Courtney reported that the projected average revenue in the year 2016 has been compared to the Cost of Service results for 2016 based on a dollars per one hundred cubic foot basis (CCF); based on the Cost of Service Study results the City is overrecovering cost from the Residential Class, the Commercial Class, and the Industrial Class, while the City is underrecovering costs from the Wholesale Class. Courtney stated that the Cost of Study is an indication of the goal when adjusting rates, and this should be taken into account when the rates are adjusted to roll in the debt service for the water plant project.

Courtney explained the Summary Page from the Cost of Service Model that demonstrates that the revenue adjustment for the Wholesale Class should be an increase of approximately 4.9% based on the fully allocated Cost of Service. Courtney stated that Irelan requested a separate model with a modified Cost of Service to reflect only the cost associated with those water mains that are necessary to provide service to the Wholesale

**Review Of City Water Rate  
Structure And Allocations  
(Continued)**

Class customers; Jones & Henry pulled the necessary lines from a computer model of the entire system, and reduced the distribution system cost to reflect the elimination of those lines; this shifted the result from underrecovering by approximately 4.9% to overrecovering by approximately 4.3%; Courtney added the figures of Cost of Service for the other classes are not correct since the smaller water lines have been deleted from the model; Courtney also added that the Treatment and Supply Costs and a portion of the Distribution Mains and Storage Costs are included in this model.

Irelan stated that a Cost of Service model is an attempt to put a cost to the actual impact per class to the system; the final rate is an inside rate and an outside rate; the final rate is not split out by class. Irelan reported that the outside rate is the inside rate times fifty percent (50%), adding that the contractual rate for the satellite customers is the inside rate times twenty five percent (25%); both having the declining block rate included, stating that this rate structure is defined by Ordinance. Irelan stated that the AWWA best practice M1 rate manual is used to configure the rates to ensure that the City can legally stand by the Cost of Service rates.

Irelan listed what she believes to be the requirements of the satellite customers to commit to the water plant, including the best quality water at the cheapest price, to meet and exceed all EPA regulations, to have some input regarding the cost of the water, as well as paying transmission costs instead of distribution costs. Irelan stated that she has discussed rewriting the contracts with the satellite customers to meet the listed goals; Irelan brought a proposal in September 2014 to the satellite customers to either decrease or eliminate the capacity charge, to decrease the commodity charge, to allow a line for a midterm adjustment of the contract allowing discussions with the satellite customers if they could prove that they could get less expensive water from a comparable water system with equivalent water facilities, as well as offered an Advisory Board with a member of each satellite customer to propose rates to the Water, Sewer, Refuse, Recycling & Litter Committee and the Board of Public Affairs with final approval of the proposed rates by Council, however this proposal was not negotiated by any of the satellite customers by the deadline of April 2015. Irelan added that the only options not offered in the proposal were a flat wholesale rate and the Transmission Cost change. Irelan stated that in October she requested that Courtney figure a levelized wholesale rate using 2013 as the base year, using the actual water usage of the satellite customers and the actual payments to figure a basis for the extra capacity model, adding that the rate would only increase by the percentage set by Council. Irelan stated that she would prefer the rates be based on a model that is based on best practices, however she still presented this analysis to the satellite customers; in April 2015 Irelan requested that Courtney create the model that demonstrated the cost of the transmission versus the cost of the distribution system which showed a 4.9% savings to the satellite customers. Irelan reported that the satellite customers have decided to research other options; however Irelan wanted the options that were given to the satellite customers to be brought before Council in an open meeting to allow for negotiations later.

Maassel asked why the satellite customers did not approve the proposals

**Review Of City Water Rate  
Structure And Allocations  
(Continued)**

when they were presented last Fall, Irelan believes this to be due to the offer of a decrease in the capacity charge and the commodity charge; the satellite customers wanted these charges eliminated as well as requiring a flat rate instead of a capacity model with a declining block rate; however Irelan explained that if the satellite customers increase their customers with this case, they will end up paying more. Irelan stated that there may not have been approval due to cost over all, adding that Irelan will never offer a cost less than what an inside customer would pay, adding that she cannot legally justify allowing a satellite customer to pay less than what an inside customer is required to pay.

Sheaffer believes that a line must be drawn in this process, suggesting that the satellite customers must either commit to being a part of the City water distribution system, or when the satellite customer contracts are done then they are done; adding that the satellite customers have continually ignored the timeframe given, and there seems to be no willingness to negotiate on their part. Maassel suggested asking the satellite customer representatives in attendance.

Frank Godwin, Village of Liberty Center, agreed that Irelan did offer what was stated tonight, however he believes that the levelization would cost Liberty Center more in the first two (2) years. Godwin asked if the number of satellite customers would dictate the size of the water plant; Irelan stated that the City must have a water plant able to accommodate the satellite customers until 2020 when the current contracts expire. Godwin asked for a cost estimate; Irelan replied that estimates that were discussed at the last presentation at the Henry County Water Sewer meeting was a cost of approximately \$14.5 million with two percent (2%) interest over thirty (30) years; the \$14.5 million is broken down into a \$12 million dollar rehab with a \$2.5 million note that the City has been carrying. Irelan added that these figures are a worst case scenario, and the City is trying to do a \$10 million rehab. Godwin stated that Liberty Center would like to know what the rates will be in the future before they are willing to commit, and he is open to any contact to receive information, adding that Liberty Center will not commit until the rates are explained. Wilson asked Godwin to explain himself; she believes that a \$10 million to \$12 million rehab is less expensive than Liberty Center building their own plant; Godwin believes that a \$10 million rehab is not less expensive than Liberty Center building their own plant; Nick Rettig stated that the rates, if Whitehouse were included, would range from \$2.94 to \$5.95. Helberg asked what the rates would figure without Whitehouse; Rettig replied \$6.05 to \$9.58. Irelan clarified that these figures are comparing units of water to thousands of gallons; Irelan stated there are few figures in the City numbers that aren't figured into the satellite customer information including billing and finance and administration costs, since the satellite customers do not have this data.

Ridley asked if the 2017 and 2018 costs could be projected based on estimates; Irelan stated that this could be done based on the wholesale rate and these projections have been provided for the satellite customers based on the larger debt amount of \$16.8 million, but to keep this rate structure the City would be required to pay Courtney to do another Cost of Service

**Review Of City Water Rate  
Structure And Allocations  
(Continued)**

Study based on these assumptions tied to this amount; Irelan believes that the City has spent approximately \$10,000 on studies for answers for the satellite customers. Maassel asked when there will be a set figure on the rehab; Heath stated that these will only be available once the bids are opened, and the final debt will not be sold until after the construction of the project. Irelan stated that she would like to know that satellite customers are committed to the City before the debt is incurred; the City will have to incur the debt at a higher rate if the satellite customers wait to commit to the project, then Council would need to decide if the City is willing to discount the Capacity Charge and Commodity Charge. Helberg asked how to configure the satellite customer figures to compare with the City figures since it is currently units compared to thousands of gallons; Irelan stated the figure is divided by 748.05. Wilson stated that she would like to see the billing, finance and administrative costs included in the satellite customer figures as well. Irelan stated that she had asked Rettig for these figures, he replied that they "are all in the report". Irelan asked if the satellites customers were going to have a centralized finance department or if each satellite customer was having their own; Rettig replied that each will have its own. Helberg asked how they could make a true comparison for these figures, adding that the satellite customers have not approached the EPA to request having their own system and no approval has been given. Irelan stated that the satellite customers will figure their rates by dividing the cost of water and by the total number of customers, and there will be no allocations per class.

Helberg believes that the City should move on without the satellite customers; Sheaffer agreed, adding that he has read comments from the satellite customers in the paper in which they state that "the City is treating the satellite customers poorly"; Helberg agreed, adding that the rates to the satellite customers would be increased only to recover costs. Wilson stated that the unwillingness to commit to the project should mean no discounts at a later date, adding that no gratitude should be extended for noncommittal. Ridley believes that a point of contention stems from the way that costs are currently be collected; looking at plant as a whole, not just at the transmission lines; Irelan stated this model was shown to Rettig a few weeks ago; Ridley stated regardless if the satellite customers choose to continue with the City, the City must determine cost and billing from this point forward, and asked the Committee and Council to determine which options stated earlier they would not be willing to consider. Maassel believes it does not matter which options are discussed; he believes time to be on the side of the satellite customers; Helberg replied that time is not on their side; the City has been delaying the project while waiting for them to make a decision, and all customers are at risk including the satellite customers. Maassel believes that the satellite customers can choose to go a different way if they believe the plant cost is too high; Helberg stated that he does not have an issue with only charging the Transmission Cost. Wilson agreed with Irelan, and believes the City residents should also be held in regard when figuring the rates for the satellite customers. Irelan stated that the model shows that charging the Transmission Cost to the satellite customers would save them approximately five percent (5%).

DeWit believes that the City is negotiating against itself, since the satellite

**Review Of City Water Rate  
Structure And Allocations  
(Continued)**

customers are not negotiating, adding that he believes that the City should not continue to offer discounts to the satellite customers. DeWit stated that approval has not been given for the satellite customers to pump water from a different county and does not believe that water can be distributed across Henry County at the figures that were quoted earlier by Rettig; DeWit added that he does not believe that Whitehouse will be a customer of their system. DeWit believes that the City has more time to wait than the satellite customers as the City has a good water supply as opposed to wells, and Liberty Center will be assessed to pay for this system even if the system cannot make water, adding that the satellite customers are not assessed when buying water from the City. DeWit asked Rettig how the system will be paid for; Rettig replied that EPA and USDA grants will be applied for. DeWit stated that if the grant applications are written as the report has been up to this point, stating that they are establishing water out of the ground because there is no recourse, the City will raise an objection and the EPA will take this into consideration. DeWit suggested stopping negotiations with the satellite customers and letting them find their water elsewhere; DeWit suggested watching the paperwork and raising objections as necessary, as well as cutting services off with the County and forming a separate district. Helberg believes that the satellite customers are determining the size of the water plant due to their contracts not being up until 2020; DeWit believes the bigger plant will not be an issue in the future, and the satellite customers will not be able to find lower rates due to the size of the pumping systems required.

Sheaffer agreed with DeWit; the rate is the rate, adding that the City would be happy to keep the satellite customers, however, the rates are what they are. DeWit stated that the City has done everything possible to keep the rates low in fairness to the satellite customers. Helberg stated that the City is not asking the satellites to leave, but the project must move forward. Godwin asked if the size of the building would change if the satellite customers left; Irelan stated the building size would be the same, however different skids of membranes could be used depending on if the satellites are included or not. Godwin stated that Liberty Center is just exploring options; Irelan stated that none of the satellite customers have counteroffered on any proposal that has been offered, and the City has paid for approximately \$10,000 worth of studies to answer questions for the satellite customers; Helberg stated the only counteroffer that has been offered is to leave. Rettig asked for the cost of creating water; Irelan stated she presented that entire calculation at a Henry County Water Sewer Consortium meeting and will email this information to Rettig again. Godwin stated that he does not know the specifics since he has not had enough time to research the information even though the study has been completed. Ridley suggested that all parties read the information and discuss the options at the June WSRRL meeting; Ridley added that he would like to collaborate with the satellite customers. Helberg suggested calculating rates based on how it has been done in the past, but to adjust the Distribution Charge to the Transmission Charge. Comadoll asked how changing this charge would affect the City resident customers; Irelan believes it would be an approximate one percent (1%) increase per class; Sheaffer stated that he is not willing to have residents subsidize this charge; Comadoll agreed. Helberg asked why the Commercial Class rate is being

**Review Of City Water Rate Structure And Allocations (Continued)**

used rather than the recommended Wholesale Class rate; Courtney stated there was no detailed information on sales, but it was assumed to be more like the Commercial Class and represents the average capacity factor of the system. Ireland added that it was more fair to the satellite customers; Courtney stated this is the factor that has been used since the first model was created; Helberg stated that once again the satellite customers are receiving a discount with no required commitment. Ireland stated that this has given her a direction to open discussions back up with the satellite customers, though she believes that there will be no committal until the final design is complete with a final bid on the construction. Heath asked what the delta of the project would be, adding that even if the delta is \$2 million more, would that be the tipping point of the satellite customers; there is no feedback from the satellite customers regarding this. Helberg stated that the contracts must be honored through 2020; Heath added that there will be a financial review by the debt markets and the rates will be reallocated accordingly to cover the debt causing higher capital costs. Helberg stated that the rates will not increase solely based on the lack of contributors to the capital, and operation costs will decrease. Heath stated that the satellite customers represent approximately twenty percent (20%) to twenty five percent (25%) of revenue and losing this will raise the debt interest rate due to being a higher risk. Heath stated this depends on market at the time, and believes the costs that the satellite customers are providing are unrealistic, adding that the City must move forward and the assumption must be made that the satellite customers will not be involved. Helberg believes this increase should be allocated to the outside customers; Rettig stated that the satellite customers represent twenty five percent (25%) of usage and thirty one percent (31%) of revenue; Ireland stated that Rettig has these figures reversed, guaranteeing that the satellite customers are not charged as much as they use; Courtney agreed. Godwin stated that he would like the Engineer's Estimate on the project; Ireland stated that she has given the figures regarding the cost and the annual debt to the satellites customers; however the actual rate figure cannot be determined without paying Courtney to do another Cost of Service model, adding that the numbers given in the past used a leveled figure based on the \$16.8 million option at a wholesale rate. Ireland gave the Engineer's Estimate as \$14.5 million over thirty (30) years at two percent (2%) interest. Helberg stated the plant will be the same size no matter if the satellites are involved or not; Ireland stated that from 2017 through 2020 water must be processed for the satellite customers; and if the satellite customers leave, the plant will use one (1) less skid with loose membranes throughout at a lower cost.

**Review Of City Water And Sewer Rules (Tabled)**

Chairman Ridley left the Review of City Water and Sewer Rules Tabled.

**Any Other Matters To Come Before The Committee**

None

**WSRRL Motion To Adjourn**

Motion: Comadoll Second: Wilson  
To adjourn the meeting at 8:18pm

**Passed**

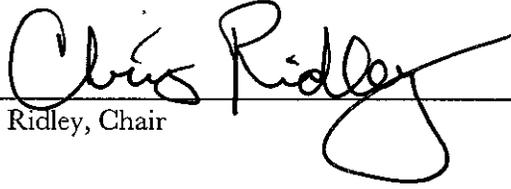
Roll call vote on above motion:

Yea-  
Nay-

6-15-15

Date

Yea- Wilson, Ridley, Maassel, Sheaffer, Helberg, Comadoll  
Nay-



Chris Ridley, Chair

September 21, 2015  
City Council Meeting Minutes





**Smaller Windows**

**Passed**  
**Yea- 6**  
**Nay- 1**

Roll call vote on above motion:  
Yea- Helberg, Marihugh, McColley, Comadoll, Ridley, Maassel  
Nay- Sheaffer

**Update Of Water Treatment Plant Design (Continued)**

Irelan will take this issue off the City website. McColley asked the Browns what they would like to see on the MIEX building for the mural; Mrs. Brown replied that the whale mural is beautiful.

**Sheaffer Referred Upgrade Of The MIEX Building To The Water, Sewer, Refuse, Recycling & Litter Committee**

Sheaffer referred the upgrade of the MIEX Building to the Water, Sewer, Refuse, Recycling & Litter Committee.

**Good Of The City (Cont.) Heath**

Heath notified Council that Income Tax nonfiling letters have been mailed, and the Central Collection Agency out of Cleveland has been contacting residents for the nonfiling of other schedules.

**Comadoll**

None

**Ridley**

Ridley believes that there could be additional opportunity options regarding Loose Field, however there may be increased costs to maintain it and believes this should be carefully researched before it is approved, adding that the City currently has many parks and wonders if now is the right time to take on the responsibility of another park.

**Maassel**

Maassel thanked all that helped to make FallFest a success, noting that the National Anthem was perfectly timed with the airplane fly over.

Maassel congratulated Matt Volkman for being the band member to 'dot the I' in Columbus over the weekend.

Maassel reported that the Finance & Budget Committee meeting scheduled for Monday, September 28 will begin at 6:00pm; Marihugh will bring his list of approximately twenty (20) budgetary concerns to Maassel before the meeting.

**Sheaffer**

Sheaffer created a special Ad Hoc Committee consisting of himself, Ridley and Maassel to look at the City Vision Statement, City Mission Statement, and City Goals and to work with the City Manager regarding these.

Sheaffer reported that the week of October 4 is Public Power Week; Sheaffer has spoken with the Mayor to proclaim this using sample verbage from AMP.

Sheaffer assigned proposed Council Rules changes to the Council Rules Review Committee, including significant costs being incurred for copies being made for public records requests for information on items that are not on Council Agenda or before Committees, and will be reevaluating fees for citizen requests as well.

**Helberg**

Helberg agreed with Ridley regarding there being too many parks in the City; Helberg stated that he is concerned with how this is tied back to the master plan

October 20, 2015

Joint Meeting

Water, Sewer, Refuse, Recycling, and Litter  
Committee Minutes

And

City Council

City of Napoleon, Ohio  
**Water, Sewer, Refuse, Recycling & Litter Committee**  
in Joint Session with  
**City Council**

**Meeting Minutes**

Tuesday, October 20, 2015 at 4:00pm

<b>PRESENT</b>	
<b>Water &amp; Sewer Committee Council</b>	Chris Ridley – Chair, John Helberg, Jeff Comadoll Jason Maassel – President Pro Tem, , John Helberg, Jeffrey Marihugh, Jeff Comadoll, Patrick McColley, Chris Ridley
<b>City Staff</b>	Monica S. Irelan, City Manager Gregory J. Heath, Finance Director/Clerk of Council Lisa L. Nagel, Law Director Scott Hoover, Water Treatment Plant Superintendent Jeff Weis, Water Treatment Plant Chief Operator
<b>Recorder</b>	Tammy Fein
<b>Others</b>	News Media; NCTV; Rob Shoaf, AECOM; Mike DeWit
<b>Absent</b>	Travis Sheaffer – Council President
<b>Call To Order</b>	Chairman Ridley called the Committee meeting to order at 4:00pm. President Pro Tem Maassel called the Council meeting to order at 4:00pm.
<b>Water Treatment Plant Update</b>	<p>Irelan introduced Rob Shoaf to the Committee and Council; Shoaf and his team are doing the design work for the Water Treatment Plant rehabilitation.</p> <p>Shoaf distributed a presentation regarding the Water Treatment Plant rehabilitation; see attached. Shoaf reported that Irelan was adamant that all of the satellite customers receive the best quality of water at all times when researching the filtration processes available.</p> <p>Shoaf explained the water treatment process, adding that the MIEX system does an adequate job but is fairly expensive to operate.</p> <p>Shoaf reported that the chlorine gas will be replaced with a safer alternative, adding that the current equipment was in place for the two (2) phase process.</p> <p>Shoaf reported that the reverse osmosis softening process cost is approximately \$300,000 less than lime softening and should also decrease annual costs by approximately \$125,000.</p> <p>Shoaf reported that jar testing was completed for turbidity and organics reduction, adding that the aluminum chlorohydrate (ACH) did a great job as a coagulant for the process. Marihugh asked if the building would be required to be rewired for things such as contacts and conduits; Shoaf stated that ACH has a lower pH balance and no rewiring would be needed. Comadoll asked if the Waste Water Treatment Plant would need to switch to ACH as well; Irelan stated that the Waste Water Treatment</p>

**Water Treatment Plant Update  
(Continued)**

Plant is testing a different chemical however this chemical does not work well in the Water Treatment Plant process. Maassel asked if one system is favored by the EPA over the others; Shoaf replied that the reverse osmosis process is flexible and is based on pressure and is the highest level of treatment that is possible; the reverse osmosis process removes all chemicals necessary. Shoaf reported that the filters will soften and remove the organics from the water, eliminating the need for the MIEX system. Marihugh stated that currently the lime soda is allowed to be land applied and asked if this would still be the case; Shoaf stated he has seen no problems in taking the solids from the sludge and moving it to the Waste Water Treatment Plant with no issues, while the reverse osmosis waste stream is being proposed to be put back in the river.

Shoaf reported that ACH will be added in the first stage of the process, then proceed to second stage, then to the settling basin; sixty eight percent (68%) rejection of turbidity is sufficient. Marihugh asked if granulated carbon and permanganate will be added; Shoaf stated that the ability to add this is available but these may not need to be used as often.

Shoaf reported that the membranes will eliminate the need for lime softening as well as the MIEX process, and will remove other constituents of concern from the river water; the next step is ultraviolet (UV) disinfection which is located downstream of the clear well, which provides additional disinfection and eliminates the need for a second clear well.

Shoaf demonstrated architectural drafts of the proposed Water Treatment Plan building, adding that the UV system may be built first to meet the EPA deadlines, starting in the Summer for the overall construction project.

Marihugh asked if the MIEX building must remain operational at the beginning of the project; Shoaf stated that once the membranes are operating correctly the MIEX will be taken offline with one mobilization; the Operators are aware that they may have to run for twenty four (24) hours for some time to make up for the loss of some of the processes at first.

Shoaf restated that Ireland and Staff required that the water be of the best quality for the residents and the satellite customers.

Shoaf reported that the reverse osmosis process has a higher electric cost but lower chemical cost; saving approximately \$100,000 annually.

Shoaf reported that the extra UV protection is available at less than five (5) facilities in Ohio, costing less than \$10,000 annually in power costs.

Heath asked how the plant will operate in conjunction with the current process during the construction; Shoaf replied there will be at least monthly meetings with the contractor, and only certain parts of the plant will be rehabbed at a time, such as one filter at a time, adding that the Operators are highly capable of running the plant as necessary. Heath asked if the new building will be constructed first; Shoaf stated that the

**Water Treatment Plant Update  
(Continued)**

new building construction will be independent of the work on the filters and the basins and the new electric service installation. Shoaf proposed installing a new tank instead of upgrading the current tank which is approximately one hundred (100) years old. Maassel asked how long the membranes last; Shoaf replied approximately five (5) years on average, however Tipp City is still using membranes from eight (8) years ago. Marihugh asked when conceptual footprints will be developed; Shoaf believes in approximately one (1) month, after some undecided details are completed. Shoaf stated the current plan is to have the front side of the building facing Riverview Avenue. Comadoll asked if the water tower is in this project; Irelan stated that the water tower is a separate project and not added into this project; the idea was to have that included but that discussion is ongoing. Marihugh asked who this is being discussed with; Irelan stated that research is being done with various companies. Marihugh noted that at one point there was a fund to paint the water tower, however there was no discipline and that fund was depleted.

**Any Other Matters To Come  
Before The Committee**

None

**Any Other Matters That May  
Properly Come Before Council**

None

**WSRRL Motion To Adjourn**

Motion: Comadoll                      Second: Helberg  
To adjourn the WSRRL Committee meeting

**Passed**  
**Yea- 3**  
**Nay- 0**

Roll call vote on above motion:  
Yea- Helberg, Ridley, Comadoll  
Nay-

WSRRL meeting adjourned at 4:45pm.

**Council Motion To Adjourn**

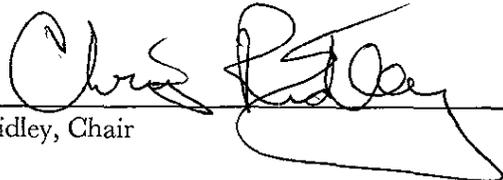
Motion: Marihugh                      Second: Ridley  
To adjourn the Council meeting

**Passed**  
**Yea- 6**  
**Nay- 0**

Roll call vote on above motion:  
Yea- Ridley, Maassel, Helberg, Marihugh, McColley  
Nay-

Council Meeting adjourned at 4:45pm.

November 9, 2015  
**Approved**

  
Chris Ridley, Chair

City of Napoleon, Ohio  
Municipal Properties, Buildings, Land Use, & Economic  
Development Committee

LOCATION: Council Chambers, 255 West Riverview Avenue, Napoleon, Ohio

Meeting Agenda  
Monday, January 11, 2016 at 7:30pm

- I. Approval of Minutes (*In the absence of any objections or corrections, the Minutes shall stand approved.*)
- II. Review of the current Engineering Rules (Tabled)
- III. Review of historical data regarding previous Assessment percentages
- IV. Updated information from Staff on Economic Development (as needed)
- V. Adjournment

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Gregory J. Heath, Finance Director/Clerk of Council

City of Napoleon, Ohio  
**Municipal Properties, Buildings, Land Use & Economic Development  
Committee**  
in Joint Session with  
**City Council**

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Special Meeting Minutes  
Monday, December 14, 2015 at 7:00pm

**PRESENT**  
**Committee Members**  
**Council**  
**City Staff**

John Helberg - Chair, Travis Sheaffer, Jeff Comadoll (Substitute)  
Travis Sheaffer – President, Jason Maassel – President Pro Tem, John Helberg, Chris Ridley, Jeff Comadoll  
Greg Heath, Finance Director/Clerk of Council  
Monica Irelan, City Manager  
Lisa Nagel, Law Director  
Bobby Stites, Assistant MIS Administrator  
Tammy Fein  
News Media; Adam Hoff & Andrew Fayley, Stantec; Megan Flanagan; Genia Donley

**Recorder**  
**Others**

**ABSENT**  
**Committee**  
**Staff**  
**Call To Order**

Patrick McColley, Ron Behm

President Sheaffer called the Council meeting to order at 7:00pm.  
Chairman Helberg called the Committee meeting to order at 7:00pm.

**Approval Of Minutes**

Minutes of the November 9, 2015 Committee meeting stand approved as presented with no objections or corrections.

Minutes of the December 7, 2015 Council meeting stand approved as presented with no objections or corrections.

**Review Of Pavement Rating Study**

Andrew Fayley, Stantec, presented the Pavement Rating Study results, including future recommendations; see attached. Fayley reported that streets were defined from intersection to intersection to determine Surface Distress Index (SDI), with an average SDI of 55, adding that this is a typical figure. Fayley reported that the Pavement Quality Index (PQI) defines the quality of the streets which will determine the costs associated with rehabilitation of the deterioration of the street and at what point the street rehabilitation must be addressed. Fayley demonstrated a decision tree to help determine the way in which the various road rehabilitations are addressed, adding that the rehabilitation increases the life cycle of the street. Fayley reported that this information will be integrated into the City GIS system. Maassel asked if the intersections were included in the Study; Fayley stated that they were included, adding that an intersection in the GIS system is defined as a line and a point and the Study went from the center of each point to the center of the next point. Helberg asked on what year the costs are based; Fayley stated this year; Lulfs added this was information from previous bid tabs as well as information received from current seminars, and some costs were adjusted to reflect local costs. Helberg asked how this Study will be updated to remain current; Lulfs will research this as the projects

are completed and will figure the assumed rate of deterioration. Ireland and Lulfs thanked Council for allowing this Study to be done, adding that the information can now be used for future plans using educated decisions on road repair and allowing Council to speak to residents regarding the proactive road projects. Sheaffer asked if the budget figures will begin next year; Ireland stated that they would. Lulfs reminded Council that there is also a backlog of streets to be repaired as it is financially feasible. Lulfs stated that the planning stages for next year's projects include mobilization costs and utilizing streets that are not being currently repaired.

**Approval of A Minimum Of  
\$400,000/\$400,000 For  
Miscellaneous Streets Projects  
Resurfacing & Reconstruction**

Motion: Ridley Second: Comadoll  
To approve a minimum of \$400,000/\$400,000 for Miscellaneous Street Projects including resurfacing and reconstruction

**Passed**  
**Yea- 5**  
**Nay- 0**

Roll call vote on above motion:  
Yea- Maassel, Sheaffer, Helberg, Comadoll, Ridley  
Nay-

**Second Read Of Ordinance No.  
062-15**

President Sheaffer read by title Ordinance No. 062-15, an Ordinance establishing the Appropriation Measure (Budget) of the City of Napoleon, Ohio, for the Fiscal Year ending December 31, 2016; and declaring an Emergency

**Motion To Approve  
Second Read**

Motion: Comadoll Second: Ridley  
To approve Second Read of Ordinance No. 062-15

**Discussion**

Heath reported that there are no changes to the Ordinance since the Second Read.

**Passed**  
**Yea- 5**  
**Nay- 0**

Roll call vote to approve Second Read of Ordinance No. 060-15  
Yea- Maassel, Sheaffer, Helberg, Comadoll, Ridley  
Nay-

**Second Read Of Resolution No.  
063-15**

President Sheaffer read by title Resolution No. 063-15, a Resolution authorizing the Finance Director to transfer certain fund balances from respective Funds to other Funds per Section 5704.14 ORC on an as needed basis in Fiscal Year 2016, listed in Exhibit "A"; and declaring an Emergency

**Motion To Approve  
Second Read**

Motion: Comadoll Second: Ridley  
To approve Second Read of Resolution No. 063-15

**Discussion**

Heath reported that there are no changes to the Resolution since the Second Read.

**Passed**  
**Yea- 5**  
**Nay- 0**

Roll call vote to approve Second Read of Ordinance No. 060-15  
Yea- Maassel, Sheaffer, Helberg, Comadoll, Ridley  
Nay-



**Review Of Zoning Changes  
Regarding Poultry Within City  
Limits (Continued)**

would be required to be purchased including feed, a coop and other supplies which would not recoup the costs; the citizen previously stated that the chickens lay eggs at a rate of one (1) egg per chicken per day for approximately one (1) year; Irelan added that other concerns may arise if residents decided to slaughter chickens as well as destroy the roosters, adding that fly control in the Spring, Summer and Fall could also become an issue.

Irelan stated that City Staff recommends no change to the current Ordinance based on the lack of Staff for oversight, the numerous previously stated concerns, the issues of noise, smell, rooster control and disposal, and the potential for attracting predators. Irelan added that there is the option of purchasing fresh, local eggs at local farmer's markets and local farms. Comadoll stated that he personally does not approve of chickens within the City limits; Sheaffer agreed. Helberg stated that many previous concerns were stated and addressed along with the additional concerns that were brought forward tonight, adding that he agrees with Comadoll and Sheaffer.

Megan Flanagan addressed the Committee stating that she has had residents thank her for bringing up this issue, offering to start a petition. Flanagan addressed the accessory building issue, adding that she believes that a chicken coop would not fit this definition. Flanagan believes that enforcement could require a conditional use permit for residents who would like to have chickens. Flanagan stated that she believes it would be the resident's responsibility to dispose of the roosters. Flanagan stated that she could not find research backing up the issue of the attraction of predators. Flanagan stated that she read that avian flu is reported by the CDC to be at commercial facilities and requires contact with wild birds. Flanagan stated that North College Hill, Ohio is the only community with a comparable size to the City, offering to contact other entities regarding any potential issues. Helberg agreed to allow Flanagan to bring forward a petition if the discussion were to go any further.

Genia Donley agrees with Flanagan that four (4) chickens should be acceptable, adding that her sister-in-law has chickens and does not see any issue, and believes that a coop could be added to an existing shed. Helberg stated that this used to be allowed years ago, though this was removed from the Zoning Ordinance due to lack of responsible ownership.

Sheaffer stated that he stands with not being in favor of changing the Ordinance; Comadoll agreed.

**Motion To Keep Current  
Zoning Ordinance Regarding  
Poultry Within City Limits As  
Written**

**Passed**  
**Yea- 3**  
**Nay- 0**

Motion: Sheaffer Second: Comadoll  
To keep the current Zoning Ordinance regarding poultry within City limits as written

Roll call vote on above motion:  
Yea- Helberg, Sheaffer, Comadoll  
Nay-



**Review Of Assessment Process  
(Continued)**

Sheaffer believes that assessment is the option necessary to afford the Park Lane projects. Ireland asked if the Committee is approving assessments for both Park Lane and Dodd Street; Sheaffer stated yes as well as using Grant funding. Ireland believes that previously low to moderate income area assessments used the Grant funding for properties that could not afford the assessment, adding that the CDBG Funds will allow the same for these projects and asked for direction from the Committee. Helberg asked if just the street portion of the project is being considered for assessment or if it includes the sanitary sewer as well; Sheaffer believes that if the sanitary sewer is under findings and orders then it is the homeowner responsibility, Helberg asked what the process would be if there is no viable sewer; Sheaffer restated that he believes that assessment must be considered for projects. Lulfs added that the project schedule must be considered if assessment is an option, and this must be known ahead of the advertisement. Sheaffer stated that he is willing to wait until next year if necessary due to the project schedule. Lulfs stated that Park Lane cannot be awarded until July 1, 2016 and Dodd Street must be completed by August 2017 though the City cannot apply for the Grant again until this project is completed, receiving approximately \$290,000 of a \$650,000 project. Sheaffer stated that he is willing to move forward with Dodd Street project without assessment due to the grant funding but would like to discuss assessment of Park Lane. Heath stated that if the direction is to assess Park Lane, the guidelines for future assessments must be set now. Heath stated that if no guideline is set, the maximum allowed assessment will be assumed and must be defended when residents complain. Sheaffer believes the full body of Council must decide this guideline next year; Lulfs stated that he would move forward under the assumption that the entire project would be assessed, adding that the design portion of the project is not included in the assessment. Lulfs stated that the eight (8) inch water line is the base used for assessment calculations as is the eight (8) inch sewer line and can be calculated as necessary. Ireland agreed with Heath that a percentage guideline must be given as a clear direction for Staff to move forward with future projects. Helberg stated that Lulfs could create options for future projects; Ireland asked for clearer direction. Sheaffer suggested researching past assessments and finding the percentages using the base pipes sizes previously stated. Helberg suggested using the Front Street assessment history; Sheaffer suggested using Sheffield Avenue. Ireland stated that the history of assessments will be researched; asking if Park Lane percentages would be figured; Sheaffer suggested using either thirty five percent (35%), fifty percent (50%), or seventy five percent (75%) depending on the research findings; Lulfs stated that the sanitary sewer is being replaced as required with a grant for half of the total project. Ireland stated that the Park Lane projects were split into three (3) phases to receive \$325,000 for each phase.

**Motion To Not Assess Dodd  
Street Due To the CDBG Grant  
But Move Forward With the  
Park Lane Assessment  
Discussion**

Motion: Sheaffer                      Second: Comadoll  
To not assess Dodd Street but move forward with the assessment  
discussion for Park Lane

**Passed**  
**Yea- 3**  
**Nay- 0**

**Motion To Assess Park Lane  
And Request Staff To Bring  
Back Historical Data Regarding  
Prior Assessment Percentages**

Roll call vote on above motion:  
Yea- Helberg, Sheaffer, Comadoll  
Nay-

Motion: Sheaffer                      Second: Comadoll  
To assess Park Lane even with the 50% OPWC grant funding and for  
Staff to bring back historical data regarding assessment percentages

**Passed**  
**Yea- 3**  
**Nay- 0**

Roll call vote on above motion:  
Yea- Helberg, Sheaffer, Comadoll  
Nay-

Irelan asked if low to moderate income areas should be considered in assessing future projects; Comadoll, Sheaffer and Helberg agreed that it should. Lulfs stated that the CDBG Grant is income based and monitored by the Maumee Valley Planning Commission (MVPC). Irelan stated that once the bidding documents are sent out, this finalizes the details. Heath stated that the assessment Resolution must be created and the residents are informed, then the bid goes out with the option of dispute by the residents with the final cost being assessed, adding that there is still debt attached to an assessment that is assessed to the property tax. Sheaffer asked if the Strategic Planning discussion could involve assessments versus income tax increases from the resident survey; Irelan stated that an increase in income tax amount can be asked, but not assessment versus income tax increase.

**Review Updated Information  
From Staff On ED (As Needed)**

Irelan reported none at this time.

**Committee Motion To Adjourn**

Motion: Sheaffer                      Second: Comadoll  
To adjourn the Committee meeting at 8:55pm.

**Passed**  
**Yea- 3**  
**Nay- 0**

Roll call vote on motion:  
Yea- Helberg, Sheaffer, Comadoll  
Nay-

**Date** \_\_\_\_\_

\_\_\_\_\_  
John Helberg, Chair

*City of Napoleon, Ohio*  
*Engineering Department*  
*Rules & Regulations*

**Document No. CNER98-1**

# *History*

Adopted	July 15, 1998	Ordinance No. 30-98
Amended	August 7, 2006	Ordinance No. 062-06
Amended	October 16, 2006	Ordinance No. 100-06
<u>Amended</u>		<u>Ordinance No.</u>

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## **RULE 1      DEFINITIONS**

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The following words and phrases, when used in the "City of Napoleon, Ohio Engineering Department Rules and Regulations", except as otherwise provided, shall have the meaning respectively ascribed to them in this section. (*Amended – August 7, 2006 – Ordinance No. 062-06*)

### ***AASHTO Standards***

The most current edition of standards as established by the American Association of State Highway and Transportation Officials (AASHTO).

### ***ASTM Standards***

The most current edition of standards as established by the American Society for Testing Materials.

### ***AWWA Standards***

The most current edition of standards as established by the American Waterworks Association.

### ***Alley***

A public right-of-way, usually located between streets, established to provide vehicular, pedestrian and utility access and service to the rear or side of lots or buildings.

### ***Arterial Street***

A public right-of-way established for the purpose of vehicular and pedestrian travel and to accommodate public utilities. An arterial street is the primary course of travel for traffic through a community and provides continuity for all rural and state routes that intersect the municipality.

### ***Collector Street***

A public right-of-way established for the purpose of vehicular and pedestrian travel and to accommodate public utilities. A collector street permits both direct access to abutting properties and through traffic.

### ***Commencing Construction***

The physical alteration of a site for the purpose of performing an improvement or development. This is not intended to include preparatory work required for surveying, design or layout.

### ***Construction Plan***

Detailed drawings developed for the purpose of improving property. Generally utilized for properties greater than one (1) acre in area for which the proposed development shall result in a new subdivision, commercial or industrial site, or any extension of or from existing public infrastructure.

### ***Cul-de-sac***

A semicircular ending to a dead-end street intended to provide an area to turn vehicles around.

### ***Dead-End Street***

A local street constructed with an outlet at only one end.

***Development***

As a verb, any construction upon a site, being vacant or occupied, resulting in the altered use or characteristics of the site. Generally utilized in reference to new subdivisions and/or facilities.

As a noun, the result or proposed result of construction upon a vacant site.

***EPA***

The Environmental Protection Agency.

***Improvement***

As a verb, any construction upon a site, being vacant or occupied, resulting in the altered use or characteristics of the site. Generally utilized in reference to the modification of an existing facility.

As a noun, the result or proposed result of construction upon an occupied or vacant site.

***Local Street***

A public right-of-way established for the purpose of vehicular and pedestrian travel and to accommodate public utilities. A local street permits direct access to abutting properties and service to through traffic is discouraged.

***NGS***

The National Geodetic Survey. (*Amended – August 7, 2006 – Ordinance No. 062-06*)

***ODOT***

The Ohio Department of Transportation.

***Private Street***

A privately owned right-of-way established for vehicular travel for the purpose of serving a private development.

***Public Street***

A right-of-way established for public purpose.

***Right-of-way***

A continuous parcel of land, established within a plat or by legislation, for public purposes for the installation and maintenance of streets, sidewalks and utilities.

***Sidewalk***

A walkway, generally along the margin of a street, designed and prepared for the use of pedestrians, exclusive of road vehicles.

***Site***

A parcel of land, occupied or vacant, to be the location of an improvement or development.

***Site Plan***

A drawing developed for the purpose of improving property. Generally utilized for properties of less than one (1) acre in area and including improvements resulting in an altered use of the site (i.e. - A parking lot).

***Street***

A main way within a municipality including, but not limited to, the roadway, curbs, gutters and sidewalks.

***10 States Standards***

The most current edition of recommended standards as established by the Great Lakes - Upper Mississippi River Board for water works and wastewater facilities.

***USGS***

The United States Geological Survey.

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**RULE 2      GENERAL CONDITIONS**

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**Rule 2.1      *Authority***  
The Ohio Revised Code, City Charter and legislation of the Council of the City of Napoleon, Ohio.

**Rule 2.2      *Scope of Control***  
These "City of Napoleon, Ohio Engineering Department Rules and Regulations" apply to all rights-of-way and easements, either dedicated or to be dedicated, all extension of utilities, public or private, receiving City services and the development or any improvement of real estate within the corporation limits of the City of Napoleon, Ohio. Includes streets, sanitary sewers, storm sewers, water mains, pavement, drainage facilities and all appurtenances thereto. *(Amended – August 7, 2006 – Ordinance No. 062-06)*

**Rule 2.3      *Effective Date***  
These "City of Napoleon, Ohio Engineering Department Rules and Regulations" shall be effective immediately upon the adoption of legislation of the Council of the City of Napoleon, Ohio.

**Rule 2.4      *Approvals***  
Any approval given by the Engineer of the City of Napoleon shall be only for the drawings or plans submitted and reviewed and said approval shall be for one (1) calendar year from the date of said approval, thereafter said approval is automatically withdrawn unless the Owner, Developer or their Agent requests for good cause an extension of time and such extension is granted by the City Engineer.

**Rule 2.5      *Violations & Penalties***  
(See Rule No. 6 contained herein) *(Amended – August 7, 2006 – Ordinance No. 062-06)*

**Rule 2.6      *Agreement***  
All persons, successors and assigns obtaining and accepting a permit or approvals for developing, subdividing, platting or improving from the City Engineer or the City Building Department, accept and agree to be bound to these "City of Napoleon, Ohio Engineering Department Rules and Regulations".

**Rule 2.7      *Interpretation***  
The provisions of these "City of Napoleon, Ohio Engineering Department Rules and Regulations" shall be the minimum requirements adopted for the promotion of the health, safety, and welfare of the constituency of the City of Napoleon, Ohio. These "City of Napoleon, Ohio Engineering Department Rules and Regulations" are not intended to repeal, abrogate, annul or in any manner interfere with any laws or rules of any governmental units having jurisdiction that are more stringent. Where these "City of Napoleon, Ohio Engineering Department Rules

and Regulations" impose greater restrictions than those of existing laws and rules, then the provisions of these "City of Napoleon, Ohio Engineering Department Rules and Regulations" shall govern.

**Rule 2.8**

***Correction and/or Modification***

Any typographical, scrivener, or clerical error found in said "City of Napoleon, Ohio Engineering Department Rules and Regulations" may be corrected by the City Engineer upon joint approval of the City Manager, and upon the approval as to form and correctness by the City Law Director, without the necessity of further legislative action; further, nothing in this Ordinance shall be construed as limiting the authority of the City Manager or City Engineer to establish additional rules and regulations not inconsistent with said "City of Napoleon, Ohio Engineering Department Rules and Regulations" manual without necessity of Council approval; however, any other modifications of these "City of Napoleon, Ohio Engineering Department Rules and Regulations" require the approval by legislation of the City Council of the City of Napoleon, Ohio. The City Engineer is expressly granted the authority by the City Council to create standard detailed drawings to supplement this manual without further approval of City Council.

*(Amended – August 7, 2006 – Ordinance No. 062-06)*

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**RULE 3      PROCEDURES**

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***Rule 3.1      General Statement***

The following list of statements on procedure is to be followed in obtaining approval of the City Engineer, the City's respective boards or commissions and/or the Council of Napoleon, Ohio for subdivisions, platting, improving, and/or developing real estate. For the purpose of this section, the requirements set forth within the Subdivision Construction Planning section of this Article shall be followed for all subdivisions, planned unit developments and large-scale commercial and industrial developments. The requirements set forth within the Site Planning section of this Article shall be followed for all other developments, as determined by the City Engineer.

Unless otherwise approved by the Planning Commission and City Council prior to preliminary plan submittal, all streets, water mains, storm sewers, sanitary sewers, and traffic control devices and signage shall be constructed at owner or developer's expense to no less than the minimum standards set forth below and, once accepted by the City pursuant to Chapter 1105 of the City of Napoleon Code of Ordinances, be public infrastructure. Any improvement that is permitted by Council to remain as private shall also be constructed to no less than the minimum standards set forth below such that, in the event the improvements are petitioned to become public, the City may accept the improvements. *(Amended – August 7, 2006 – Ordinance No. 062-06)*

***Rule 3.2      Subdivision Construction Planning*****Rule 3.2.1      ENGINEER AND SURVEYOR**

All preliminary and detailed construction plans for the proposed development shall be prepared under the supervision of and certified by a Professional Engineer registered in the State of Ohio. All preliminary and final plats for the proposed development shall be prepared under the supervision of and certified by a Professional Surveyor registered in the State of Ohio.

**Rule 3.2.2      PRELIMINARY PLAN CONSIDERATION**

The Owner, Developer or their Agent, along with their Engineer and Surveyor, shall consult with the City Engineer and any other authority having jurisdiction in the matter. In the case of a subdivision, construction plans for the development will not be considered by the City Engineer until a preliminary plat of the area in question has been approved in accordance with Chapter 1105 of the Codified Ordinances of the City of Napoleon.

**Rule 3.2.3      CONSTRUCTION STANDARDS**

The most current edition of the City of Napoleon Standard Construction Drawings and Standard Specifications for Construction shall be used in conjunction with all construction planning and are available for a fee of twenty-five dollars (\$25.00)

from the office of the City Engineer. All applicable standard drawings and specifications of ODOT, the Ohio EPA, AASHTO, AWWA and ASTM shall also be referenced, as required.

Rule 3.2.4 MASTER PLANS AND REFERENCES

Along with the City of Napoleon Rules for Water and Sewer Service and the Fire Prevention Code (Chapter 1501 of the Codified Ordinances of the City of Napoleon), both as may be amended from time to time, the following documents and their amendments shall be used in the planning of the development. Copies of all referenced documents contained in these "City of Napoleon, Ohio Engineering Department Rules and Regulations" are on file in the office of the City Engineer for review.

"Master Plan of Napoleon, Ohio" - 1957, Metropolitan Planners, Inc., or such plan as may be later adopted and on file in the office of the City Engineer. If such a later plan is developed and adopted, the later plan shall control.

"Study of Theoretical Vehicular On-Street and Off-Street Parking and Existing Parking Supply - City of Napoleon" - July, 1989, McDonnell Proudfoot & Associates, Inc.

"Water Distribution System Analysis - Napoleon, Ohio" - July, 1969, Jones & Henry Engineers, Limited.

"Water Distribution Study for the City of Napoleon, Ohio" - August, 1995, FBA Environmental, Inc.

"Sewerage Report - Napoleon, Ohio" - March, 1973, Jones and Henry Engineers, Limited.

"City of Napoleon - Facilities Plan for Wastewater Collection and Treatment" - October, 1976, Jones & Henry Engineers, Limited.

"Combined Sewer System Operational Plan for the City of Napoleon, Ohio" - December, 1995, Finkbeiner, Pettis & Strout, Inc.

"Napoleon, Ohio Wastewater System Master Plan" - August, 1996, Finkbeiner, Pettis & Strout, Inc.

"Flood Insurance Study - City of Napoleon, Ohio" - November, 1995, Federal Emergency Management Agency.

"Flood Plain Information - Maumee River - Napoleon, Ohio"; 1970; Army Corps of Engineers U.S. Army - Detroit District.

Rule 3.2.5 PRELIMINARY CONSTRUCTION PLAN REQUIREMENTS

Four (4) copies of the preliminary construction plans shall be submitted by the Owner, Developer or their Agent to the Zoning Administrator who shall submit two (2) copies to the City Engineer and shall be subject to and/or contain the following: (the Preliminary Plat may be used as the base map for the preliminary construction plan).

The name of the Subdivision (or development), the name of the Owner or Developer, and the name and seal of the Professional Engineer and Professional Surveyor registered in the State of Ohio preparing the plans.

The scale of the preliminary plans shall not be smaller than one inch (1") equals one hundred feet (100').

The preliminary plan shall be submitted ~~on twenty-four inch (24") by thirty-six inch (36") sheets~~ electronically in .pdf format.

Location of development by Section, Township, and Range. *(Amended – August 7, 2006 – Ordinance No. 062-06)*

Scale of plan and north arrow.

Boundaries of the proposed development indicated by a heavy line including the bearing and distance for each line and monuments found or set.

Names of adjacent subdivisions and/or owners of record.

A location map of a scale not less than one inch (1") equals two thousand feet (2,000') showing the development in relationship to the corporation limits of the City of Napoleon.

Lot layout and location of existing and proposed utilities and structures.

Show location, widths and names of existing streets, railroad right-of-way, easements, parks, permanent buildings, corporation and township lines, location of wooded areas and other significant topographic and natural features within and adjacent to the proposed development.

Show street names and scaled dimensions for all proposed roads, alleys, easements (with purpose stated) and areas to be reserved for parks, schools, or other public uses.

Angles shall be shown where streets intersect at something other than ninety degrees (90°).

Show the existing contours with the following intervals:

Five feet (5') where the slope is greater than ten percent (10%).

Two feet (2') where the slope is less than ten percent (10%).

One foot (1') in flat areas.

Vertical Datum shall be USGS or NGS. *(Amended – August 7, 2006 – Ordinance No. 062-06)*

One (1) copy of ~~runoff~~ drainage calculations showing pre- and post-development storm water runoff for two (2), five (5) and ten (10) year storm events shall be submitted with the preliminary plans. If storm water retention or detention is required based upon these calculations, preliminary pond sizing shall be included as part of the submittal. All drainage calculations shall be prepared and sealed by a licensed engineer.

If the area is to be developed in phases, the preliminary plan shall be for the entire development. *(Amended – August 7, 2006 – Ordinance No. 062-06)*

After the approval of the preliminary plan by the City Engineer, a reproducible copy of the plan shall be placed on file with the City Engineering Department.

Rule 3.2.6

DETAILED CONSTRUCTION PLANS

~~Four (4)~~ One (1) sets of the detailed construction plans and specifications in .pdf format prepared by a Professional Engineer registered in the State of Ohio shall be submitted to the Zoning Administrator who shall ~~submit two (2) sets~~ distribute them to the City Engineer and other appropriate department heads.

~~The plans shall be on twenty four inch (24") by thirty six inch (36") sheets.~~

A title block shall be placed on each sheet showing the design engineer's name, the date when the drawing was done, the sheet number, the total number of sheets and a revision block.

There shall be a title sheet showing a location map, the name of the development, the name and signature of the owner; the name, signature and seal of the design engineer and a signature block for the approvals of the Mayor, the City Manager, and the City Engineer.

The plans shall include general notes, general summary, test boring locations and logs, intersection details and construction details.

~~Two (2)~~ One (1) electronic copies of the soil boring log and report, including recommendations for design and construction of streets, underground utilities and buildings, shall be submitted with the detailed construction plans.

Each plan and profile sheet shall have a north arrow and scales denoted and a minimum of one (1) site bench mark.

A note on the plans shall indicate that all work will be done in accordance with the latest ODOT Construction and Materials Specifications and with the City of Napoleon Standard Specifications for Construction.

All proposed improvements shall be shown in plan and profile.

All existing utilities and structures shall be shown in the plan and profile including, but not limited to, gas mains, storm and sanitary sewers, water mains and buried cables.

The type of pipe material, joints, strength, etc. shall be shown by ODOT, ASTM or AWWA nomenclature.

Details of special structures shall be included in the plans.

All property lines, dimensions, corporation limits, section lines, boundary lines, easements, and other survey lines shall be shown.

The location, description and elevation of all bench marks shall be shown on the appropriate sheets.

USGS or NGS Datum shall be used. *(Amended – August 7, 2006 – Ordinance No. 062-06)*

Indicate references for all existing section corners, street intersections, property corners, etc. that are relevant to the construction.

All supporting data including survey information, pavement design calculations, soil test results, storm sewer design and construction estimates, including a ~~fifteen~~ ten percent (~~150~~%) contingency, shall be submitted with the detailed plans.

Rule 3.2.7 FEES

The City Engineering Department shall charge a fee to the Owner or Developer to cover the cost of reviewing the Preliminary and Final Construction Plans, the Preliminary and Final Plat and Construction Inspection and Testing.

*Construction Plans*

**Before the Preliminary Construction Plan review is begun**, the Owner, Developer or their Agent must pay a fee of two hundred dollars (\$200.00), plus ten dollars (\$10.00) per acre for every acre, or part thereof, within the proposed development up to a maximum of one thousand dollars (\$1,000.00), by check or money order payable to "City of Napoleon", noting "Engineering Plan Review". This fee is intended to cover the cost of reviewing the Preliminary and Final Construction Plans. *(Amended – August 7, 2006 – Ordinance No. 062-06)*

*City Inspection*

City employed or City contracted inspectors shall be utilized during construction unless private inspectors are expressly authorized by the City Engineer. *(Amended – August 7, 2006 – Ordinance No. 062-06)*

*Inspection Fees Due and Payable*

**Before construction has begun**, the Owner, Developer or their Agent shall: Advance the cost of inspection fees as it relates to City owned or contracted inspector(s) prior to any construction in an amount stated in Rule 3.3.5. *(Amended – August 7, 2006 – Ordinance No. 062-06)*

Rule 3.2.8 WARRANTY

Following final plat approval and the dedication of streets and utilities for public use; however, prior to acceptance thereof by the City, the Owner or Developer shall agree to provide a minimum of a one (1) year warranty from the date of dedication for all work within the development. Such warranty shall be secured by the furnishing of a maintenance bond or irrevocable letter of credit running to the City in the amount equal to one hundred percent (100%) of the value of all streets and utilities to be dedicated for public use. Any work performed under the auspices of said warranty shall cause the time period to extend to one (1) year from the date of such warranty work for those items affected by such warranty work, as well as a performance agreement as approved by the City Law Director. *(Amended – August 7, 2006 – Ordinance No. 062-06)*

**Rule 3.3 Site Planning**

**Rule 3.3.1 ENGINEER OR ARCHITECT AND SURVEYOR**

All preliminary and detailed site plans for the proposed development shall be prepared under the supervision of and certified by a Professional Engineer or Architect registered in the State of Ohio. Boundary surveys and descriptions, when required, shall be prepared under the supervision of and certified by a Professional Surveyor registered in the State of Ohio.

**Rule 3.3.2 PRELIMINARY SITE PLAN CONSIDERATION**

The Owner, Developer or their Agent, along with their Engineer or Architect and Surveyor, shall consult with the City Engineer and any other authority having jurisdiction in the matter.

**Rule 3.3.3 CONSTRUCTION STANDARDS**

The most current edition of the City of Napoleon Standard Construction Drawings and Standard Specifications for Construction shall be used in conjunction with all planning and are available for a fee of twenty-five dollars (\$25.00) from the office of the City Engineer. All applicable standard drawings and specifications of ODOT, the Ohio EPA, AASHTO, AWWA and ASTM shall also be referenced, as required.

**Rule 3.3.4 SITE PLAN REQUIREMENTS**

~~Three (3)~~ One (1) copies of the site plan in electronic .pdf format shall be submitted by the Owner, Developer or their Agent to the Zoning Administrator who shall ~~submit one (1) copy~~ distribute it to the City Engineer and other appropriate department heads and shall be subject to and/or contain the following:

The name of the development, the name of the Owner, or Developer, and the name of the Engineer or Surveyor preparing the plans. *(Amended – August 7, 2006 – Ordinance No. 062-06)*

Scale of plan and north arrow.

Property lines including the bearing and distance for each line and monuments found or set.

Names of adjacent subdivisions and/or owners of record.

Location of existing and proposed utilities and structures.

Show location, widths and names of existing streets, railroad right-of-way, easements, permanent buildings, location of wooded areas and other significant topographic and natural features within and adjacent to the proposed development.

At a minimum, spot elevations shall be given for every one hundred (100) feet of surface to be developed.

Vertical Datum shall be defined on the drawings.

One (1) copy of ~~runoff~~drainage calculations showing pre- and post-development storm water runoff for two (2), five (5) and ten (10) year storm events may be requested to be submitted with the preliminary plans, as determined by the City Engineer. If storm water retention or detention is required based upon these calculations, preliminary pond sizing shall be included as part of the submittal.

If the area is to be developed in phases, the preliminary plan shall be for the entire development. *(Amended – August 7, 2006 – Ordinance No. 062-06)*

#### Rule 3.3.5

**FEES** (NOTE: 3.2.7 and 3.3.5 are not the same for Plan Review Fee)

The City Engineering Department shall charge a fee to the Owner or Developer to cover the cost of reviewing the Site Plan. A fee shall also be charged for Construction Inspection and Testing, if required.

#### *Site Plans*

**Before the Construction Plan review is begun**, the Owner, Developer or their Agent must pay a fee of two hundred dollars (\$200.00), by check or money order payable to "City of Napoleon", noting "Engineering Plan Review". This fee is intended to cover the cost of reviewing the Site Plans. *(Amended – August 7, 2006 – Ordinance No. 062-06)*

#### *Inspection Fee Amounts*

If construction inspection is performed by the City Engineering Department utilizing its own or contracted forces, as determined by the City Engineer, the Owner, Developer or their Agent shall: *(Amended – August 7, 2006 – Ordinance No. 062-06)*

1. Pay an amount equal to two percent (2%) of the estimated cost of construction (including contingencies) of all improvements to be connected to City utilities, as verified by the City Engineer, for the City to provide part-time inspection services; or, *(Amended – August 7, 2006 – Ordinance No. 062-06)*
2. In the event the owner or developer hires or utilizes its own inspector responsible for the supervision of construction during the construction period with the consent of the City Engineer, the inspector shall be a professional engineer registered in the State of Ohio or employed by a qualified engineering consulting firm. The inspector shall be responsible to submit construction reports to the City Engineer on a regular basis as determined by the City Engineer and notify the City Engineering Department a minimum of one (1) working day prior to when testing is to be performed. *(Amended – August 7, 2006 – Ordinance No. 062-06)*

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## **RULE 4 ROADWAY AND DRAINAGE REQUIREMENTS**

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### ***Rule 4.1 Pavement Design***

Due to emergency vehicle access, all private streets shall be constructed to the same standards as public streets. *(Amended – August 7, 2006 – Ordinance No. 062-06)*

#### **Rule 4.1.1 SOIL TESTS**

For every six hundred feet (600') of pavement length, one (1) soil boring shall be made by a qualified testing laboratory. All borings shall be made to a depth of four feet (4') below the proposed top of curb grade or to one foot (1') below the depth of the deepest proposed underground utility, whichever is greater. The soil samples taken at every boring shall be analyzed for:

- a. Visual classification.
- b. AASHTO group index.
- c. Atterburg limits.
- d. Liquid limit, plastic limit, plasticity index. The water table shall also be determined for each boring.

A minimum of one (1) sample per project or on larger projects one (1) sample out of six (6) shall be tested to determine the moisture-density relationship by the Standard Proctor Method (ASTM D-698, AASHTO T-99) and the bearing values by the use of the California Bearing Ratio Test.

The pavement cross section recommended by the testing firm shall prevail, unless the design is less than the minimum design standards set forth below.

#### **Rule 4.1.2 PAVEMENT CROSS SECTION**

Pavement for residential streets and parking lots shall include a minimum of one and one half inches (1½") of Asphalt Concrete Surface (ODOT Item 448 Type 1 Medium, PG 64-22), one and one half inches (1½") of Asphalt Concrete Intermediate (ODOT Item 448 Type 2 Medium, PG 64-22), three inches (3") of Bituminous Aggregate Base (ODOT Item 301 PG 64-22), and eight inches (8") of Compacted Aggregate Base (ODOT Item 304) installed in two (2) lifts. Subgrade stabilization fabric meeting the requirements of ODOT Item 712.09 Type D, soil type 2 (apparent opening size  $\leq 0.3$  mm) shall be required between the subgrade and the aggregate base. Heavier pavement designs shall be required for arterial streets and streets within commercial and industrial areas. *(Amended – August 7, 2006 – Ordinance No. 062-06)*

Rigid concrete pavements may also be utilized if approved by the City Engineer. The minimum residential concrete pavement shall be eight inches (8") of ODOT Item 499, Class "C" concrete over six inches (6") of Compacted Aggregate Base (ODOT Item 304) installed in two (2) lifts. Subgrade stabilization fabric meeting the requirements of ODOT Item 712.09 Type D, Soil type 2 (apparent opening

size  $\leq 0.3$  mm) shall be required between the subgrade and the aggregate base. Heavier pavements shall be required for arterial streets and streets within commercial and industrial areas. (Amended – August 7, 2006 – Ordinance No. 062-06)

Except for those streets designated as arterial streets, the ~~minimum standard~~ width of pavement shall be twenty-five ~~nine~~ feet (29~~5~~)' as measured from the back of curb with ODOT Type 2 concrete curb and gutter. ODOT Type 3 concrete curb and gutter may be utilized in new residential subdivisions. (Amended – August 7, 2006 – Ordinance No. 062-06)

The pavement width may be reduced to twenty-five feet (25') if existing right-of-way width prohibits standard width pavement and approved by the City Engineer.

Arterial streets shall be a minimum of thirty-three feet (33') in width as measured from the back of curb with ODOT Type 2 concrete curb and gutter. The concrete curb and gutter may be eliminated in industrial developments if approved by the City Engineer. Where curbs and gutters are eliminated, shallow grass drainage swales shall be provided along both sides of the roadway. (Amended – August 7, 2006 – Ordinance No. 062-06)

Streets shall be constructed with transverse slopes of one quarter inch ( $\frac{1}{4}$ " ) per foot as measured from the centerline to the edge of asphalt. Parking lots shall be sloped to a point, or series of points, within the pavement so as not to shed storm water off ~~of~~ the site. Such slopes shall not be less than one percent (1%).

Six inch (6") nominal diameter perforated under drains shall be provided along both sides of pavement. Underdrain inverts shall be four feet (4') below the top of curb. The under drains shall be located directly under the back of curb. Where no curbs are to be constructed, the under drains shall be located directly beneath the edge of the proposed pavement and the invert shall be four feet (4') below the edge of pavement. (Amended – August 7, 2006 – Ordinance No. 062-06)

#### Rule 4.1.3 SIDEWALKS AND DRIVE APPROACHES

Sidewalks shall be located along both sides of streets. Sidewalks shall be four inches (4") of ODOT Item 499, Class "C" concrete over ~~four six~~ inches (6~~4~~)" of Compacted Aggregate Base (ODOT Item 304) or Stabilized Crushed Aggregate (ODOT Item 411) except within five feet (5') of drive approaches and within the intersection of rights-of-ways. At drive approaches and intersections, sidewalks shall be six inches (6") of ODOT Class "C" concrete over four inches (4") of Compacted Aggregate Base (ODOT Item 304) or Stabilized Crushed Aggregate (ODOT Item 411). (Amended – August 7, 2006 – Ordinance No. 062-06)

Sidewalks shall be four feet (4') in width when located at least two feet (2') from the back of curb or edge of pavement, as applicable. Where within two feet (2') of the back of curb or edge of pavement, sidewalks shall be five feet (5') in width.

Sidewalks shall have a transverse slope no greater than one quarter inch ( $\frac{1}{4}$ " ) per foot, nor a longitudinal slope greater than one inch (1") per foot.

Handicap ramps with curb drops shall be provided at all intersections. (Amended – August 7, 2006 – Ordinance No. 062-06)

Drive approaches for residential developments shall be a minimum six inches (6") of ODOT Item 499, Class "C" concrete over six inches (6") of Compacted Aggregate Base (ODOT Item 304) or Stabilized Crushed Aggregate (ODOT Item 411). Commercial drive approaches shall be no less than eight inches (8") of ODOT Item 499, Class "C" concrete over six inches (6") of Compacted Aggregate Base (ODOT Item 304) or ~~411~~Stabilized Crushed Aggregate (ODOT Item 411). Minimum drive approach curb cuts shall be fourteen feet (14'). Maximum drive approach curb cuts shall be thirty feet (30') for residential drives. Both minimum and maximum curb cuts include three feet (3') wide drive wings on each side of the drive approach. No residential lot shall have more than one (1) drive unless approved by the City Engineer. (Amended – August 7, 2006 – Ordinance No. 062-06)

Commercial and industrial drive approaches shall have Type 2A concrete curb with radii in place of wings. Commercial drive approach widths shall be submitted for review by the City Engineer.

#### Rule 4.1.4

##### VERTICAL GEOMETRY

A vertical curve shall be established where the algebraic differential of grade is greater than ninety-five hundredths percent (0.95%). Vertical curves shall be no less than fifty feet (50') in length.

Pavement grades shall be not less than fifty hundredths percent (0.50%), nor greater than five percent (5%), except in cases of extreme necessity. (Amended – August 7, 2006 – Ordinance No. 062-06)

Pavement and gutter grades shall be established on intersection details at the following locations: (Amended – August 7, 2006 – Ordinance No. 062-06)

1. At the end of all radii.
2. At the Center of all radii.
3. At the intersection of pavement centerlines.
4. At any point necessary to clarify drainage.

#### Rule 4.1.5

##### HORIZONTAL GEOMETRY

The minimum allowable radius at intersections shall be twenty-five feet (25') as measured to the back of curb, except at intersections of a proposed street with an arterial street or state route where the minimum radius shall be thirty-five feet (35') as measured to the back of curb. If streets are not curbed, the minimum radii shall apply to the edge of payment. Where a street is terminated due to phasing, a temporary cul-de-sac shall be constructed. Temporary cul-de-sacs shall have a minimum radius of thirty-five feet (35') and shall be constructed of twelve inches (12") of Compacted Aggregate Base (ODOT Item 304) installed in two (2) lifts. (Amended – August 7, 2006 – Ordinance No. 062-06)

The arrangement of streets in new subdivisions shall provide for the continuation of the principal existing streets in adjoining areas.

The angle of intersection between any street and an arterial street shall not be less than eighty degrees (80°) as measured from the centerline of each street. All other streets shall not intersect at an angle less than seventy degrees (70°).

Except in extreme cases, dead end streets shall not be permitted. Where a dead-end is permitted, a cul-de-sac shall be provided at the terminus of the street. Cul-de-sacs shall have a minimum radius of fifty feet (50') as measured to the back of curb. *(Amended – August 7, 2006 – Ordinance No. 062-06)*

Horizontal curves shall be provided where the horizontal deflection exceeds two degrees (2°), fifteen (15) minutes. Horizontal curves shall not exceed the following:

1. The maximum degree of curve shall be eleven degrees (11°), thirty (30) minutes for arterial streets; and
2. The maximum degree of curve shall be sixteen degrees (16°), thirty (30) minutes for all other streets.

A Type "A" monument shall be placed at each change in direction of the centerline of right-of-ways, the intersection of centerlines of all street right-of-ways, the centerline of right-of-way at the end of all phased construction, and the center of all permanent cul-de-sacs. *(Amended – August 7, 2006 – Ordinance No. 062-06)*

Rule 4.1.6 STORM SEWER SIZING

An overall drainage area layout plan showing the limits of the area contributing to each drainage pickup point shall be submitted with the detailed construction plans. The drainage design within the development shall be adequate to handle the entire contributing watershed area, along with its existing, proposed or probable future development, and not just the area being submitted for approval.

If the development is to be completed in phases, the overall drainage plan shall be submitted with the first set of detailed construction drawings and the storm outlet for the entire development shall be included for construction within the first phase.

Storm sewers shall be sized using the "Rational Method" ( $Q = CIA$ ). The storm sewers shall be designed to flow just full for a five (5) year storm event. The hydraulic grade for each segment of sewer shall be checked by using the ten (10) year intensity-duration-frequency curve. The initial time of concentration ( $T_c$ ) shall be not less than twenty (20) minutes.

The runoff coefficients (C) to be used shall be based on a weighted coefficient of runoff using the following ranges:

<u>Type of Ground Cover or Development</u>	<u>Runoff Coefficient (C)</u>
Concrete or Asphalt Pavements	0.90
Roof Areas	0.90
Gravel Roadways	0.50
Undeveloped Sites	0.20

Catch basin and curb inlet crossovers shall be twelve inch (12") nominal diameter and placed at no less than one percent (1%) slope.

Catch basins and curb inlets shall be constructed per the City of Napoleon Standard Construction Drawings.

Storm taps shall be provided for residential and commercial lots. Storm taps shall consist of a six inch (6") wye connected to the ~~storm sewer main pavement under drains and a non-perforated~~ and a six inch (6") PVC crossover extended to the right-of-way line for each building lot in a development. The location and the elevation of the storm tap at the right-of-way line shall be shown on the detailed plans. Storm taps shall be utilized as outlets for footer drains and sump pumps only. Downspouts shall outlet onto the ground surface.

Rear yard drainage shall be provided by means of drainage swales and/or catch basins located between lots.

Manholes shall be provided at intervals not to exceed four hundred feet (400'), at all changes in size, direction or grade, at the connection point between two (2) or more mainline sewers and at the upper terminus of the sewer.

A headwall with dump rock fill shall be provided at the outfall of a proposed storm sewer. Dump rock fill shall be ODOT Item 601.07 Type C.

The proposed outlet for the storm drainage system must be approved at the time of the preliminary plan. ~~If a sufficient outlet or receiving stream is not available to carry all of the runoff from the watershed, a~~ method of on-site retention or detention of storm water shall be provided. Calculations for the sizing of a retention/detention pond or basin shall be based upon the following criteria:

Any increase in the volume of storm water runoff caused by site development shall be controlled such that the post-development peak rate of discharge does not exceed that of pre-development for all twenty-four (24) hour storms between the two (2) year frequency and the critical storm, as subsequently defined. In other words, when required, facilities shall be provided such that the volume of water equal to that produced under post-development conditions for the critical storm may be retained or detained on site while discharging at a rate not to exceed that produced by a two (2) year storm under pre-development conditions. Pre-development conditions assumes all developments to be grass lots.

The method by which the Owner or Engineer shall determine the changes in rates of runoff and runoff volumes is presented in Urban Hydrology for Small Watersheds (TR-55) as prepared by the US Department of Agriculture, Soil Conservation Service, Engineering Division and dated June, 1986. TR-55 is supplemented by the Ohio Supplement to Urban Hydrology for Small Watersheds.

To determine the critical storm for which control is required, the Owner or Engineer shall:

Calculate the storm water runoff for a two (2) year frequency, twenty-four (24) hour storm for undeveloped conditions (C = 0.20) and post-development of the site. The maximum allowable runoff from the proposed site shall be pre-development runoff.

Subtract the pre-development runoff from the post-development runoff and divide by the pre-development runoff to determine the percent of increase.

Determine the critical storm frequency for which ~~for which~~ storm water control is required from the following table:

Storm Frequency Requirements		
Equal to or Greater Than (%)	Less Than (%)	Storm Frequency (Years)
--	20	2
20	50	5
50	100	10
100	250	25
250	500	50
500	--	100

Example (critical storm):

Development Area = 6.25 acres

Pre-development "C" = 0.230      Post-development "C" = 0.80 *(Amended – August 7, 2006 – Ordinance No. 062-06)*

2 year, 24 Hour Rainfall = 2.60 inches (Table OH-1, TR-55 Ohio Supplement)

$$Q2A = (0.230) * (2.0) * (6.25) = 3.254.88 \text{ CFS}$$

$$Q2B = (0.80) * (2.60) * (6.25) = 13.00 \text{ CFS}$$

$$(Q2B - Q2A) / (Q2A) = (13.00 - 3.254.88) / (3.254.88) = 3.01.66, \text{ or } 300.66\%$$

Therefore, the critical storm is the ~~fifty twenty-five~~ (250) year frequency, twenty-four (24) hour storm.

Develop a unit hydrograph of the critical storm for the proposed development, including a horizontal line at the rate of allowable discharge (Q2A). Calculate the area beneath the curve and above the horizontal line. This will equate to the volume of retention or detention required.

#### Rule 4.1.7 Traffic Control Devices

The placement of all traffic control devices and signage in all phases of a development or subdivision shall be at the owner's or developer's expense until acceptance and in accordance with standards defined in the Manual Of Uniform Traffic Control Devices as on file with the City, or as otherwise directed by the City Engineer. *(Amended – August 7, 2006 – Ordinance No. 062-06) (Amended – October 16, 2006 – Ordinance No. 100-06)*

**Rule 4.2 Sanitary Sewers**

Rule 4.2.1 GENERAL

All sanitary sewers shall meet all of the requirements of the Ohio EPA and the City of Napoleon Standard Specifications for Construction.

Rule 4.2.2 SEWER EXTENSIONS

If a development can be reasonably served by the extension of an existing sewer, as determined by the City Engineer, the Owner, Developer or their Agent may petition the City for the extension of said sewer. All extensions shall be to the farthest end of the development and shall be at the cost of the developer. (See also City of Napoleon Rules for Water and Sewer Service.)

Rule 4.2.3 LIFT STATIONS

When a subdivision cannot be readily serviced by a sewer extension of an existing sanitary sewer by gravity flow, a lift station shall be required.

Lift stations shall be constructed at the cost of the Owner or Developer and shall be of the wet-well - dry-well type and shall include telemetering equipment.

The drawings and specifications for lift stations shall be submitted for approval with the detailed construction plans.

Rule 4.2.4 SANITARY SEWER SERVICES

Sanitary sewers shall be a minimum of eight inches (8") in diameter and shall be constructed with six inch (6") diameter service connections to ~~within five feet (5') of the structure foundation for~~ each proposed lot or unit within a development. and shall be extended from the sanitary sewer main to the right-of-way line. A six inch (6") diameter cleanout shall be required at the right-of-way line. (Amended – August 7, 2006 – Ordinance No. 062-06)

Service connections shall be constructed at no less than one percent (1%) slope, not greater than three percent (3%) slope and shall outlet directly into the sewer main, not into manholes unless authorized by the City Engineer. (Amended – August 7, 2006 – Ordinance No. 062-06)

Manholes shall be provided at intervals not to exceed four hundred feet (400') , at all changes in size, direction or grade, at the connection point between two (2) or more mainline sewers and at the upper terminus of the sewer.

Where oversizing of the proposed sanitary sewers is required by the City, the City shall pay the incremental cost of oversizing, as determined by the City Engineer, prior to construction. The oversizing of sanitary sewers to reduce the slope of the sewer and compensate for grade concerns is prohibited.

Prior to commencing with construction, the City Engineer shall receive one (1) copy of the Ohio EPA Permit to Install for the proposed sanitary sewers and an approved set of plans. Any construction commencing prior to the City Engineer receiving such documentation shall be subject to penalties as subsequently defined.

**Rule 4.3 Water Mains**

Rule 4.3.1 GENERAL

All water mains shall meet all of the requirements of the Ohio EPA and the City of Napoleon Standard Specifications for Construction.

Rule 4.3.2 WATER MAIN EXTENSIONS

If a development can be reasonably served by the extension of an existing water main, as determined by the City Engineer, the Owner, Developer or their Agent may petition the City for the extension of said water main. All extensions shall be to the farthest end of the development and shall be at the cost of the developer. (See also City of Napoleon Rules for Water and Sewer Service.)

Rule 4.3.3 WATER MAINS

Water mains shall be a minimum of eight inches (8") in diameter. Six inch (6") diameter water mains shall only be allowed if justified by the City of Napoleon's water model. All costs for modeling the proposed waterline shall be paid by the developer regardless of the findings.

Service connections shall be installed by the contractor responsible for the installation of the respective water mains.

Service connections shall be provided for each building lot within a development and shall be extended from the water main to the right-of-way line with a curb valve and box installed at the right-of-way line.

Service connections shall be sized based upon the water fixture unit demand as determined by current building codes. However, no service connections shall be less than one inch (1") diameter, Type K copper.

Water mains shall be "looped", where possible.

Where oversizing of the proposed water mains is required by the City, the City shall pay the incremental cost of oversizing, as determined by the City Engineer, prior to construction.

Valves shall be located as follows:

1. The lesser of not more than every five hundred feet (500') or at all intersections for commercial and industrial developments;
2. The lesser of not more than every eight hundred feet (800') or at all intersections for residential developments;
3. At all connections to existing water mains; and
4. At the end of all dead end water mains. Plugs shall also be provided at dead ends.

Fire hydrants shall be located as follows:

1. Every three hundred feet (300') for commercial and industrial developments;
2. Every five hundred feet (500') for residential developments; and
3. At the end of all dead end water mains.

Prior to commencing with construction, the City Engineer shall receive one (1) copy of the Ohio EPA Permit to Install for the proposed water mains and an approved set of plans. Any construction commencing prior to the City Engineer receiving such documentation shall be subject to penalties as subsequently defined.

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## **RULE 5 CONSTRUCTION AND POST-CONSTRUCTION REQUIREMENTS**

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### ***Rule 5.1 Permits***

The Owner or Developer shall obtain all applicable permits, including but not limited to, the Ohio EPA Permit to Install for water mains and sanitary sewers and building permits from the proper authorities, which may be necessary to proceed with the construction of the improvements.

Prior to commencing with construction, the City Engineer shall receive one (1) copy of the Ohio EPA Permit to Install for the proposed water mains and sanitary sewers along with an approved set of plans [in .pdf format](#). Any construction commencing prior to the City Engineer receiving such documentation shall be subject to penalties as subsequently defined.

### ***Rule 5.2 Restrictions on Plan Approval***

The Owner or Developer shall, unless an extension of time is requested in writing and granted by the City Engineer, commence with the construction of the proposed improvement within one (1) year of the date of approval of the detailed construction plans and specifications.

Any proposed changes or alternates to the plan after approval, but prior to construction, shall be subject to the complete review process, including resubmittal to all applicable agencies.

Any proposed changes to the approved plan once construction has commenced shall be brought to the attention of and reviewed by the City Engineer. Any such modifications to the approved plan without the proper notification to the City Engineer shall be subject to penalties as subsequently defined.

### ***Rule 5.3 Construction***

The Owner or Developer shall pay all applicable inspection fees, as defined previously, **prior to commencing with construction**.

The Owner or Developer shall hire a qualified testing laboratory to provide testing services throughout construction including, but not limited to, compaction and concrete testing.

If the Owner or Developer opts to provide its own inspection services, the responsible inspector shall be a Professional Engineer registered in the State of Ohio or an agent thereof. The inspector shall provide the City with daily construction reports and shall inform the City a minimum of one (1) working day in advance of any testing procedure. The City shall maintain the right to reject any and all work performed.

**Rule 5.4**

***As-Built Plans***

The Owner or Developer shall, within sixty (60) days after the completion of construction, submit one (1) set of ~~mylar, permanent, reproducible tracings~~ electronic plans in .pdf format marked "AS-BUILT" to the City Engineer.

The Owner's or Developer's Engineer shall provide a notarized affidavit certifying that the completion of the work is in accordance with the approved plans. If any changes to the approved plans occurred, a list of these deviations shall be included with the certification. A sample affidavit is available from the office of the City Engineer.

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**RULE 6 VIOLATIONS AND PENALTIES**

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**RULE 6 VIOLATIONS AND PENALTIES**

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***Rule 6.1 Violations and Penalties***

Criminal violations of the "City of Napoleon, Ohio Engineering Department Rules and Regulations" and associated penalties therefore, shall be pursuant to City Ordinance 30-98, as may be amended from time to time, or codified.

***Rule 6.2 Revocation of Prior Approvals***

In addition to the criminal penalties specified in Rule 6.1 above, the City Manager may, for a violation of the "City of Napoleon, Ohio Engineering Department Rules and Regulations" or City Ordinance No. 30-98 as may be amended from time to time, or codified, (upon such finding by the City Manager after an informal hearing with the Owner, Developer or Agent thereof and the City Engineer, unless such hearing is waived), order the revocation of all prior approvals of the City and the City Engineer relative to the property being developed. The failure to appear at a scheduled hearing after notice constitutes a waiver thereof. *(Amended – August 7, 2006 – Ordinance No. 062-06)*

***Rule 6.3 EPA Notification***

Any work performed for the installation of sanitary sewers and/or water mains commenced without first obtaining the necessary permits or approvals of the Ohio EPA shall be reported directly to the Ohio EPA Northwest District Office.

***Rule 6.4 Administrative Penalties for Failure to Meet Specifications***

If the Owner, Developer or Agent thereof, opts to provide their own inspection services and does not comply with the requirements of the "City of Napoleon, Ohio Engineering Department Rules and Regulations", the Owner, Developer or Agent shall be subject to Administrative Fines in the amount of fifty dollars (\$50.00) per day for each day that a violation exists, to be levied by the City Manager (upon a finding that the violation exists after an informal hearing with the Owner, Developer or Agent thereof and the City Engineer, unless such hearing is waived). ~~The~~ Failure to appear at a scheduled hearing after notice constitutes a waiver thereof. All improvements completed during times when inspection does not meet the requirements of the "City of Napoleon, Ohio Engineering Department Rules and Regulations" will not be accepted by the City.

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**RULE 7 ADMINISTRATIVE APPEALS**

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***Rule 7.1 Appeals in General***

Any decision of the City Manager in regard to the denial, suspension or revocation of a permit, as required by the "City of Napoleon, Ohio Engineering Department Rules and Regulations", or any finding or imposition of an administrative fine, as authorized by the "City of Napoleon, Ohio Engineering Department Rules and Regulations", or forfeiture of prior approvals of the City Engineer may be appealed to the Safety and Human Resources Committee of Council, so long as the appeal is commenced in a timely manner.

A filing fee of thirty-five dollars (\$35.00), as may be amended from time to time, will be charged for all appeals to the Safety and Human Resources Committee of Council. However, this fee may be waived by the Finance Director in cases of indigence. Further, said fee will be returned if the appealing party prevails.

***Rule 7.2 Appeals from Decision of City Manager***

After a hearing by the City Manager, a decision or order shall be rendered and delivered by either personal service or mailed to the person who filed the appeal at the last known address by regular mail.

An appeal from a decision of the City Manager, after hearing, may be taken to the Safety and Human Resources Committee of Council, so long as a notice of appeal is filed in writing with the Finance Director within thirty (30) business days after mailing of the decision or order of the City Manager or thirty (30) business days after rendering the decision or order by personal service to the person who filed the appeal.

Appeals will not stay the decision or order of the City Manager as a result of his/her finding.

Appeals to the Safety and Human Resources Committee of Council will be held in a timely manner and will be informal in nature such that the rules of evidence shall not apply.

Such orders of the Safety and Human Resources Committee of Council will be considered final.

***Rule 7.3 Scope of Appeals***

The scope of all appeals to the Safety and Human Resources Committee of Council shall be limited to the question of whether the City Manager acted unreasonably, arbitrary or capricious in his/her decision. The Committee may, upon a finding that the City Manager acted unreasonably, arbitrary or capricious in his/her decision, merely remand the subject of appeal to the City Manager for further consideration.

## Memorandum

**To:** Board of Zoning Appeals, Council, Mayor, City Manager, City Law Director, City Finance Director, Department Supervisors, Media

**From:** Gregory J. Heath, Finance Director/Clerk of Council

**Date:** 1/6/2016

**Re:** Board of Zoning Appeals Meeting Cancellation

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The Board of Zoning Appeals meeting regularly scheduled for Tuesday, January 12, 2016 at 4:30pm has been CANCELED due to lack of agenda items.

## Memorandum

**To:** Planning Commission, Council, Mayor, City Manager, City Law Director, City Finance Director, Department Supervisors, Media

**From:** Gregory J. Heath, Finance Director/Clerk of Council

**Date:** 1/6/2016

**Re:** Planning Commission Meeting Cancellation

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The Planning Commission meeting regularly scheduled for Tuesday, January 12, 2016 at 5:00pm has been CANCELED due to lack of agenda items.

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### EVENTLINE

**January & February 2016**

[Web pdf version](#)

## FEATURE

### TMACOG General Assembly - Register Now



The annual General Assembly of TMACOG members is Monday, January 25. At this year's assembly, members will vote on a change in TMACOG bylaws to formally recognize the creation and adoption of a new Water Quality Council. Caucus sessions are another reason why members should make sure to attend. These sessions establish the cooperation that makes regional development possible and lead to future partnerships...[read more](#)

### TMACOG President Announces Retirement



Tony Reams, who has been president of TMACOG since November of 2000, has announced that he will retire effective June 30, 2016, at the end of the fiscal year.

The TMACOG Board of Trustees is beginning the process to select the next president to lead the staff. A search committee is in development. The plan for succession calls for a decision in May with a start date in June.

TMACOG was formed in 1968 and has had four permanent presidents or top officials.

## Upcoming Events

### Clean Ohio Funds - Informational Meeting

Thursday, January 13, 2 p.m.  
TMACOG Boardroom  
Contact: [Kurt Erichsen](#) ext. 126

### TMACOG Certification Review

Wednesday, January 20, noon  
Grand Lobby of the Dr. Martin Luther King Jr. Plaza  
Contact: [David Gedeon](#) ext. 125

### TMACOG General Assembly

Monday, January 25, Holiday inn French Quarter, Perrysburg  
Contact: [Jennifer Allen](#) ext. 107

### Construction Site Stormwater Pollution Prevention Plan How-to's

Wednesday, January 27, 9 a.m - noon.  
Grand Lobby of the Dr. Martin Luther King, Jr. Plaza.  
Contact: [Kari Gerwin](#) ext. 103

### The Toledo Region Transportation Summit

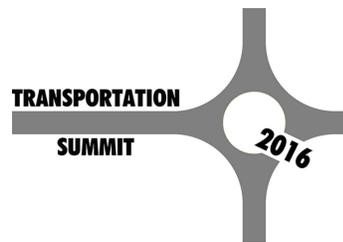
Friday, March 18, 8 a.m. - 2 p.m.  
Parkway Place, 2592 Parkway Plaza, Maumee  
Contact:

# TRANSPORTATION

## Local Implications of New Federal FAST Act

A new five-year federal transportation bill has been approved after years of extensions and delays. The Fixing America's Surface Transportation (FAST) Act replaces Moving Ahead for Progress in the 21st Century (MAP-21) Act...[read more](#)

## Toledo Region Transportation Summit



Government officials, public and private sector transportation professionals, engineers, planners, and all transportation stakeholders are invited to attend the Toledo Region Transportation Summit Friday, March 18, 8 a.m. – 2 p.m. at Parkway Place in Maumee.

The program includes two panel sessions followed by a networking luncheon and keynote address.

Registration is available now at [www.tmacog.org](http://www.tmacog.org). For more information contact [Christine Connell](#), ext. 119.

## Intelligent Transportation System Update



TMACOG has announced that ConSysTec has been awarded the contract to build the architecture of the next generation of the region's Intelligent Transportation System (ITS).

The current model is the Toledo Metropolitan Area Regional Intelligent Transportation Systems Architecture. It is a roadmap for integration of transportation systems (including message boards, emergency communication, and traffic signaling systems) in Lucas and Wood counties in Ohio and the three southern townships of Monroe County, Michigan. The architecture models how information and resources can be shared and integrated to provide a safer and more efficient transportation system.

The report is an important tool used by operating agencies and planning agencies in local jurisdictions. It shows how different area systems are related and provides a blueprint for cost effectively

expanding and improving the regional integrated transportation network.

The contractor will create a planning document that looks out to 2030. The software package will be updated and existing and planned projects identified by ODOT and local jurisdictions will be added. Work will begin immediately and public meetings will be scheduled in late winter or spring of 2016.

For more information on the ITS system, contact TMACOG planner/analyst [Lisa Householder](#), 419.241.9155 ext. 124.

## **Public Meeting Addresses TMACOG Planning Process**



Every four years, the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) hold a public meeting as part of the process to re-certify TMACOG's compliance with federal regulations related to transportation planning. The public is invited to attend the 2016 meeting on Wednesday, January 20, noon – 1 p.m. in the Grand Lobby of the Dr. Martin Luther King, Jr. Plaza....[read more](#)

## **ENVIRONMENT**

### **Learn How to Apply for Clean Ohio Funds**



**CleanOhioFund**

TMACOG urges any applicant who is planning to apply for Clean Ohio Fund grants to attend an informational meeting Wednesday, January 13 at 2 p.m. in the TMACOG Boardroom, 300 Dr. Martin Luther King Jr. Drive in Toledo.

The Natural Resources Assistance Council (NRAC), the committee that evaluates and makes recommendations on applications, is hosting the meeting to discuss the program, its goals, and to answer questions. Clean Ohio grants fund preservation of open space and are available to nonprofit organizations in Lucas County.

In the current round of funding, the Clean Ohio Fund has allocated \$1,216,484 to Lucas County for the preservation of open spaces. Applications and more information can be obtained by contacting

NRAC District 12 Liaison [Kurt Erichsen](#) at TMACOG: 419.241.9155 ext. 126. Application forms and program information can also be found on the TMACOG webpages [here](#) or on the Clean Ohio [website](#).

All applications must be submitted to TMACOG by 5 p.m. on March 15, 2016. Applicants will be notified of NRAC's recommendation by April 30, 2016.

## **Changes to 208 Plan Procedures**

The TMACOG Wastewater Committee is creating a streamlined procedure for evaluating applications for installation or modification of any wastewater collection, storage, or treatment system. The new procedure brings permit evaluation closer to home and puts local agencies in control...[read more](#)

## **Sewerage Planning Meeting for Fulton & Henry Counties**

### **Fulton-Henry County Sewerage Meeting**

Friday, January 15, 10 a.m. – noon  
Oberhaus Park Shelter House, Napoleon

TMACOG members in Fulton and Henry counties have expressed interest in TMACOG's sewerage and wastewater planning services. As TMACOG reorganizes its Water Quality committees, there is a potential for expanding services to those counties. Lucas, Wood, Ottawa, Sandusky, and Monroe counties are already covered by the Areawide Water Quality Management Plan, more commonly called the 208 plan.

At the January 15 meeting Kurt Erichsen, vice president of Water Quality at TMACOG, will discuss what regional sewer planning entails. Fulton and Henry counties might benefit from a 208-style plan or communities might be better served by planning on a community-by-community basis.

Neither Henry nor Fulton County themselves are members of TMACOG, but several of their villages are. TMACOG anticipates consulting with the county sanitary engineer or lead official, the health department, and the plan commission about any services.

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