- *To:* Mayor & Members of Council
- From: Monica Irelan, City Manager
- Subject: General Information
- **Date:** February 5, 2016

CALENDAR

AGENDAS FOR MONDAY, FEBRUARY 8TH

1) Electric Committee & Board of Public Affairs @6:30 pm

- a) Approval of Minutes the minutes from the January 11, 2016 meeting are enclosed.
- b) *Review/Approval of the Power Supply Cost Adjustment Factor* the report for February, 2016 is attached.
- c) Electric Department Report for January 2016 is attached
- d) *AMP Project Update* enclosed are two (2) Memorandums; the first is an update on AMP projects and the second is information jargon and definitions for the electric industry.

2) Board of Public Affairs @6:30 pm

3) Municipal Properties/ED Committee

- a) Approval of Minutes the January 11, 2016 meeting minutes are enclosed.
- Enclosed is a Memorandum for each agenda item b –e.
 - b) Review of Current Engineering Rules (Tabled)
 - c) Review of Historical Data Regarding Previous Assessment Percentages (Tabled)
 - d) Discussion regarding St. Paul Methodist Parking Lot Lease
 - e) Dodd Street Project Review
- 4) Water/Sewer Committee Meeting Canceled
- 5) Board of Zoning Appeals Meeting Canceled
- 6) Planning Commission Meeting Canceled

SATURDAY, FEBRUARY 13 @ 9:00 AM

a. MEETING - City Council in Joint Session with Henry County Commissioners

INFORMATIONAL ITEMS

- 1. AMP Update/ January 29, 2016
- 2. OML Legislative Bulletin/February 5, 2016
- 3. TMACOG Big Picture/February 2016
- 4. Napoleon Fire & Rescue Association Pancake & Sausage Breakfast

Monthly Calendar

February 1 - 29, 2016

CouncilCalendar



🕗 Calendar

	Monday	Tuesday	Wedneedey	Thursday	Friday	Saturday
Sunday 31	Monday 1	Tuesday 2	Wednesday 3	Thursday 4	Friday 5	Saturday 6
31	7:00 PM City COUNCIL	2	3	-		0
	Meeting					
	6					
7	8	9	10	11	12	13
1	6:30 PM ELECTRIC	5	10		12	IJ 0:00 AM City Council & Henry
	Committee					County Commissioners Joint
	Board of Public Affairs (BOPA)					Meeting (@Commissioners'
	Mtg.					9:00 AM City Council & Henry County Commissioners Joint Meeting (@Commissioners' Office)
	7:00 PM Municipal Properties/ED Committee					
	Properties/ED Committee Meeting					
	Meeting					
14	15	16	17	18	19	20
		10	17	10	19	20
7:00 AM - 1:00 PM Fire & Rescue Assoc. Pancake &	6:00 PM Tree Commission Meeting					
Sausage Breakfast	6:15 PM Parks & Recreation					
5	Committee Meeting					
	7:00 PM City COUNCIL					
	Meeting					
21	22	23	24	25	26	27
	6:30 PM FINANCE &					
	BUDGET Committee Meeting					
	7:30 PM SAFETY & HUMAN					
	RESOURCES Committee Meeting					
28	29	1	2	3	4	5
	5th Monday/No Scheduled Mee					
L			1			

City of Napoleon, Ohio Electric Committee

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

Meeting Agenda Monday, February 8, 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 February: PSCAF three (3) month averaged factor: -\$0.00747
 JV2: \$0.032455
 JV5: \$0.032455
- III. Electric Department Report
- IV. AMP Project Update
- V. Any other matters currently assigned to the Committee
- VI. Adjournment

Gregory J. Heath, Finance Director/Clerk of Council

	City of Napoleon, Ohio Electric Committee
	Meeting Minutes
М	onday, January 11, 2016 at 6:30pm
PRESENT Members BOPA City Staff	Travis Sheaffer – Chair, Patrick McColley, Dan Baer Mike DeWit – Chair, Dr. David Cordes Monica S. Irelan, City Manager Gregory J. Heath, Finance Director/Clerk of Council Lisa L. Nagel, Law Director Jason P. Maassel, Mayor Bobby Stites, Assistant MIS Director
Recorder Others ABSENT	Tammy Fein Jon Tassler (arrived at 6:40pm)
Electric Committee Call To Order	Chairman Sheaffer called the Electric Committee meeting to order at 6:32pm.
Approval Of Minutes	The December 14, 2015 meeting minutes stand approved as presented with no objections or corrections.
Review Of Power Supply Cost Adjustment Factor	The electric Power Supply Cost Adjustment Factor for January was presented for review.
	Heath reminded the Board and Committee that one of the hydros has now come online. Irelan reported that the City is reviewing the potential impact of electric cars, adding that the City is situated well and is continually reviewing the power portfolio.
BOPA Motion To Recommend Approval Of Power Supply Cost Adjustment Factor Passed	Motion: Cordes Second: DeWit To recommend approval of Power Supply Cost Adjustment Factor for January 2016 as follows: PSCAF three (3) month averaged factor: -\$0.00440 JV2: \$0.035222 JV5: \$0.035222 Roll call vote on above motion:
Yea- 2 Nay- 0	Yea- Cordes, DeWit Nay-
	Heath explained the reason for the Power Supply Cost Adjustment Factor along with the power portfolio of the City to the Committee.
Motion To Accept BOPA Recommendation For Approval Of Power Supply Cost Adjustment Factor	Motion:BaerSecond:McColleyTo accept the BOPA recommendation for approval of Power Supply CostAdjustment Factor for January 2016 as follows:PSCAF three (3) month averaged factor:JV2:\$0.035222JV5:\$0.035222
Passed	Roll call vote on above motion:

Yea- 3 Nay- 0	Yea- Sheaffer, McColley, Baer Nay-
Electric Department Report	The Electric Department Report was distributed for review.
Any Other Matters To Come Before The Board	Irelan reviewed the American Municipal Power, Inc. (AMP) Organization and Generation Projects Overview with the Board and Committee.
BOPA Motion To Adjourn	Motion: Cordes Second: DeWit To adjourn the meeting at 6:50pm
Passed Yea- 2 Nay- 0	Roll call vote on above motion: Yea- Cordes, DeWit Nay-
Any Other Matters Assigned To The Committee	None
Electric Motion To Adjourn	Motion:McColleySecond:BaerTo adjourn the Electric Committee meeting at 6:50pm
Passed Yea- 3 Nay- 0	Roll call vote on above motion: Yea- Sheaffer, McColley, Baer Nay-
Date	Travis Sheaffer, Chair

Travis Sheaffer, Chair

FEBRUA	RY 2016				City	y of	f Napoleon,	Oh	io						
		DETERN	IIN	ATION OF MO	ONTHLY - PO	WE	RSUPPLY	<u>CO</u>	ST ADJUS	TN	MENT FAC	т	OR (PSCAF)	
AMP		City		Power					Rolling		Less: Fixed		PSCA		PSCAF
Billed	City	Net		Supply Costs	Rolling 3-N				3 Month	1	Base Power		Dollar		3 MONTH
Usage	Billing	kWh		(*Net of Known)	Current + P	Prior			Average		Supply		Difference		AVERAGED
Month	Month	Delivered		(Credit's)	kWh		Cost		Cost		Cost		+ or (-)		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		\$	1,106,152.18	41,137,815		2,989,656.83		0.07267		(0.07194)		0.00073		0.00079
Jan '14	March '14		\$	1,172,398.60	43,288,581		3,206,860.62		0.07408		(0.07194)		0.00214		0.00230
Feb '14	April '14		\$	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		\$	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	т	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)
Nov '15	Jan'16	13,060,476		939,293.49	40,816,226	\$	2,769,420.60	\$	0.06785	\$	(0.07194)		(0.00409)	\$	(0.00440)
Dec '15	Feb'16	13,634,579	\$*	863,769.64	40,205,537	\$	2,612,940.89	\$	0.06499	\$	(0.07194)	\$	(0.00695)	\$	(0.00747)

2016 - FEBRUARY BILLING WITH JANUARY 20								
PREVIOUS MONTH'S POWER BILLS - PU	JRCHASED PO	OWER KWH A	ND COST ALL	OCATIONS B	Y DEMAND & I	ENERGY:		
DATA PERIOD	MONTH / YR	DAYS IN MONTH	MUNICIPAL PEAP	(
AMP-Ohio Bill Month	DECEMBER, 2015	31	23,621					
City-System Data Month	JANUARY, 2016	31						
City-Monthly Billing Cycle	FEBRUARY, 2016	29						
(FREEMONT	JV-6	PRAIRIE STATE		JV-5	JV-2	AMP SOLAR
PURCHASED POWER-RESOURCES -> (AMP CT	ENERGY	WIND	CHED. @ PJMC	NYPA	HYDRO	PEAKING	PHASE 1
Ĺ	SCHED. @ ATSI	SCHEDULED	SCHED. @ ATSI	REPLMT@ PJMC	SCHED. @ NYIS	7x24 @ ATSI	SCHED. @ ATSI	SCHED. @ ATS
Delivered kWh (On Peak) ->	0	4,198,440	50,007	3,554,437	693,560	2,297,472	236	48,36
Delivered kWh (Off Peak) ->								
Delivered kWh (Replacement/Losses/Offset) ->						33,547		
Delivered kWh/Sale (Credits) ->								
Net Total Delivered kWh as Billed ->	0	, , -	50,007	3,554,437		2,331,019		-)
Percent % of Total Power Purchased->	0.0000%	30.7926%	0.3668%	26.0693%	5.0868%	17.0964%	0.0017%	0.3547%
COST OF PURCHASED POWER:								
DEMAND CHARGES (+Debits)								
Demand Charges	\$17,359.62		\$1,576.48			\$24,377.29		
Debt Services (Principal & Interest)		\$44,196.22		\$92,861.58		\$44,643.82		
DEMAND CHARGES (-Credits)								
Transmission Charges (Demand-Credits)	-\$28,307.02		-\$387.17			-\$10,092.83	-\$285.35	
Capacity Credit	-\$97,918.61	-\$96,643.27	-\$1,131.13	-\$15,499.31	-\$6,810.70	-\$33,531.82	-\$1,703.65	
Sub Total Damand Charges	¢100.000 01	¢15 020 00				\$25,396.46	¢1 501 05	
Sub-Total Demand Charges	-\$108,866.01	-\$15,930.29	\$58.18	\$117,282.61	\$196.26	\$23,390.40	-\$1,581.05	\$0.00
ENERGY CHARGES (+Debits):								
Energy Charges - (On Peak)	\$0.00	\$107,998.37		\$41,678.47	\$9,109.74	\$53,589.61	\$5.41	\$4,110.6
Energy Charges - (Replacement/Off Peak)	φ0.00	φτ07,330.37		φ+1,070.+7	ψ3,103.74	ψ00,009.01	ψ0.41	φ+,110.0
Net Congestion, Losses, FTR		\$5,858.89		\$5,471.52	\$2,668.16			
Transmission Charges (Energy-Debits)		φ3,030.09		\$20,448.19				
ESPP Charges				\$20,440.19				
Bill Adjustments (General & Rate Levelization)		¢075.40					¢0.00	
Bill Adjustments (General & Rate Levelization)		\$375.40					\$8.63	
ENERGY CHARGES (-Credits or Adjustments):								
Energy Charges - On Peak (Sale or Rate Stabilization)								
Net Congestion, Losses, FTR)							
Bill Adjustments (General & Rate Levelization)				¢40.040.14	¢1 700 40			
Bill Adjustments (General & Rate Levelization)				\$42,849.14	\$1,703.49			
Sub-Total Energy Charges	\$0.00	\$114,232.66	\$0.00	\$110,447.32	\$13,481.39	\$53,589.61	\$14.04	\$4,110.62
TRANSMISSION & SERVICE CHARGES, MISC.:								
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)								
Sub Tatal Comuing Free & Other Charmen								
Sub-Total Service Fees & Other Charges	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.0
TOTAL - ALL COSTS OF PURCHASED POWER	-\$108,866.01	\$98,302.37	\$58.18	\$227,729.93	\$13,677.65	\$78,986.07	-\$1,567.01	\$4,110.62
		1	1	1	1		1	1
Purchased Power Resources - Cost per kWH->	\$0.000000	\$0.023414	\$0.001163	\$0.064069	\$0.019721	\$0.033885	-\$6.639873	\$0.08500

	<u> </u>						
BILLING SUMMARY AND CON							
2016 - FEBRUARY BILLING WITH JANUARY 20							
PREVIOUS MONTH'S POWER BILLS - P	<u>'l</u>						
DATA PERIOD							
AMP-Ohio Bill Month							
City-System Data Month							
City-Monthly Billing Cycle							
(MORGAN STNLY	EFFNCY.SMART	NORTHERN	TRANSMISSION	SERVICE FEES	MISCELLANEOUS	TOTAL -
PURCHASED POWER-RESOURCES -> (REPLMNT.2015-20	POWER PLANT	POWER	CHARGES	DISPATCH, A & E	CHARGES &	ALL
	7x24 @ AD	2014 - 2017	POOL	Other Charges	Other Charges	LEVELIZATION	RESOURCES
Delivered kWh (On Peak) ->	> 2,827,200	0	285,729				13,955,441
Delivered kWh (Off Peak) ->			263,758				263,758
Delivered kWh (Replacement/Losses/Offset) ->	>						33,547
Delivered kWh/Sale (Credits) ->			-618,167				-618,167
Net Total Delivered kWh as Billed ->	2,827,200	0	-68,680	0	0	0	13,634,579
Percent % of Total Power Purchased->	20.7355%	0.0000%	-0.5037%	0.0000%	0.0000%	0.0000%	100.0001%
						Verification Total - >	100.0000%
COST OF PURCHASED POWER:							
DEMAND CHARGES (+Debits)							
Demand Charges				\$98,552.22			\$225,717.62
Debt Services (Principal & Interest)							\$181,701.62
DEMAND CHARGES (-Credits)							
Transmission Charges (Demand-Credits)							-\$39,072.37
Capacity Credit							-\$253,238.49
Sub-Total Demand Charges	\$0.00	\$0.00	\$0.00	\$98,552.22	\$0.00	\$0.00	\$115,108.38
ENERGY CHARGES (+Debits):							
Energy Charges - (On Peak)	\$177,972.24		\$11,449.07	\$5,667.37			\$411,580.90
Energy Charges - (Replacement/Off Peak)			\$6,384.28				\$6,384.28
Net Congestion, Losses, FTR	-\$696.39						\$13,302.18
Transmission Charges (Energy-Debits)							\$20,448.19
ESPP Charges		\$17,953.72					\$17,953.72
Bill Adjustments (General & Rate Levelization)						-\$78,920.11	-\$78,536.08
ENERGY CHARGES (-Credits or Adjustments)						#0.00	A15 000 0
Energy Charges - On Peak (Sale or Rate Stabilization	1)		-\$15,329.86			\$0.00	-\$15,329.80
Net Congestion, Losses, FTR							\$0.00
Bill Adjustments (General & Rate Levelization)							\$44,552.63
Sub-Total Energy Charges	\$177,275.85	\$17,953.72	\$2,503.49	\$5.667.37	\$0.00	-\$78,920.11	\$420,355.96
	<i>,</i>	<i> </i>	÷2,000.40	<i><i><i>q</i>0,007.07</i></i>	<i>\$0.00</i>	<i><i>q</i>. 3,020.77</i>	÷0,000.00
TRANSMISSION & SERVICE CHARGES, MISC.	:						
RPM Charges Capacity - (+Debit)	-			\$317,451.13			\$317,451.13
RPM Charges Capacity - (-Credit)				<i></i>			\$0.00
Service Fees AMP-Dispatch Center - (+Debit/-Credit)					\$0.00		\$0.00
Service Fees AMP-Part A - (+Debit/-Credit)	+				\$2,921.91		\$2,921.9 ⁻
					\$7,932.26		\$7,932.26
Service Fees AMP-Part B - (+Debit/-Credit)	1				ψ1,002.20		\$0.00
Service Fees AMP-Part B - (+Debit/-Credit) Other Charges & Bill Adjustments - (+Debit/-Credit)					1	1	φ0.00
Service Fees AMP-Part B - (+Debit/-Credit) Other Charges & Bill Adjustments - (+Debit/-Credit)							
	\$0.00	\$0.00	\$0.00	\$317,451.13	\$10,854.17	\$0.00	\$328,305.30
Other Charges & Bill Adjustments - (+Debit/-Credit)		\$0.00 \$0.72					
Other Charges & Bill Adjustments - (+Debit/-Credit) Sub-Total Service Fees & Other Charges			\$0.00 \$2,503.49	\$317,451.13 \$421,670.72	\$10,854.17	-\$78,920.11	\$863,769.64
Other Charges & Bill Adjustments - (+Debit/-Credit) Sub-Total Service Fees & Other Charges TOTAL - ALL COSTS OF PURCHASED POWEF	\$177,275.85	\$17,953.72	\$2,503.49	\$421,670.72	\$10,854.17		\$863,769.64 \$863,769.64
Other Charges & Bill Adjustments - (+Debit/-Credit) Sub-Total Service Fees & Other Charges	**************************************	\$17,953.72 \$0.000000	\$2,503.49 -\$0.036452	\$421,670.72 \$0.000000	\$10,854.17		\$328,305.30 \$863,769.64 \$863,769.64 \$0.063351 \$0.032455



AMERICAN MUNICIPAL POWER, INC.

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:	190920
INVOICE DATE:	1/14/2016
DUE DATE:	1/29/2016
TOTAL AMOUNT DUE:	\$818,085.97
CUSTOMER NUMBER:	5020
CUSTOMER P.O. #:	RG10046

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

Northern Power Pool Billing - December, 2015

MUNICIPAL PEAK: TOTAL METERED ENERGY: 23,621 kW 13,676,305 kWh DO NOT PAY - AMOUNT AUTOMATICALLY DEDUCTED FROM YOUR BANK ACCOUNT

EMAIL BILLING@AMPPARTNERS.ORG WITH ANY QUESTIONS

Total Power Charges:	\$385,561.08
Total Transmission Charges:	\$421,670.72
Total Other Charges:	\$10,854.17
Total Miscellaneous Charges:	\$0.00

GRAND TOTAL POWER INVOICE:

\$818,085.97

DETAIL INFORMATION OF POWER CHARGES December , 2015

Napoleon

	Napoleor	ו		
FOR THE MONTH OF:	December, 2015		Total Metered Load kWh: Transmission Losses kWh: Distribution Losses kWh:	13,676,305 -41,726 0
			Total Energy Req. kWh:	13,634,579
TIME OF FENTS PEAK: TIME OF MUNICIPAL PEAK: TRANSMISSION PEAK:	12/17/2015 @ H.E. 19:00 12/17/2015 @ H.E. 19:00 September, 2014		COINCIDENT PEAK kW: MUNICIPAL PEAK kW: TRANSMISSION PEAK kW: BUIK CAROLINE PARTIKEMENT kW:	23,621 23,621 30,153 28,312
			PJM Capacity Requirement kW:	20,312
Napoleon Resources				
AMP CT - Sched @ ATSI				
Demand Charge:	\$1.399969	/ kW *	12,400 kW =	\$17,359.62
Transmission Credit: Capacity Credit:	\$2.282824 \$7.896662	/ kW * / kW *	-12,400 kW = -12,400 kW =	-\$28,307.02 -\$97,918.61
Subtotal	#N/A	/ kWh *	0 kWh =	-\$108,866.01
Fremont - sched @ Fremont				
Demand Charge:	\$4.165252	/ kW *	8,767 kW =	\$36,516.76
Energy Charge: Net Congestion, Losses, FTR:	\$0.025723 \$0.001395	/ kWh * / kWh *	4,198,440 kWh =	\$107,998.37 \$5,858.89
Capacity Credit:	\$11.023528	/ kW *	-8,767 kW =	-\$96,643.27
Debt Service	\$5.041202	/ kW	8,767 kW	\$44,196.22
Adjustment for prior month:	• -			\$375.40
Subtotal JV6 - Sched @ ATSI	\$0.023414	/ kWh *	4,198,440 kWh =	\$98,302.37
JV6 - Sched @ ATSI Demand Charge:			300 kW	
Energy Charge:			50,007 kWh	
Transmission Credit:	\$1.290567	/ kW *	-300 kW =	-\$387.17
Capacity Credit:	\$3.770433	/ kW *	-300 kW =	-\$1,131.13
Subtotal Prairie State - Sched @ PJMC	-\$0.030362	/ kWh *	50,007 kWh =	-\$1,518.30
Demand Charge:	\$8.022576	/ kW *	4,976 kW =	\$39.920.34
Energy Charge:	\$0.011726	/ kWh *	3,554,437 kWh =	\$41,678.47
Net Congestion, Losses, FTR:	\$0.001539	/ kWh *	-,	\$5,471.52
Capacity Credit:	\$3.114813	/ kW *	-4,976 kW =	-\$15,499.31
Debt Service	\$18.661893	/ kW	4,976 kW	\$92,861.58
Transmission from PSEC to PJM/MISO, including non-Prairie State variable charges/credits	¢0.005752	/ kWh	2 EE4 427 KW/b	\$20,448.19
Board Approved Rate Levelization	\$0.005753	/ KVVII	3,554,437 kWh	\$42,849.14
Subtotal	\$0.064069	/ kWh *	3,554,437 kWh =	\$227,729.93
NYPA - Sched @ NYIS				
Demand Charge:	\$7.430498	/ kW *	943 kW =	\$7,006.96
Energy Charge:	\$0.013135	/ kWh *	693,560 kWh =	\$9,109.74
Net Congestion, Losses, FTR: Capacity Credit:	\$0.003847 \$7.567444	/ kWh * / kW *	-900 kW =	\$2,668.16 -\$6,810.70
Adjustment for prior month:	φ1.001+++	/		\$1,703.49
Subtotal	\$0.019721	/ kWh *	693,560 kWh =	\$13,677.65
JV5 - 7X24 @ ATSI				
Demand Charge:			3,088 kW	
Energy Charge: Transmission Credit:	\$3.268403	/ kW *	2,297,472 kWh -3,088 kW =	-\$10.092.83
Capacity Credit:	\$10.858750	/ kW *	-3,088 kW =	-\$10,092.83
Subtotal	-\$0.018988	/ kWh *	2,297,472 kWh =	-\$43,624.65
JV5 Losses - Sched @ ATSI				
Energy Charge: Subtotal	451/A	/ 1.////= *	33,547 kWh	¢0.00
JV2 - Sched @ ATSI	#N/A	/ kWh *	33,547 kWh =	\$0.00
Demand Charge:			264 kW	
Energy Charge:	\$0.022960	/ kWh *	236 kWh =	\$5.41
Transmission Credit:	\$1.080871	/ kW *	-264 kW =	-\$285.35
Capacity Credit:	\$6.453220	/ kW *	-264 kW =	-\$1,703.65
Subtotal AMP Solar Phase I - Sched @ ATSI	-\$8.418442	/ kWh *	236 kWh =	-\$1,983.59
Demand Charge:			1,040 kW	
Energy Charge:	\$0.085000	/ kWh *	48,360 kWh =	\$4,110.62
Subtotal	\$0.085000	/ kWh *	48,360 kWh =	\$4,110.62
Morgan Stanley 2015-2020 - 7x24 @ AD				
Demand Charge: Energy Charge:	\$0.062950	/ kWh *	3,800 kW 2,827,200 kWh =	\$177,972.24
Net Congestion, Losses, FTR:	-\$0.000246	/ kWh *	2,027,200 KVVII =	-\$696.39
Subtotal	\$0.062704	/ kWh *	2,827,200 kWh =	\$177,275.85
Efficiency Smart Power Plant 2014-2017				
ESPP 2014-2017 obligation @ \$1.400 /MWh x 153,889. MWh / 12		/ 1.34/1. +	A 1340.	\$17,953.72
Subtotal	#N/A	/ kWh *	0 kWh =	\$17,953.72
Northern Power Pool:				
On Peak Energy Charge: (M-F HE 08-23 EDT)	\$0.040070	/ kWh *	285,729 kWh =	\$11,449.07
Off Peak Energy Charge:	\$0.024205	/ kWh *	263,758 kWh =	\$6,384.28
Sale of Excess Non-Pool Resources to Pool Subtotal	\$0.024799	/ kWh *	-618,167 kWh =	-\$15,329.86
Subtotal	-\$0.036451	/ kWh *	-68,681 kWh =	\$2,503.49

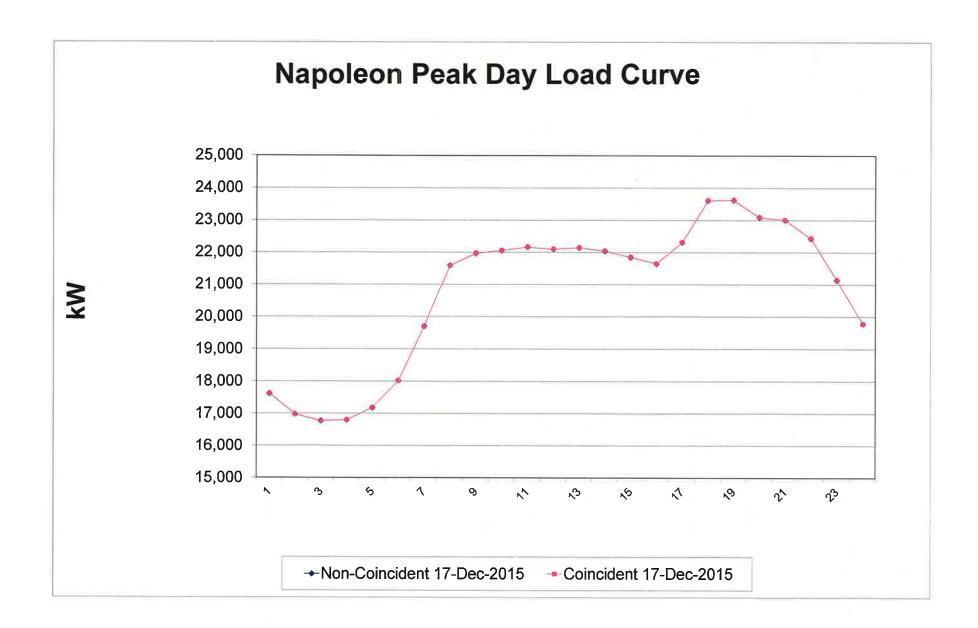
DETAIL INFORMATION OF POWER CHARGES December , 2015

Napoleon

Total Power Charges:			13,634,579 kWh	\$385,561.08
TRANSMISSION CHARGES:				
Demand Charge:	\$3.268405	/ kW *	30,153 kW =	\$98,552.22
Energy Charge:	\$0.000500	/ kWh *	11,337,107 kWh =	\$5,667.37
RPM (Capacity) Charges:	\$11.212600	/ kW *	28,312 kW =	\$317,451.13
TOTAL TRANSMISSION CHARGES:	\$0.037194	/ kWh *	11,337,107 kWh =	\$421,670.72
Service Fee Part A,				
Based on Annual Municipal Sales	\$0.000229	/ kWh *	153,112,965 kWh 1/12 =	\$2,921.91
Service Fee Part B.				
Energy Purchases	\$0.000580	/kWh *	13,676,305 kWh =	\$7,932.26
TOTAL OTHER CHARGES:				\$10,854.17
GRAND TOTAL POWER INVOICE:				\$818,085.97

Napoleon	Capacity Plan - Actual			117	5.01		1.				
Dec 201	5 ACTU	JAL DEMAND =	23.621	MW							
Days 31	ACTU	JAL ENERGY =	13,676	MWH							
				1	DEMAND	ENERGY				EFFECTIVE	%
		DEMAND	ENERGY	LOAD	RATE	RATE	DEMAND	ENERGY	TOTAL	RATE	OF
	SOURCE	MW	MWH	FACTOR	\$/KW	\$/MWH	CHARGE	CHARGE	CHARGES	\$/MWH	DOLLARS
	(1)	(2)	(4)	(5)	(6)	(7)	(9)	(10)	(11)	(12)	(13)
1	NPP Pool Purchases	0.00	549	0%	\$0.00	\$32.41	\$0	\$17,809	\$17,809	\$32.41	1,9%
2	NPP Pool Sales	0.00	-618	0%	\$0.00	\$24.80	\$0	-\$15,330	-\$15,330	\$24.80	-1.6%
3	AFEC	8.77	4,198	64%	-\$1.77	\$27.12	-\$15,555	\$113,857	\$98,302	\$23.41	10.5%
4	Prairie State	4.98	3,554	96%	\$36.29	\$13.27	\$180,580	\$47,150	\$227,730	\$64.07	24.2%
5	NYPA - Ohio	0.94	694	99%	\$0.21	\$19.44	\$196	\$13,481	\$13,678	\$19.72	1.5%
6	JV5	3.09	2,297	100%	\$8.22	\$23.33	\$25,396	\$53,590	\$78,986	\$34.38	8.4%
7	JV5 Losses	0.00	34	0%	\$0.00	\$0.00	\$0	\$0	\$0	\$0.00	0.0%
8	JV6	0.30	50	22%	-\$1.10	\$0.00	-\$331	\$0	-\$331	-\$6.62	0.0%
9	AMP Solar Phase I	1.04	48	6%	\$0.00	\$85.00	\$0	\$4,111	\$4,111	\$85.00	0.4%
10	Morgan Stanley 2015-2020 7x24	3.80	2,827	100%	\$0.00	\$62.70	\$0	\$177,276	\$177,276	\$62.70	18.9%
11	AMPCT	12.40	0	0%	-\$8.78	\$0.00	-\$108,866	\$0	-\$108,866	\$0.00	-11.6%
12	JV2	0.26	0	0%	-\$5.96	\$22.96	-\$1,572	\$5	-\$1,567	-\$6,650.58	-0.2%
	POWER TOTAL	35.58	13,635	52%			\$79,848	\$411,949	\$491,798	\$36.07	52.4%
13	Energy Efficiency		0		\$0.00	\$0.00	\$0	\$17,954	\$17,954	\$0.00	1.9%
14	Installed Capacity	28.31			\$11.21		\$317,451	\$0	\$317,451	\$23.21	33.8%
15	TRANSMISSION	30,15	11,337		\$3.27	\$0.50	\$98,552	\$5,667	\$104,220	\$7.62	11,1%
16	Distribution Charge	23.62			\$0.00	\$0.00	\$0	\$0	\$0	\$0.00	0.0%
17	Service Fee B		13,676			\$0.58		\$7,932	\$7,932	\$0.58	0.8%
18	Dispatch Charge		13,676			\$0.00		\$0	\$0	\$0.00	0.0%
respectively and a second second	OTHER TOTAL			_			\$416,003	\$31,553	\$447,557	\$32.72	47.6%
GRAND TOTAL PURCHAS	SED		13,635				\$495,852	\$443,503	\$939,355		
Delivered to members		23.621	13,676	78%			\$495,852	\$443,503	\$939,355	\$68.68	100.0%
		DEMAND	ENERGY	L.F.					TOTAL \$	\$/MWh	Avg Temp
	2015 Forecast	25.53	14,657	77%					\$1,198,217	\$81.75	29.7
	2014 Actual	24.07	14,117	79%					\$944,620	\$66.91	33.0
	2013 Actual	25.53	14,657	77%					\$1,092,495	\$74.54	27.6
									Actual Temp		40.9

NAPOLEOI		Wednesday	Thursday	Friday	Saturday	Supday	Monday	Tuesday	Madacaday	Thursday	Friday	Ceturday	0			
Date Hour	12/1/2015	12/2/2015	12/3/2015	12/4/2015	12/5/2015	Sunday 12/6/2015	Monday 12/7/2015		Wednesday 12/9/2015		Friday 12/11/2015	Saturday 12/12/2015	Sunday 12/13/2015	Monday 12/14/2015	Tuesday 12/15/2015	
100	18,137	18,246	18,716	18,415	16,395	15,949	17,292	17,851	17,915	17,745	17,754	15,328	40.070	45.550	17.500	
200	17,604	17,823	18,155	17,905	15,990	15,949	16,852	17,367	17,915	17,745	16,992		13,872	15,553	17,566	
300	17,389	17,603	17,940	17,961	15,646	15,067	16,861	17,162	16,960	16,946		14,563	13,128	15,182	17,265	
400	17,017	17,416	17,846	17,641	15,662	15,070	16,926	16,873	16,900	16,948	16,849	14,369	12,735	15,240	17,045	
500	17,417	17,794	18,072	17,979	15,753	15,070	17,575				16,515	14,174	12,586	15,138	16,826	
600	18,342	18,589	18,771	18,748	16,142	15,639	18,638	17,170 18,104	17,086	17,135	16,740	14,240	12,679	15,689	17,084	
700	20,012	20,188	20,370	20,493	16,142	16,022	20,129	19,911	18,177	18,036	17,844	14,665	13,120	16,537	18,003	
800	21,052	20,188	20,370	20,493	17,716				19,884	19,593	19,435	15,343	13,763	18,356	19,719	
900	20,892	21,508	21,820	21,922		16,531	21,744	21,384	21,468	20,995	21,247	16,316	14,489	20,118	21,222	
1000	20,892	21,508	22,126	21,875	17,923 18,122	16,643	21,994	21,488	21,385	20,802	21,124	16,522	14,695	20,284	21,136	
1100	21,078	21,424				16,978	21,580	21,127	21,180	20,812	20,984	16,579	14,991	20,363	21,207	
			22,007	21,909	18,234	17,165	21,205	21,301	21,077	20,434	20,938	16,621	15,354	20,579	21,338	
1200	21,057	21,154	21,750	21,580	18,090	17,090	20,965	21,121	20,846	20,369	20,552	16,778	15,362	20,586	21,288	
1300	21,084	21,414	21,773	20,923	17,913	17,011	20,691	20,937	20,812	20,470	20,092	16,633	15,751	20,618	21,082	
1400	20,815	21,432	21,423	20,749	17,709	16,503	20,371	20,762	20,567	20,446	19,860	16,224	15,677	20,878	20,969	
1500	20,153	21,311	21,237	20,365	17,172	16,458	19,788	20,467	20,493	20,175	19,441	15,874	15,599	20,312	20,939	
1600	19,875	21,081	21,056	19,977	16,588	16,303	19,787	20,390	20,333	20,058	19,098	15,852	15,474	20,008	21,091	
1700	20,413	21,815	21,592	19,869	16,954	16,647	20,200	21,084	20,627	20,816	19,318	16,128	16,239	20,462	21,579	
1800	21,521	22,767	22,228	21,207	18,673	18,418	21,895	22,520	21,854	21,833	20,576	17,472	17,992	21,625	22,591	
1900	21,683	22,980	22,488	21,356	19,177	19,164	22,184	22,671	22,229	21,903	20,361	17,561	18,287	21,740	22,741	
2000	21,569	22,669	22,027	21,218	18,780	19,149	21,855	22,226	22,008	21,675	20,092	17,357	17,756	21,237	22,296	
2100	21,468	22,316	21,864	21,194	18,625	18,952	21,304	21,924	21,584	21,187	19,935	17,139	17,519	21,296	22,063	
2200	20,931	21,502	21,365	20,521	18,278	18,638	20,693	20,868	20,612	20,442	19,492	16,466	17,312	20,330	20,825	
2300	19,914	20,191	20,166	19,178	17,441	17,737	19,557	19,704	19,331	19,335	18,073	15,507	16,502	18,973	19,562	
2400	19,033	19,109	19,002	17,649	16,865	17,456	18,460	18,531	18,358	18,337	16,535	14,579	16,030	17,984	18,686	
Total	479,267	493,039	495,616	482,583	399,838	405,337	478,546	482,943	478,772	473,516	459,847	382,290	366,912	459,088	484,123	
	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday
Date	Wednesday 12/16/2015	Thursday 12/17/2015	Friday 12/18/2015	Saturday 12/19/2015	Sunday 12/20/2015	Monday 12/21/2015	Tuesday 12/22/2015									Thursday 12/31/2015
									Thursday 12/24/2015		Saturday 12/26/2015	Sunday 12/27/2015	Monday 12/28/2015	Tuesday 12/29/2015	Wednesday 12/30/2015	Thursday 12/31/2015
Date									12/24/2015	12/25/2015	12/26/2015	12/27/2015	12/28/2015	12/29/2015	12/30/2015	12/31/2015
Date Hour	12/16/2015	12/17/2015	12/18/2015	12/19/2015	12/20/2015	12/21/2015	12/22/2015	12/23/2015					12/28/2015 15,717	12/29/2015 16,186	12/30/2015	12/31/2015 15,108
Date Hour 100	12/16/2015 17,934	12/17/2015 17,611	12/18/2015 19,042	12/19/2015 17,816	12/20/2015 17,421	12/21/2015	12/22/2015 17,156	12/23/2015	12/24/2015 12,316 11,864	12/25/2015 12,398 11,887	12/26/2015 12,649 12,129	12/27/2015 13,240 12,462	12/28/2015 15,717 15,562	12/29/2015 16,186 15,378	12/30/2015 15,957 15,767	12/31/2015 15,108 14,554
Date Hour 100 200	12/16/2015 17,934 17,233	12/17/2015 17,611 16,968	12/18/2015 19,042 18,414	12/19/2015 17,816 17,120	12/20/2015 17,421 16,617	12/21/2015 17,518 16,858	12/22/2015 17,156 16,509	12/23/2015 17,677 16,880	12/24/2015 12,316	12/25/2015 12,398	12/26/2015 12,649 12,129 12,147	12/27/2015 13,240 12,462 12,162	12/28/2015 15,717 15,562 15,370	12/29/2015 16,186 15,378 14,942	12/30/2015 15,957 15,767 15,580	12/31/2015 15,108 14,554 14,451
Date Hour 100 200 300	12/16/2015 17,934 17,233 16,949	12/17/2015 17,611 16,968 16,762	12/18/2015 19,042 18,414 18,288	12/19/2015 17,816 17,120 16,756	12/20/2015 17,421 16,617 16,363	12/21/2015 17,518 16,858 16,848	12/22/2015 17,156 16,509 16,485	12/23/2015 17,677 16,880 16,780	12/24/2015 12,316 11,864 11,633	12/25/2015 12,398 11,887 11,696 11,634	12/26/2015 12,649 12,129 12,147 12,292	12/27/2015 13,240 12,462 12,162 12,320	12/28/2015 15,717 15,562 15,370 15,086	12/29/2015 16,186 15,378 14,942 14,801	12/30/2015 15,957 15,767 15,580 15,291	12/31/2015 15,108 14,554 14,451 14,336
Date Hour 200 300 400	12/16/2015 17,934 17,233 16,949 16,840	12/17/2015 17,611 16,968 16,762 16,792	12/18/2015 19,042 18,414 18,288 18,145	12/19/2015 17,816 17,120 16,756 16,695	12/20/2015 17,421 16,617 16,363 16,096	12/21/2015 17,518 16,858 16,848 16,917	12/22/2015 17,156 16,509 16,485 16,164	12/23/2015 17,677 16,880 16,780 16,390 16,681	12/24/2015 12,316 11,864 11,633 11,565 11,728	12/25/2015 12,398 11,887 11,696 11,634 11,698	12/26/2015 12,649 12,129 12,147 12,292 12,394	12/27/2015 13,240 12,462 12,162 12,320 12,311	12/28/2015 15,717 15,562 15,370 15,086 15,534	12/29/2015 16,186 15,378 14,942 14,801 15,283	12/30/2015 15,957 15,767 15,580 15,291 15,607	12/31/2015 15,108 14,554 14,451 14,336 14,444
Date Hour 200 300 400 500	12/16/2015 17,934 17,233 16,949 16,840 17,204	12/17/2015 17,611 16,968 16,762 16,792 17,174	12/18/2015 19,042 18,414 18,288 18,145 18,434	12/19/2015 17,816 17,120 16,756 16,695 16,920	12/20/2015 17,421 16,617 16,363 16,096 16,560	12/21/2015 17,518 16,858 16,848 16,917 17,243	12/22/2015 17,156 16,509 16,485 16,164 16,447	12/23/2015 17,677 16,880 16,780 16,390	12/24/2015 12,316 11,864 11,633 11,565	12/25/2015 12,398 11,887 11,696 11,634 11,698 11,880	12/26/2015 12,649 12,129 12,147 12,292 12,394 12,843	12/27/2015 13,240 12,462 12,162 12,320 12,311 12,480	12/28/2015 15,717 15,562 15,370 15,086 15,534 16,551	12/29/2015 16,186 15,378 14,942 14,801 15,283 16,136	12/30/2015 15,957 15,767 15,580 15,291 15,607 16,193	12/31/2015 15,108 14,554 14,451 14,336 14,444 14,699
Date Hour 200 300 400 500 600	12/16/2015 17,934 17,233 16,949 16,840 17,204 17,777	12/17/2015 17,611 16,968 16,762 16,792 17,174 18,014	12/18/2015 19,042 18,414 18,288 18,145 18,434 19,133	12/19/2015 17,816 17,120 16,756 16,695 16,920 17,450	12/20/2015 17,421 16,617 16,363 16,096 16,560 16,964	12/21/2015 17,518 16,858 16,848 16,917 17,243 18,055	12/22/2015 17,156 16,509 16,485 16,164 16,447 17,106	12/23/2015 17,677 16,880 16,790 16,390 16,681 17,427	12/24/2015 12,316 11,864 11,633 11,565 11,728 12,226	12/25/2015 12,398 11,887 11,696 11,634 11,698 11,880 12,056	12/26/2015 12,649 12,129 12,147 12,292 12,394 12,843 13,358	12/27/2015 13,240 12,462 12,162 12,320 12,311 12,480 12,995	12/28/2015 15,717 15,562 15,370 15,086 15,534 16,551 17,630	12/29/2015 16,186 15,378 14,942 14,801 15,283 16,136 17,096	12/30/2015 15,957 15,767 15,580 15,291 15,607 16,193 17,318	12/31/2015 15,108 14,554 14,451 14,336 14,444 14,699 15,290
Date Hour 200 300 400 500 600 700	12/16/2015 17,934 17,233 16,949 16,840 17,204 17,777 19,168	12/17/2015 17,611 16,968 16,762 16,792 17,174 18,014 19,699	12/18/2015 19,042 18,414 18,288 18,145 18,434 19,133 20,937	12/19/2015 17,816 17,120 16,756 16,695 16,920 17,450 17,904	12/20/2015 17,421 16,617 16,363 16,096 16,560 16,964 17,442	12/21/2015 17,518 16,858 16,848 16,917 17,243 18,055 19,662	12/22/2015 17,156 16,509 16,485 16,164 16,447 17,106 18,589	12/23/2015 17,677 16,880 16,790 16,681 17,427 18,614	12/24/2015 12,316 11,864 11,633 11,565 11,728 12,226 13,300 14,410	12/25/2015 12,398 11,887 11,696 11,634 11,698 11,880 12,056 12,779	12/26/2015 12,649 12,129 12,147 12,292 12,394 12,843 13,358 14,297	12/27/2015 13,240 12,462 12,162 12,320 12,311 12,480 12,995 13,881	12/28/2015 15,717 15,562 15,370 15,086 15,534 16,551 17,630 18,910	12/29/2015 16,186 15,378 14,942 14,801 15,283 16,136 17,096 18,018	12/30/2015 15,957 15,767 15,580 15,291 15,607 16,193 17,318 18,486	12/31/2015 15,108 14,554 14,451 14,336 14,444 14,699 15,290 16,298
Date Hour 100 200 300 400 500 600 700 800	12/16/2015 17,934 17,233 16,949 16,840 17,204 17,777 19,168 20,954	12/17/2015 17,611 16,968 16,762 17,792 17,174 18,014 19,699 21,589	12/18/2015 19,042 18,414 18,288 18,145 18,434 19,133 20,937 22,735	12/19/2015 17,816 17,120 16,756 16,695 16,920 17,450 17,904 19,036	12/20/2015 17,421 16,617 16,363 16,096 16,560 16,964 17,442 17,910 17,842	12/21/2015 17,518 16,858 16,848 16,917 17,243 18,055 19,662 21,238 21,898	12/22/2015 17,156 16,509 16,485 16,164 16,447 17,106 18,589 19,866 20,163	12/23/2015 17,677 16,880 16,780 16,681 17,427 18,614 19,994 20,368	12/24/2015 12,316 11,864 11,633 11,565 11,728 12,226 13,300 14,410 14,784	12/25/2015 12,398 11,887 11,696 11,634 11,698 11,880 12,056 12,779 13,173	12/26/2015 12,649 12,129 12,147 12,292 12,394 12,843 13,358 14,297 14,357	12/27/2015 13,240 12,462 12,162 12,320 12,311 12,480 12,995 13,881 14,206	12/28/2015 15,717 15,562 15,370 15,086 15,534 16,551 17,630 18,910 19,351	12/29/2015 16,186 15,378 14,942 14,801 15,283 16,136 17,096 18,018 18,018 18,310	12/30/2015 15,957 15,767 15,580 15,291 15,607 16,193 17,318 18,486 18,951	12/31/2015 15,108 14,554 14,451 14,336 14,444 14,699 15,290 16,298 17,051
Date Hour 200 300 400 500 600 700 800 900	12/16/2015 17,934 17,233 16,949 16,840 17,204 17,777 19,168 20,954 21,028	12/17/2015 17,611 16,968 16,762 16,792 17,174 18,014 19,699 21,589 21,967	12/18/2015 19,042 18,414 18,288 18,145 18,434 19,133 20,937 22,735 22,377	12/19/2015 17,816 17,120 16,756 16,695 16,920 17,450 17,904 19,036 19,307	12/20/2015 17,421 16,617 16,363 16,096 16,560 16,964 17,442 17,910 17,842	12/21/2015 17,518 16,858 16,848 16,917 17,243 18,055 19,662 21,238 21,238 21,898 21,998	12/22/2015 17,156 16,509 16,485 16,164 16,447 17,106 18,589 19,866 20,163 20,022	12/23/2015 17,677 16,880 16,790 16,681 17,427 18,614 19,994 20,368 20,494	12/24/2015 12,316 11,864 11,633 11,565 11,728 12,226 13,300 14,410 14,784 15,355	12/25/2015 12,398 11,887 11,696 11,634 11,698 11,880 12,056 12,779 13,173 13,744	12/26/2015 12,649 12,129 12,147 12,292 12,394 12,843 13,358 14,297 14,357 15,179	12/27/2015 13,240 12,462 12,162 12,320 12,311 12,480 12,995 13,881 14,206 14,606	12/28/2015 15,717 15,562 15,370 15,086 15,534 16,551 17,630 18,910 19,351 19,869	12/29/2015 16,186 15,378 14,942 14,801 15,283 16,136 17,096 18,018 18,018 18,310 18,701	12/30/2015 15,957 15,767 15,580 15,291 15,607 16,193 17,318 18,486 18,951 19,493	12/31/2015 15,108 14,554 14,451 14,336 14,444 14,699 15,290 16,298 17,051 17,558
Date Hour 200 300 400 500 600 700 800 900 1000	12/16/2015 17,934 17,233 16,949 16,840 17,204 17,777 19,168 20,954 21,028 20,842 20,796	12/17/2015 17,611 16,968 16,762 16,792 17,174 18,014 19,699 21,589 21,967 22,054 22,163	12/18/2015 19,042 18,414 18,288 18,145 18,434 19,133 20,937 22,735 22,377 22,365 22,410	12/19/2015 17,816 17,120 16,756 16,695 16,920 17,450 17,904 19,036 19,036 19,307 19,445	12/20/2015 17,421 16,617 16,363 16,096 16,560 16,964 17,442 17,910 17,845 17,845	12/21/2015 17,518 16,858 16,848 16,917 17,243 18,055 19,662 21,238 21,998 21,998 22,415	12/22/2015 17,156 16,509 16,485 16,164 17,106 18,589 19,866 20,163 20,022 20,220	12/23/2015 17,677 16,880 16,780 16,681 17,427 18,614 19,994 20,368 20,494 20,422	12/24/2015 12,316 11,864 11,633 11,565 11,728 12,226 13,300 14,410 14,784 15,355 15,491	12/25/2015 12,398 11,887 11,696 11,634 11,698 11,880 12,056 12,779 13,173 13,744 14,044	12/26/2015 12,649 12,129 12,147 12,292 12,394 12,843 13,358 14,297 14,357 15,179 15,819	12/27/2015 13,240 12,462 12,162 12,320 12,311 12,480 12,995 13,881 14,206 14,606 14,606	12/28/2015 15,717 15,562 15,370 15,086 15,534 16,551 17,630 18,910 19,351 19,869 20,438	12/29/2015 16,186 15,378 14,942 14,801 15,283 16,136 17,096 18,018 18,310 18,701 19,318	12/30/2015 15,957 15,767 15,580 15,291 15,607 16,193 17,318 18,486 18,951 19,493 19,813	12/31/2015 15,108 14,554 14,451 14,336 14,444 14,699 15,290 16,298 17,051 17,558 17,617
Date Hour 200 300 400 500 600 700 800 900 1000 1100	12/16/2015 17,934 17,233 16,949 16,840 17,204 17,777 19,168 20,954 21,028 20,842	12/17/2015 17,611 16,968 16,762 17,174 18,014 19,699 21,589 21,967 22,054	12/18/2015 19,042 18,414 18,288 18,145 18,434 19,133 20,937 22,735 22,377 22,365	12/19/2015 17,816 17,120 16,756 16,695 16,920 17,450 17,904 19,036 19,307 19,345 19,758	12/20/2015 17,421 16,617 16,363 16,096 16,560 16,964 17,442 17,910 17,842 17,845 17,853 17,853	12/21/2015 17,518 16,858 16,848 16,917 17,243 18,055 19,662 21,238 21,238 21,988 21,988 22,415 22,112	12/22/2015 17,156 16,509 16,485 16,164 16,447 17,106 18,589 19,866 20,163 20,022 20,220 20,292	12/23/2015 17,677 16,880 16,780 16,681 17,427 18,614 19,994 20,368 20,494 20,422 20,428	12/24/2015 12,316 11,864 11,633 11,565 11,728 12,226 13,300 14,410 14,784 15,355 15,491 15,320	12/25/2015 12,398 11,897 11,634 11,638 11,880 12,056 12,779 13,173 13,744 14,044 13,992	12/26/2015 12,649 12,129 12,147 12,292 12,394 12,843 13,358 14,297 14,357 15,179 15,819 15,624	12/27/2015 13,240 12,462 12,162 12,320 12,311 12,480 12,995 13,881 14,206 14,606 14,680 15,374	12/28/2015 15,717 15,562 15,370 15,086 15,534 16,551 17,630 18,910 19,351 19,869 20,438 20,438	12/29/2015 16,186 15,378 14,942 14,801 15,283 16,136 17,096 18,018 18,310 18,701 19,318 19,566	12/30/2015 15,957 15,767 15,580 15,291 15,607 16,193 17,318 18,486 18,951 19,493 19,813 19,963	12/31/2015 15,108 14,554 14,451 14,336 14,444 14,699 15,290 16,298 17,051 17,558 17,617 17,782
Date Hour 200 300 400 500 600 700 800 900 1000 1100 1200 1300	12/16/2015 17,934 17,233 16,949 16,840 17,204 17,777 19,168 20,954 21,028 20,842 20,796 20,713 20,685	12/17/2015 17,611 16,968 16,762 17,174 18,014 19,699 21,589 21,967 22,054 22,163 22,096 22,147	12/18/2015 19,042 18,414 18,288 18,145 18,434 19,133 20,937 22,735 22,377 22,365 22,377 22,365 22,595 22,595	12/19/2015 17,816 17,120 16,695 16,695 16,920 17,450 17,904 19,036 19,307 19,445 19,768 19,702 19,519	12/20/2015 17,421 16,617 16,363 16,056 16,560 16,964 17,442 17,910 17,842 17,845 17,853 17,692 17,710	12/21/2015 17,518 16,858 16,848 16,917 17,243 18,055 19,662 21,238 21,898 21,898 21,998 22,415 22,112 21,862	12/22/2015 17,156 16,509 16,485 16,164 16,447 17,106 18,589 19,866 20,163 20,022 20,220 20,292 20,438	12/23/2015 17,677 16,880 16,780 16,681 17,427 18,614 19,994 20,368 20,494 20,422 20,428 20,306	12/24/2015 12,316 11,864 11,633 11,565 11,728 12,226 13,300 14,410 14,784 15,355 15,491 15,320 14,873	12/25/2015 12,398 11,897 11,636 11,638 11,638 11,880 12,056 12,779 13,173 13,744 14,044 13,992 13,425	12/26/2015 12,649 12,129 12,147 12,292 12,394 12,843 13,358 14,297 14,357 15,179 15,624 15,680	12/27/2015 13,240 12,462 12,162 12,320 12,311 12,480 12,995 13,881 14,206 14,606 14,680 15,374 16,061	12/28/2015 15,717 15,562 15,370 15,086 15,534 16,551 17,630 18,910 19,351 19,869 20,438 20,827 21,183	12/29/2015 16,186 15,378 14,942 14,801 15,283 16,136 17,096 18,018 18,310 18,701 19,318 19,566 19,468	12/30/2015 15,957 15,767 15,580 15,291 15,607 16,193 17,318 18,486 18,951 19,493 19,813 19,963 19,732	12/31/2015 15,108 14,554 14,451 14,336 14,444 14,699 15,290 16,298 17,051 17,558 17,617 17,782 17,804
Date Hour 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400	12/16/2015 17,934 17,233 16,949 16,840 17,204 17,777 19,168 20,954 21,028 20,842 20,796 20,713 20,685 20,272	12/17/2015 17,611 16,968 16,762 16,792 17,174 18,014 19,699 21,589 21,589 21,589 21,967 22,054 22,163 22,054 22,163 22,054 22,147 22,037	12/18/2015 19,042 18,414 18,288 18,145 18,434 19,133 20,937 22,735 22,377 22,365 22,377 22,365 22,410 22,595 22,559 22,559 22,387	12/19/2015 17,816 17,120 16,756 16,695 16,920 17,450 17,904 19,036 19,307 19,445 19,708 19,708 19,708 19,709 19,519	12/20/2015 17,421 16,617 16,363 16,056 16,560 16,964 17,442 17,845 17,845 17,853 17,653 17,653 17,610	12/21/2015 17,518 16,858 16,848 16,917 17,243 18,055 19,662 21,238 21,898 21,998 22,415 22,112 21,862 21,646	12/22/2015 17,156 16,509 16,485 16,647 17,106 18,589 19,866 20,163 20,022 20,220 20,220 20,222 20,438 20,476	12/23/2015 17,677 16,880 16,780 16,681 17,427 18,614 19,994 20,368 20,494 20,422 20,424 20,424 20,422 20,424 20,306 20,031	12/24/2015 12,316 11,864 11,633 11,565 11,728 12,226 13,300 14,410 14,784 15,355 15,491 15,320 14,873 14,416	12/25/2015 12,398 11,887 11,696 11,634 11,698 11,680 12,056 12,079 13,173 13,744 14,044 13,992 13,425 12,967	12/26/2015 12,649 12,129 12,147 12,292 12,394 12,843 13,358 14,297 14,357 15,179 15,819 15,620 15,580 15,111	12/27/2015 13,240 12,452 12,162 12,320 12,311 12,480 12,995 13,881 14,206 14,606 14,606 14,606 15,374 16,061 16,090	12/28/2015 15,717 15,562 15,370 15,086 15,534 16,551 17,630 18,910 19,351 19,869 20,438 20,827 21,183 21,356	12/29/2015 16,186 15,378 14,942 14,801 15,283 16,136 17,096 18,018 18,310 18,701 19,318 19,566 19,468 18,986	12/30/2015 15,957 15,767 15,580 15,291 15,607 16,193 17,318 18,486 18,951 19,493 19,813 19,963 19,732 19,494	12/31/2015 15,108 14,554 14,451 14,336 14,444 14,699 15,290 16,298 17,051 17,558 17,617 17,782 17,804 17,481
Date Hour 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1300 1300	12/16/2015 17,934 17,233 16,949 16,840 17,204 17,204 17,777 19,168 20,954 21,028 20,842 20,796 20,713 20,685 20,272 20,229	12/17/2015 17,611 16,968 16,762 16,792 17,174 18,014 19,699 21,589 21,967 22,054 22,163 22,096 22,147 22,037 21,845	12/18/2015 19,042 18,414 18,288 18,145 18,434 19,133 20,937 22,735 22,377 22,365 22,410 22,595 22,565 22,565 22,565 22,567 22,587 21,986	12/19/2015 17,816 17,120 16,756 16,695 17,904 19,036 19,307 19,445 19,758 19,702 19,519 19,094 18,445	12/20/2015 17,421 16,667 16,363 16,096 16,560 16,964 17,442 17,845 17,845 17,853 17,692 17,710 17,610 17,610 17,481	12/21/2015 17,518 16,858 16,848 16,917 17,243 18,055 19,662 21,238 21,998 22,415 22,112 21,862 21,864 21,238	12/22/2015 17,156 16,509 16,485 16,164 16,447 17,106 18,589 19,866 20,163 20,022 20,220 20,220 20,222 20,220 20,292 20,476 19,905	12/23/2015 17,677 16,880 16,780 16,681 17,427 18,614 19,994 20,368 20,494 20,422 20,428 20,031 19,559	12/24/2015 12,316 11,864 11,633 11,565 11,728 12,226 13,300 14,410 14,784 15,355 15,491 15,320 14,873 14,416 14,224	12/25/2015 12,398 11,887 11,634 11,634 11,638 11,880 12,056 12,779 13,173 13,744 14,044 13,992 13,425 12,967 12,435	12/26/2015 12,649 12,129 12,147 12,292 12,394 12,843 13,358 14,297 14,357 15,179 15,819 15,624 15,580 15,5111 14,980	12/27/2015 13,240 12,462 12,162 12,320 12,311 12,480 12,995 13,881 14,206 14,606 14,606 14,880 15,374 16,061 16,090 15,507	12/28/2015 15,717 15,562 15,370 15,086 15,534 16,551 17,630 18,910 19,351 19,869 20,438 20,827 21,183 21,356 20,813	12/29/2015 16,186 15,378 14,942 14,801 15,283 16,136 18,018 18,310 18,701 19,318 19,566 19,468 18,986 18,724	12/30/2015 15,957 15,767 15,580 15,291 15,607 16,193 17,318 18,486 18,951 19,493 19,813 19,813 19,953 19,732 19,494 19,386	12/31/2015 15,108 14,554 14,451 14,336 14,444 14,699 15,290 16,298 17,051 17,558 17,617 17,782 17,804 17,481 17,031
Date Hour 200 300 500 600 700 800 900 1000 1100 1200 1300 1400 1500	12/16/2015 17,934 17,233 16,949 16,840 17,204 17,777 19,168 20,954 21,028 20,842 20,796 20,713 20,685 20,272 20,229 20,074	12/17/2015 17,611 16,968 16,762 16,792 17,174 18,014 19,699 21,967 22,054 22,163 22,096 22,147 22,037 21,845 21,845 21,842	12/18/2015 19,042 18,414 18,288 18,145 18,434 19,133 20,937 22,735 22,377 22,365 22,377 22,365 22,410 22,585 22,569 22,387 21,986 21,986 21,980	12/19/2015 17,816 17,120 16,695 16,920 17,450 17,904 19,036 19,307 19,445 19,758 19,702 19,519 19,094 18,445 18,240	12/20/2015 17,421 16,617 16,363 16,056 16,560 16,964 17,442 17,910 17,842 17,845 17,853 17,652 17,710 17,481 17,752	12/21/2015 17,518 16,858 16,947 17,243 18,055 19,652 21,238 21,898 21,998 22,415 22,112 21,862 21,646 21,238 21,238 21,119	12/22/2015 17,156 16,509 16,485 16,164 16,447 17,106 18,589 19,866 20,163 20,022 20,220 20,220 20,292 20,438 20,476 19,905 19,643	12/23/2015 17,677 16,880 16,780 16,681 17,427 18,614 19,994 20,368 20,494 20,422 20,428 20,306 20,031 19,559 19,304	12/24/2015 12,316 11,864 11,633 11,565 11,728 12,226 13,300 14,410 14,784 15,355 15,491 15,320 14,873 14,416 14,224 14,078	12/25/2015 12,398 11,897 11,639 11,638 11,638 11,638 12,056 12,779 13,173 13,744 14,044 13,992 13,425 12,967 12,435 12,139	12/26/2015 12,649 12,129 12,147 12,292 12,394 12,843 13,358 14,297 14,357 15,179 15,619 15,624 15,580 15,111 14,980 14,704	12/27/2015 13,240 12,452 12,152 12,320 12,311 12,480 12,995 13,881 14,206 14,606 14,880 15,374 16,061 16,090 15,507 15,603	12/28/2015 15,717 15,562 15,370 15,086 15,534 16,551 17,630 18,910 19,351 19,869 20,438 20,827 21,183 21,356 20,813 20,813	12/29/2015 16,186 15,378 14,942 14,801 15,283 16,136 17,096 18,018 18,310 18,701 19,318 19,566 19,468 18,986 18,724 18,979	12/30/2015 15,957 15,767 15,580 15,291 15,607 16,193 17,318 18,486 18,951 19,493 19,813 19,963 19,732 19,494 19,386 19,424	12/31/2015 15,108 14,554 14,451 14,336 14,444 14,699 15,290 16,298 17,051 17,558 17,617 17,782 17,804 17,481 17,031 16,693
Date Hour 100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1300 1400 1500 1600	12/16/2015 17,934 17,233 16,949 16,840 17,204 17,777 19,168 20,954 21,028 20,842 20,796 20,713 20,685 20,272 20,229 20,074 20,390	12/17/2015 17,611 16,968 16,762 17,174 18,014 19,699 21,589 21,589 21,967 22,054 22,163 22,096 22,147 22,037 21,845 21,845 21,642 22,310	12/18/2015 19,042 18,414 18,288 18,145 18,434 19,133 20,937 22,735 22,377 22,365 22,410 22,595 22,569 22,387 21,966	12/19/2015 17,816 17,120 16,655 16,692 17,450 17,904 19,036 19,307 19,445 19,702 19,519 19,094 18,445 18,240 18,670	12/20/2015 17,421 16,617 16,363 16,056 16,560 16,964 17,442 17,910 17,842 17,845 17,853 17,692 17,710 17,610 17,481 17,752 18,165	12/21/2015 17,518 16,858 16,848 16,917 17,243 18,055 19,662 21,238 21,898 22,415 22,112 21,862 21,238 22,415 22,112 21,646 21,238 21,119 21,418	12/22/2015 17,156 16,509 16,485 16,164 16,447 17,106 18,589 19,866 20,163 20,022 20,292 20,292 20,438 20,476 19,905	12/23/2015 17,677 16,880 16,780 16,681 17,427 18,614 19,994 20,368 20,494 20,422 20,428 20,494 20,422 20,428 20,306 20,031 19,559 19,304 20,030	12/24/2015 12,316 11,864 11,633 11,565 11,728 12,226 13,300 14,410 14,784 15,355 15,491 15,320 14,873 14,416 14,224	12/25/2015 12,398 11,897 11,696 11,638 11,698 12,056 12,779 13,173 13,744 14,044 13,992 13,425 12,967 12,435 12,189 12,395	12/26/2015 12,649 12,129 12,147 12,292 12,394 12,843 13,358 14,297 14,357 15,179 15,614 15,580 15,111 14,980 14,704 15,127	12/27/2015 13,240 12,462 12,162 12,320 12,311 12,480 12,995 13,881 14,206 14,606 14,680 15,374 16,061 16,090 15,507 15,603 16,185	12/28/2015 15,717 15,562 15,370 15,086 15,534 16,551 17,630 18,910 19,351 19,869 20,438 20,827 21,183 20,827 21,183 20,819 20,849 21,369	12/29/2015 16,186 15,378 14,942 14,801 15,283 16,136 17,096 18,018 18,310 18,701 19,318 19,566 19,468 18,986 18,724 18,979 19,072	12/30/2015 15,957 15,767 15,580 15,291 15,607 16,193 17,318 18,486 18,951 19,493 19,963 19,732 19,494 19,386 19,424 19,814	12/31/2015 15,108 14,554 14,451 14,336 14,444 14,699 15,290 16,298 17,051 17,558 17,617 17,782 17,804 17,481 17,031 16,693 16,506
Date Hour 200 300 400 500 600 700 800 900 1000 1200 1200 1300 1400 1500 1500 1700	12/16/2015 17,934 17,233 16,949 16,840 17,204 17,777 19,168 20,954 21,028 20,842 20,796 20,713 20,685 20,272 20,229 20,074 20,390 21,981	12/17/2015 17,611 16,968 16,762 16,792 17,174 18,014 19,699 21,589 21,967 22,054 22,163 22,054 22,147 22,037 21,845 21,642 22,310 23,606	12/18/2015 19,042 18,414 18,288 18,145 18,434 19,133 20,937 22,735 22,377 22,365 22,410 22,595 22,559 22,387 21,966 21,968 21,968 23,385	12/19/2015 17,816 17,120 16,756 16,695 16,920 17,450 17,904 19,036 19,037 19,445 19,758 19,702 19,519 19,094 18,445 18,240 18,670 20,273	12/20/2015 17,421 16,617 16,363 16,056 16,560 16,964 17,442 17,845 17,845 17,853 17,652 17,710 17,610 17,481 17,752 18,165 19,860	12/21/2015 17,518 16,858 16,848 16,917 17,243 18,055 19,662 21,238 21,938 22,415 22,112 21,864 21,238 21,988 22,415 22,112 21,864 21,238 21,148 21,238	12/22/2015 17,156 16,509 16,485 16,647 17,106 18,589 19,866 20,163 20,022 20,220 20,220 20,220 20,220 20,220 20,438 20,476 19,905 19,643 20,062 21,373	12/23/2015 17,677 16,880 16,780 16,681 17,427 18,614 19,994 20,368 20,494 20,422 20,428 20,306 20,031 19,559 19,304 20,030 20,035	12/24/2015 12,316 11,864 11,633 11,565 11,728 12,226 13,300 14,410 14,784 15,355 15,491 15,320 14,873 14,416 14,224 14,078 14,375 15,394	12/25/2015 12,398 11,887 11,696 11,634 11,698 11,634 11,698 11,880 12,056 12,079 13,173 13,744 14,044 13,992 13,425 12,967 12,435 12,189 12,395 13,689	12/26/2015 12,649 12,129 12,147 12,292 12,394 12,843 13,358 14,297 14,357 15,179 15,620 15,580 15,580 15,111 14,980 14,704 15,127 16,263	12/27/2015 13,240 12,462 12,162 12,320 12,311 12,480 12,995 13,881 14,206 14,606 14,606 14,680 15,374 16,061 16,090 15,507 15,603 16,185 17,319	12/28/2015 15,717 15,562 15,370 15,086 15,534 16,551 17,630 18,910 19,351 19,869 20,438 20,827 21,183 21,356 20,813 20,849 21,369 22,177	12/29/2015 16,186 15,378 14,942 14,801 15,283 16,136 17,096 18,018 18,310 18,701 19,318 19,566 19,468 18,986 18,724 18,979 19,072 20,169	12/30/2015 15,957 15,767 15,580 15,291 15,607 16,193 17,318 18,486 18,951 19,493 19,813 19,963 19,732 19,494 19,386 19,424 19,814 20,340	12/31/2015 15,108 14,554 14,451 14,336 14,444 14,699 15,290 16,298 17,051 17,558 17,617 17,782 17,804 17,481 17,031 16,693 16,506 17,196
Date Hour 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400 1500 1500 1500 1600 1700 8800 1900	12/16/2015 17,934 17,233 16,949 16,840 17,204 17,777 19,168 20,954 21,028 20,842 20,796 20,713 20,685 20,272 20,279 20,272 20,229 20,074 20,390 21,981 22,304	12/17/2015 17,611 16,968 16,762 16,792 17,174 18,014 19,699 21,589 21,967 22,054 22,163 22,096 22,147 22,037 21,845 21,642 22,310 23,606 23,601	12/18/2015 19,042 18,414 18,288 18,145 18,434 19,133 20,937 22,735 22,377 22,365 22,410 22,595 22,599 22,585 22,599 22,585 22,585 22,585 21,986 21,986 21,986 21,986 23,385 23,254	12/19/2015 17,816 17,120 16,675 16,695 16,920 17,450 17,904 19,036 19,307 19,445 19,758 19,702 19,519 19,094 18,445 18,240 18,670 20,273 20,811	12/20/2015 17,421 16,617 16,363 16,056 16,964 17,442 17,940 17,842 17,845 17,853 17,652 17,710 17,481 17,752 18,165 19,860 20,221	12/21/2015 17,518 16,858 16,848 16,917 17,243 18,055 19,652 21,238 21,988 21,988 22,415 22,112 21,646 21,238 21,119 21,418 22,375 22,510	12/22/2015 17,156 16,509 16,485 16,164 16,447 17,106 18,589 19,866 20,163 20,022 20,220 20,292 20,438 20,476 19,905 19,643 20,062 21,373 21,511	12/23/2015 17,677 16,880 16,780 16,681 17,427 18,614 19,994 20,368 20,494 20,422 20,428 20,030 20,036 20,031 19,559 19,304 20,030 20,705 20,518	12/24/2015 12,316 11,864 11,633 11,565 11,728 12,226 13,300 14,410 14,784 15,355 15,491 15,320 14,873 14,416 14,224 14,078 14,375 15,394 15,375	12/25/2015 12,398 11,897 11,634 11,634 11,638 11,880 12,056 12,779 13,173 13,774 14,044 13,992 13,425 12,967 12,435 12,189 12,395 13,689 14,192	12/26/2015 12,649 12,129 12,147 12,292 12,394 12,843 13,358 14,297 14,357 15,179 15,624 15,580 15,111 14,980 14,704 15,127 16,263 16,270	12/27/2015 13,240 12,462 12,162 12,320 12,311 12,480 12,995 13,881 14,206 14,800 15,374 16,061 14,880 15,374 16,061 16,090 15,507 15,603 16,185 17,319 17,662	12/28/2015 15,717 15,562 15,370 15,086 15,534 16,551 17,630 18,910 19,351 19,869 20,438 20,827 21,183 21,356 20,813 20,849 21,369 22,177 22,071	12/29/2015 16,186 15,378 14,942 14,801 15,283 16,136 17,096 18,018 18,310 18,701 19,318 19,566 19,468 18,986 19,468 18,979 19,072 20,169 20,217	12/30/2015 15,957 15,767 15,580 15,291 15,607 16,193 17,318 18,486 18,951 19,493 19,813 19,963 19,732 19,394 19,386 19,424 19,386 19,424 19,814 20,340 20,186	12/31/2015 15,108 14,554 14,451 14,336 14,444 14,699 15,290 16,298 17,051 17,558 17,617 17,782 17,804 17,481 17,031 16,693 16,506 17,196 17,458
Date Hour 100 200 300 500 600 700 800 900 1000 1200 1200 1300 1400 1500 1600 1500 1600 1700 1800 2000	12/16/2015 17,934 17,233 16,949 16,840 17,204 17,777 19,168 20,954 21,028 20,842 20,796 20,713 20,685 20,272 20,229 20,074 20,390 21,981 22,304 21,648	12/17/2015 17,611 16,968 16,762 17,174 18,014 19,699 21,589 21,967 22,054 22,163 22,096 22,147 22,037 21,845 21,642 22,310 23,661 23,661 23,664	12/18/2015 19,042 18,414 18,288 18,145 18,434 19,133 20,937 22,735 22,377 22,365 22,410 22,595 22,569 22,387 21,986 21,802 21,968 23,385 23,3254 22,745	12/19/2015 17,816 17,120 16,695 16,695 16,920 17,450 17,904 19,036 19,307 19,445 19,758 19,702 19,519 19,094 18,445 18,445 18,440 18,670 20,273 20,811 20,508	12/20/2015 17,421 16,617 16,363 16,056 16,560 16,964 17,442 17,910 17,842 17,845 17,692 17,710 17,692 17,710 17,481 17,752 18,165 19,860 20,231 20,156	12/21/2015 17,518 16,858 16,848 16,917 17,243 18,055 19,662 21,238 21,898 22,415 22,112 21,862 21,646 21,238 21,119 21,418 22,375 22,510 21,905	12/22/2015 17,156 16,509 16,485 16,164 16,447 17,106 18,589 19,866 20,163 20,022 20,292 20,438 20,476 19,905 19,643 20,062 21,373 21,511 21,247	12/23/2015 17,677 16,880 16,780 16,681 17,427 18,614 19,994 20,368 20,494 20,422 20,428 20,428 20,306 20,031 19,559 19,304 20,030 20,0705	12/24/2015 12,316 11,864 11,633 11,565 11,728 12,226 13,300 14,410 14,784 15,355 15,491 15,320 14,873 14,416 14,224 14,078 14,375 15,316 14,759	12/25/2015 12,398 11,897 11,639 11,639 11,639 12,056 12,779 13,173 13,744 14,044 13,992 13,425 12,957 12,435 12,189 12,395 13,689 14,192 14,297	12/26/2015 12,649 12,129 12,147 12,292 12,394 12,843 13,358 14,297 14,357 15,179 15,624 15,580 15,111 14,980 14,704 15,127 16,263 16,270 15,994	12/27/2015 13,240 12,462 12,162 12,320 12,311 12,480 12,995 13,881 14,206 14,606 14,680 15,374 16,061 16,061 16,061 16,061 15,507 15,603 16,185 17,319 17,662 17,807	12/28/2015 15,717 15,562 15,370 15,086 15,534 16,551 17,630 18,910 19,351 19,869 20,438 20,837 21,183 20,849 21,356 22,071 22,071 21,352	12/29/2015 16,186 15,378 14,942 14,801 15,283 16,136 17,096 18,018 18,310 18,701 19,318 19,566 19,468 18,929 19,072 20,167 19,598	12/30/2015 15,957 15,767 15,580 15,291 15,607 16,193 17,318 18,486 18,951 19,493 19,813 19,963 19,732 19,494 19,386 19,424 19,814 20,340 20,186 19,964	12/31/2015 15,108 14,554 14,451 14,336 14,444 14,699 15,290 16,298 17,051 17,558 17,617 17,782 17,804 17,481 17,031 16,693 16,506 17,196 17,458 17,053
Date Hour 100 200 300 400 500 600 700 800 900 1000 1200 1300 1300 1400 1500 1500 1600 1700 1800 1700 2000 2100	12/16/2015 17,934 17,233 16,949 16,840 17,204 17,777 19,168 20,954 21,028 20,842 20,796 20,713 20,685 20,272 20,279 20,074 20,390 21,981 22,304 21,648 21,690	12/17/2015 17,611 16,968 16,762 16,792 17,174 18,014 19,699 21,589 21,967 22,054 22,163 22,096 22,147 22,037 21,845 21,642 22,310 23,606 23,621 23,084 23,004	12/18/2015 19,042 18,414 18,288 18,145 18,434 19,133 20,937 22,735 22,377 22,365 22,410 22,595 22,569 22,387 21,986 21,968 23,385 23,264 22,745 22,745	12/19/2015 17,816 17,120 16,655 16,6920 17,450 17,904 19,036 19,037 19,445 19,702 19,519 19,094 18,445 18,240 18,670 20,273 20,811 20,508 20,218	12/20/2015 17,421 16,867 16,363 16,056 16,560 16,964 17,442 17,910 17,842 17,845 17,853 17,692 17,710 17,610 17,481 17,752 18,165 19,860 20,231 20,156 19,706	12/21/2015 17,518 16,858 16,848 16,917 17,243 18,055 19,662 21,238 21,898 22,415 22,112 21,862 21,998 22,415 22,112 21,862 21,646 21,238 21,119 21,418 22,375 22,510 21,905 21,417	12/22/2015 17,156 16,509 16,485 16,447 17,106 18,589 19,866 20,163 20,022 20,292 20,438 20,438 20,476 19,905 19,643 20,062 21,373 21,511 21,247 21,250	12/23/2015 17,677 16,880 16,780 16,681 17,427 18,614 19,994 20,368 20,494 20,422 20,428 20,368 20,494 20,422 20,428 20,306 20,031 19,559 19,304 20,030 20,705 20,518 19,675 19,179	12/24/2015 12,316 11,864 11,633 11,565 11,728 12,226 13,300 14,410 14,784 15,355 15,491 15,320 14,873 14,416 14,224 14,078 14,375 15,394 15,315 14,759 14,542	12/25/2015 12,398 11,897 11,696 11,634 11,698 11,880 12,056 12,779 13,173 13,744 14,044 13,992 13,425 12,967 12,435 12,189 12,395 13,689 14,192 14,297 14,407	12/26/2015 12,649 12,129 12,147 12,292 12,394 12,843 13,358 14,297 14,357 15,179 15,624 15,580 15,111 14,980 14,704 15,127 16,263 16,270 15,994 15,547	12/27/2015 13,240 12,462 12,162 12,320 12,311 12,480 12,995 13,881 14,206 14,606 14,606 14,680 15,374 16,061 16,090 15,507 15,503 16,185 17,319 17,662 17,807 17,579	12/28/2015 15,717 15,562 15,370 15,584 16,551 17,630 18,910 19,351 19,869 20,438 20,827 21,183 20,849 21,356 20,849 22,177 22,071 21,352 20,641	12/29/2015 16,186 15,378 14,942 14,801 15,283 16,136 17,096 18,018 18,310 18,701 19,318 19,566 19,468 18,986 18,724 18,979 19,072 20,169 20,217 19,598 19,297	12/30/2015 15,957 15,767 15,580 15,291 15,607 16,193 17,318 18,486 18,951 19,493 19,963 19,732 19,494 19,386 19,424 19,814 20,340 20,186 19,964	12/31/2015 15,108 14,554 14,451 14,336 14,444 14,699 15,290 16,298 17,051 17,558 17,617 17,782 17,804 17,481 17,031 16,693 16,506 17,196 17,458 17,053 16,669
Date Hour 100 200 300 400 500 600 700 800 900 1000 1000 1200 1200 1300 1500 1500 1500 1600 1700 1800 1900 2000 2100 2200	12/16/2015 17,934 17,233 16,949 16,840 17,204 17,777 19,168 20,954 21,028 20,954 21,028 20,796 20,713 20,685 20,272 20,229 20,074 20,390 21,981 22,304 21,648 21,690 21,126	12/17/2015 17,611 16,968 16,762 16,792 17,174 18,014 19,699 21,589 21,967 22,054 22,056 22,147 22,096 22,147 22,096 22,147 22,096 22,147 22,096 22,147 22,096 22,147 22,096 22,147 22,096 22,096 22,147 21,845 21,642 22,030 23,602 23,602 23,004 23,004 23,004 23,004 23,004	12/18/2015 19,042 18,414 18,288 18,145 18,434 19,133 20,937 22,735 22,377 22,735 22,377 22,595 22,410 22,595 22,569 22,589 22,589 22,589 22,589 22,589 22,585 22,410 22,595 22,585 22,410 22,595 22,585 22,585 22,585 22,585 22,656 21,921	12/19/2015 17,816 17,120 16,695 16,920 17,450 17,904 19,036 19,307 19,445 19,702 19,519 19,094 18,445 18,240 18,670 20,273 20,811 20,508 20,218 19,849	12/20/2015 17,421 16,617 16,363 16,096 16,560 16,964 17,442 17,910 17,842 17,845 17,853 17,662 17,710 17,610 17,481 17,752 18,165 19,860 20,231 20,156 19,706 19,708	12/21/2015 17,518 16,858 16,848 16,917 17,243 18,055 19,662 21,238 21,938 21,938 22,415 22,112 21,646 21,238 21,119 21,418 22,510 21,905 21,417 20,404	12/22/2015 17,156 16,509 16,485 16,164 16,447 17,106 18,589 19,866 20,163 20,022 20,220 20,292 20,438 20,476 19,905 19,643 20,062 21,373 21,511 21,247 21,250 20,833	12/23/2015 17,677 16,880 16,780 16,681 17,427 18,614 19,994 20,368 20,494 20,428 20,428 20,031 19,559 19,304 20,031 19,559 19,304 20,031 19,559 19,304 20,031 19,559 19,304 20,518 19,675 19,179 18,389	12/24/2015 12,316 11,864 11,633 11,565 11,728 12,226 13,300 14,410 14,784 15,355 15,491 15,320 14,873 14,873 14,873 14,416 14,224 14,078 14,375 15,394 15,315 14,542 14,542	12/25/2015 12,398 11,887 11,634 11,634 11,638 12,056 12,779 13,173 13,774 14,044 13,992 13,425 12,967 12,435 12,189 12,395 13,689 14,192 14,297 14,407 14,356	12/26/2015 12,649 12,129 12,147 12,292 12,394 12,843 13,358 14,297 14,357 15,179 15,819 15,624 15,580 15,111 14,980 14,704 15,127 16,263 16,270 15,547 15,070	12/27/2015 13,240 12,462 12,320 12,311 12,480 12,995 13,881 14,206 14,606 14,606 14,606 14,609 15,507 15,603 16,185 17,319 17,662 17,807 17,579 17,608	12/28/2015 15,717 15,562 15,370 15,086 15,534 16,551 17,630 18,910 19,351 19,869 20,438 20,827 21,183 20,849 21,356 20,813 20,849 21,369 22,177 22,071 21,352 20,641 19,753	12/29/2015 16,186 15,378 14,942 14,801 15,283 16,136 17,096 18,018 18,310 18,701 19,318 19,566 19,468 18,986 18,724 18,979 19,072 20,169 20,217 19,598 19,297 18,909	12/30/2015 15,957 15,767 15,580 15,291 15,607 16,193 17,318 18,486 18,951 19,453 19,813 19,963 19,732 19,494 19,386 19,424 19,386 19,424 19,814 20,340 20,186 19,964 19,964	12/31/2015 15,108 14,554 14,451 14,336 14,444 14,699 15,290 16,298 17,051 17,558 17,617 17,782 17,804 17,481 17,031 16,693 16,506 17,196 17,458 17,053 16,669 15,692
Date Hour 100 200 300 500 600 700 800 900 1000 1200 1200 1200 1300 1400 1500 1600 1700 1800 1800 2000 2200 2200 2300	12/16/2015 17,934 17,233 16,949 16,840 17,204 17,777 19,168 20,954 21,028 20,842 20,796 20,713 20,685 20,272 20,229 20,074 20,390 21,981 22,304 21,648 21,690 21,126 19,602	12/17/2015 17,611 16,968 16,762 16,792 17,174 18,014 19,699 21,967 22,054 22,163 22,096 22,147 22,037 21,845 21,642 22,310 23,606 23,621 23,004 23,004 23,004 23,004 23,004 23,004	12/18/2015 19,042 18,414 18,288 18,145 18,434 19,133 20,937 22,365 22,377 22,365 22,377 21,986 21,802 21,986 21,802 21,986 23,385 23,254 22,745 22,265 22,265 22,265 23,254 22,745 22,265	12/19/2015 17, 816 17, 120 16, 695 16, 920 17, 450 17, 904 19, 036 19, 307 19, 445 19, 758 19, 702 19, 519 19, 094 18, 445 18, 240 18, 670 20, 273 20, 811 20, 508 20, 218 19, 849 19, 052	12/20/2015 17,421 16,617 16,363 16,056 16,560 16,964 17,442 17,845 17,842 17,845 17,853 17,692 17,710 17,481 17,752 18,165 19,860 20,231 20,156 19,361 18,855	12/21/2015 17,518 16,858 16,848 16,917 17,243 18,055 19,652 21,238 21,898 21,898 21,898 22,415 22,112 21,862 21,238 21,238 21,119 21,418 22,375 22,510 21,905 21,417 20,404 19,203	12/22/2015 17,156 16,509 16,485 16,164 16,447 17,106 18,589 19,866 20,163 20,022 20,292 20,438 20,476 19,905 19,643 20,062 21,373 21,511 21,247 21,250 20,833 19,652	12/23/2015 17,677 16,880 16,780 16,681 17,427 18,614 19,994 20,368 20,494 20,422 20,428 20,306 20,031 19,555 19,555 19,575 19,675 19,675 19,675 19,675 19,675	12/24/2015 12,316 11,864 11,633 11,565 11,728 12,226 13,300 14,410 14,784 15,355 15,491 15,320 14,873 14,246 14,275 15,394 15,315 14,759 14,542 14,256 13,906	12/25/2015 12,398 11,897 11,698 11,698 11,698 11,698 12,056 12,779 13,173 13,744 14,044 13,992 13,425 12,435 12,435 12,189 12,395 13,689 14,192 14,297 14,407 14,305	12/26/2015 12,649 12,129 12,147 12,292 12,394 12,843 13,358 14,297 14,357 15,179 15,624 15,580 15,111 14,980 14,704 15,127 16,263 16,270 15,994 15,547 15,070 14,413	12/27/2015 13,240 12,462 12,162 12,320 12,311 12,480 12,995 13,881 14,206 14,860 15,374 16,061 16,090 15,507 15,503 16,185 17,319 17,662 17,807 17,579 17,608 16,774	12/28/2015 15,717 15,562 15,370 15,086 15,534 16,551 17,630 18,910 19,351 19,869 20,438 20,827 21,183 20,813 20,813 20,813 20,849 22,177 22,071 21,352 20,641 19,753 18,326	12/29/2015 16,186 15,378 14,942 14,801 15,283 16,136 17,096 18,018 18,310 18,701 19,318 19,566 19,468 18,929 19,072 20,169 20,217 19,598 19,297 18,909 17,825	12/30/2015 15,957 15,767 15,580 15,291 15,607 16,193 17,318 18,486 18,951 19,493 19,813 19,963 19,732 19,494 19,386 19,424 19,386 19,424 19,814 20,340 20,186 19,964 19,964 19,964 19,964 19,964	12/31/2015 15,108 14,554 14,451 14,336 14,444 14,699 15,290 16,298 17,051 17,558 17,617 17,782 17,804 17,481 17,031 16,693 16,506 17,196 17,458 17,053 16,669 15,892 15,418
Date Hour 100 200 300 400 500 600 700 800 900 1000 1000 1100 1200 1300 1400 1500 1500 1600 1700 1800 1900 2000 2100 2200	12/16/2015 17,934 17,233 16,949 16,840 17,204 17,777 19,168 20,954 21,028 20,954 21,028 20,796 20,713 20,685 20,272 20,229 20,074 20,390 21,981 22,304 21,648 21,690 21,126	12/17/2015 17,611 16,968 16,762 16,792 17,174 18,014 19,699 21,589 21,967 22,054 22,056 22,147 22,096 22,147 22,096 22,147 22,096 22,147 22,096 22,147 22,096 22,147 22,096 22,147 22,096 22,096 22,147 21,845 21,642 22,030 23,602 23,602 23,004 23,004 23,004 23,004 23,004	12/18/2015 19,042 18,414 18,288 18,145 18,434 19,133 20,937 22,735 22,377 22,735 22,377 22,595 22,410 22,595 22,569 22,589 22,589 22,589 22,589 22,589 22,585 22,410 22,595 22,585 22,410 22,595 22,585 22,585 22,585 22,585 22,656 21,921	12/19/2015 17,816 17,120 16,695 16,920 17,450 17,904 19,036 19,307 19,445 19,702 19,519 19,094 18,445 18,240 18,670 20,273 20,811 20,508 20,218 19,849	12/20/2015 17,421 16,617 16,363 16,096 16,560 16,964 17,442 17,910 17,842 17,845 17,853 17,662 17,710 17,610 17,481 17,752 18,165 19,860 20,231 20,156 19,706 19,708	12/21/2015 17,518 16,858 16,848 16,917 17,243 18,055 19,662 21,238 21,938 21,938 22,415 22,112 21,646 21,238 21,119 21,418 22,510 21,905 21,417 20,404	12/22/2015 17,156 16,509 16,485 16,164 16,447 17,106 18,589 19,866 20,163 20,022 20,220 20,292 20,438 20,476 19,905 19,643 20,062 21,373 21,511 21,247 21,250 20,833	12/23/2015 17,677 16,880 16,780 16,681 17,427 18,614 19,994 20,368 20,494 20,428 20,428 20,031 19,559 19,304 20,031 19,559 19,304 20,031 19,559 19,304 20,031 19,559 19,304 20,518 19,675 19,179 18,389	12/24/2015 12,316 11,864 11,633 11,565 11,728 12,226 13,300 14,410 14,784 15,355 15,491 15,320 14,873 14,873 14,873 14,416 14,224 14,078 14,375 15,394 15,315 14,542 14,542	12/25/2015 12,398 11,887 11,634 11,634 11,638 12,056 12,779 13,173 13,774 14,044 13,992 13,425 12,967 12,435 12,189 12,395 13,689 14,192 14,297 14,407 14,356	12/26/2015 12,649 12,129 12,147 12,292 12,394 12,843 13,358 14,297 14,357 15,179 15,819 15,624 15,580 15,111 14,980 14,704 15,127 16,263 16,270 15,547 15,070	12/27/2015 13,240 12,462 12,320 12,311 12,480 12,995 13,881 14,206 14,606 14,606 14,606 14,609 15,507 15,603 16,185 17,319 17,662 17,807 17,579 17,608	12/28/2015 15,717 15,562 15,370 15,086 15,534 16,551 17,630 18,910 19,351 19,869 20,438 20,827 21,183 20,849 21,356 20,813 20,849 21,369 22,177 22,071 21,352 20,641 19,753	12/29/2015 16,186 15,378 14,942 14,801 15,283 16,136 17,096 18,018 18,310 18,701 19,318 19,566 19,468 18,986 18,724 18,979 19,072 20,169 20,217 19,598 19,297 18,909	12/30/2015 15,957 15,767 15,580 15,291 15,607 16,193 17,318 18,486 18,951 19,453 19,813 19,963 19,732 19,494 19,386 19,424 19,386 19,424 19,814 20,340 20,186 19,964 19,964	12/31/2015 15,108 14,554 14,451 14,336 14,444 14,699 15,290 16,298 17,051 17,558 17,617 17,782 17,804 17,481 17,031 16,693 16,506 17,196 17,458 17,053 16,669 15,892
Date Hour 100 200 300 500 600 700 800 900 1000 1200 1200 1200 1300 1400 1500 1600 1500 1600 1700 2000 2100 2200 2300	12/16/2015 17,934 17,233 16,949 16,840 17,204 17,777 19,168 20,954 21,028 20,842 20,796 20,713 20,685 20,272 20,229 20,074 20,390 21,981 22,304 21,648 21,690 21,126 19,602	12/17/2015 17,611 16,968 16,762 16,792 17,174 18,014 19,699 21,967 22,054 22,163 22,096 22,147 22,037 21,845 21,642 22,310 23,606 23,621 23,004 23,004 23,004 23,004 23,004 23,004	12/18/2015 19,042 18,414 18,288 18,145 18,434 19,133 20,937 22,365 22,377 22,365 22,377 21,986 21,802 21,986 21,802 21,986 23,385 23,254 22,745 22,265 22,265 22,265 23,254 22,745 22,265	12/19/2015 17, 816 17, 120 16, 695 16, 920 17, 450 17, 904 19, 036 19, 307 19, 445 19, 758 19, 702 19, 519 19, 094 18, 445 18, 240 18, 670 20, 273 20, 811 20, 508 20, 218 19, 849 19, 052	12/20/2015 17,421 16,617 16,363 16,056 16,560 16,964 17,442 17,845 17,842 17,845 17,853 17,692 17,710 17,481 17,752 18,165 19,860 20,231 20,156 19,361 18,855	12/21/2015 17,518 16,858 16,848 16,917 17,243 18,055 19,652 21,238 21,898 21,898 21,898 22,415 22,112 21,862 21,238 21,238 21,119 21,418 22,375 22,510 21,905 21,417 20,404 19,203	12/22/2015 17,156 16,509 16,485 16,164 16,447 17,106 18,589 19,866 20,163 20,022 20,292 20,438 20,476 19,905 19,643 20,062 21,373 21,511 21,247 21,250 20,833 19,652	12/23/2015 17,677 16,880 16,780 16,681 17,427 18,614 19,994 20,368 20,494 20,422 20,428 20,306 20,031 19,555 19,555 19,575 19,675 19,675 19,675 19,675 19,675	12/24/2015 12,316 11,864 11,633 11,565 11,728 12,226 13,300 14,410 14,784 15,355 15,491 15,320 14,873 14,246 14,275 15,394 15,315 14,759 14,542 14,256 13,906	12/25/2015 12,398 11,897 11,698 11,698 11,698 11,698 12,056 12,779 13,173 13,744 14,044 13,992 13,425 12,435 12,435 12,189 12,395 13,689 14,192 14,297 14,407 14,305	12/26/2015 12,649 12,129 12,147 12,292 12,394 12,843 13,358 14,297 14,357 15,179 15,624 15,580 15,111 14,980 14,704 15,127 16,263 16,270 15,994 15,547 15,070 14,413	12/27/2015 13,240 12,452 12,320 12,311 12,480 12,995 13,881 14,206 14,800 15,374 16,061 16,090 15,507 15,603 16,185 17,319 17,662 17,807 17,679 17,679 17,679 17,679 17,608 16,774 16,174	12/28/2015 15,717 15,562 15,370 15,086 15,534 16,551 17,630 18,910 19,351 19,869 20,438 20,827 21,183 20,813 20,813 20,813 20,849 22,177 22,071 21,352 20,641 19,753 18,326	12/29/2015 16,186 15,378 14,942 14,801 15,283 16,136 17,096 18,018 18,310 18,701 19,318 19,566 19,468 18,988 18,989 19,072 20,169 20,217 19,598 19,297 18,909 17,825 16,803 431,782	12/30/2015 15,957 15,767 15,580 15,291 15,607 16,193 17,318 18,486 18,951 19,493 19,813 19,963 19,732 19,494 19,386 19,424 19,386 19,424 19,814 20,340 20,186 19,964 19,964 19,964 19,964 19,964	12/31/2015 15,108 14,554 14,451 14,336 14,444 14,699 15,290 16,298 17,051 17,558 17,617 17,782 17,804 17,481 17,031 16,693 16,506 17,196 17,458 17,053 16,669 15,892 15,818





Omega Joint Venture Two	INVOICE NUMBER:	191273
1111 Schrock Rd, Suite 100	INVOICE DATE:	1/8/2016
COLUMBUS, OHIO 43229	DUE DATE:	1/19/2016
PHONE: (614) 540-1111	TOTAL AMOUNT DUE:	\$416.57
FAX: (614) 540-1078	CUSTOMER NUMBER:	5020
	CUSTOMER P.O. #:	
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 OMEGA JV 2

<u>OMEGA JV2 POWER INVOICE -</u>	<u>December, 2015</u>					DO NOT PAY - AMOUNT AUTOMATICALLY DEDUCTED FROM YOUR BANK ACCOUNT EMAIL BILLING@AMPPARTNERS.ORG WITH ANY QUESTIONS	
FIXED RATE CHARGE:	264	kW	*	\$1.5	55	/ kW =	\$407.95
ENERGY CHARGE: SERVICE FEES: Fuel Costs that were not recovered through	0 0 Energy Sales to Ma	kWh kWh r <mark>ket</mark>					\$0.00 \$0.00 \$8.63

TOTAL CHARGES

OHIO MUNICIPAL ELECTRIC GENERATING ASSOCIATION		INVOICE NUMBER:	191171 1/4/2016
1111 Schrock Rd, Suite 100 Columbus, Ohio 43229	DO NOT PAY - AMOUNT AUTOMATICALLY DEDUCTED FROM YOUR BANK ACCOUNT	DUE DATE:	1/14/2016
Phone: (614) 540-1111	EMAIL BILLING@AMPPARTNERS.ORG	TOTAL AMOUNT DUE:	\$77,966.90
Fax: (614) 540-1078	WITH ANY QUESTIONS	CUSTOMER NUMBER:	5020
City of Na Gregory J. F	boleon Heath, Finance Director	CUSTOMER P.O. NUMBER:	BL980397
255 W. Rive	erview Ave., P.O. Box 151 Dhio 43545-0151	MAKE CHECKS PAYABLE TO:	OMEGA JV5

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

FOR THE MONTH/YEAR OF: December, 2015

DEMAND CHARGES:

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

Base Operating Expense Demand Charge: Seca Associated with JV5.	\$7.894200 \$0.000000	/ kW * / kW *	3,088 kW = 3,088 kW =	\$24,377.29 \$0.00
TOTAL DEMAND CHARGES:	\$7.894200	/ kW *	3,088 kW =	\$24,377.29
ENERGY CHARGES:				
JV5 Repl. Pwr. & Variable (Budgeted Rate):	\$0.023325	/ kWh *	2,297,472 kWh =	\$53,589.61
JV5 Fuel Cost (Actual Expense):	\$0.000000	/ kWh *	2,297,472 kWh =	\$0.00
TOTAL ENERGY CHARGES:	\$0.023325	/ kWh *	2,297,472 kWh =	\$53,589.61

SUB-TOTAL

\$77,966.90

Total OMEGA JV5 Invoice:

\$77,966.90

COMEGAJUS 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	INVOICE NUMBER: INVOICE DATE: DUE DATE: TOTAL AMOUNT DUE: CUSTOMER NUMBER:	191213 1/4/2016 1/14/2016 \$44,643.82 5020
255 W. River	oleon eath, Finance Director view Ave., P.O. Box 151 nio 43545-0151	CUSTOMER P.O. NUMBER: MAKE CHECKS PAYABLE TO:	BL980397 OMEGA JV5
Debt Service - OMEGA JV	AND RETURN YE	NVOICE NUMBER ON REMITTANCE LLOW INVOICE COPY.	
Financing CHARGES: Debt Service	\$14.45719	6 / kW *	3,088 kW = \$44,643.82

Total OMEGA JV5 Financing Invoice:

\$44,643.82

* To avoid a delayed payment charge, payment must be made to provide available funds for use by OMEGA-JV5 on or before the due date.

Mailing Address :

OMEGA JV5/AMP, Inc. Dept. L614 Columbus, OH 43260 Wire or ACH Transfer Information : Huntington National Bank Columbus, Ohio Account No. 0189-2204055 ABA: #044 000024

AMOUNT

 Entity Bank Lockbox Deposit

 65
 \$44,643.82

 OMEGA JV5
 0189-2204055

\$44,643.82

City of Napoleon - JV6 refund

From: "Bob Barnes" <bbarnes@amppartners.org> To: "Mr. Greg Heath" <gheath@napoleonohio.com> Cc: "Peggy Behrman" <pbehrman@amppartners.org>

Hello Greg,

Per our conversation, AMP will send City of Napoleon \$78,920.11 via ACH for their share of the JV6 refund due to the participants. The funds will be in your bank account by 12/31/15.

Let me know if you have any questions.

Regards, Bob

Bob Barnes, CTP, AAP Assistant Vice President, Treasury & Cash Management American Municipal Power, Inc. 1111 Schrock Road Columbus, Ohio 43229 Office: (614) 540-0841 Cell: (614) 395-4850 bbarnes@amppartners.org



http://mail.napoleonohio.com:32000/WEBMAIL/old/?sid=wm-568287c37da72147573394 12/29/2015

12/29/2015 11:18 AM



AMERICAN MUNICIPAL POWER, INC.

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

INVOICE NUMBER:	191238
INVOICE DATE:	1/4/2016
DUE DATE:	1/18/2016
TOTAL AMOUNT DUE:	\$1,576.48
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 2016

Electric Fixed	300 kW * 5.25 per kW-Month		Total
	January, 2016 -	Electric Fixed	\$1,576.48

AMOUNT DUE FOR :

\$1,576.48

FEBRUARY, 2016 2016 - FEBRUARY BILLING WITH JANUARY Class and/or Ra Schedule Co Residential (Dom-In) E Residential (Dom-In) E Residential (Dom-In) F Residential (Dom-In) A Residential (Dom-In - All Electric) E Residential (Rural-Out) E Residential (Rural-Out) E Residential (Rural-Out - All Electric) E Residential (Rural-Out - No Dmd) E Commercial (1 Ph-Out - No Dmd) E Commercial (1 Ph-Out - No Dmd) E Commercial (1 Ph-Out - No Dmd) E Commercial (3 Ph-Out - No Dmd) E	Atde	DATA B Jan-16 # of Bills 3,336 10 603 1 3,950 756 4 4 383 2 2 16 16 16 9 9 9 756 4 4 383 2 2 16 16 16 9 9 9 7 5 6 6 4 4 3 8 3 2 2 16 10 7 5 6 6 3,950 7 5 6 6 3,950 7 7 5 6 6 3,950 7 7 5 6 6 3,950 7 7 5 6 6 3,950 7 7 5 6 6 3,950 7 7 5 6 6 3,950 7 7 5 6 6 3,950 7 7 5 6 6 3,950 7 7 5 6 6 3,950 7 7 5 6 6 3,950 7 7 7 5 6 6 3,950 7 7 7 5 6 6 3,950 7 7 7 5 6 7 7 7 7 7 6 7 7 7 7 7 7 7 7 7	LLING UNITS Jan-16 (kWh Usage) 1,861,416 4,037 469,722 481 2,335,656 692,545 2,902 425,593 2,005 425,593 2,005 88,686 13,792 1,235,523 13,794 8,154 51,948 30,192 305,280	Jan-16 Billed \$195,822.68 \$441.29 \$47,982.01 \$51.43 \$76,216.42 \$327.89 \$46,020.44 \$218.79 \$9,894.24 \$1,455.82 \$134,133.60 \$5,800.34 \$1,432.14 \$7,232.48 \$36,491.09 \$3,885.43	0 0 550 115 665 14 0	\$0.1101 \$0.1130 \$0.1081 \$0.1091 \$0.1003 \$0.1056 \$0.1086 \$0.1324 \$0.1324	Average \$0.1064 \$0.1051 \$0.1055 \$0.1052 \$0.1123 \$0.1123 \$0.1172 \$0.1172 \$0.1172 \$0.1172 \$0.1172 \$0.1172 \$0.1172 \$0.1172 \$0.1172 \$0.1172 \$0.1168 \$0.1060 \$0.1060 \$0.1051 \$0.1051 \$0.1051 \$0.1172	Feb-15 # of Bills 3,343 10 609 1 1 3,963 4 389 2 2 15 9 9 1,162 73 43	Feb-15 (<u>kWh Usace</u>) 2,460,842 5,535 759,081 602 3,226,060 920,136 4,010 637,576 3,047 81,985 12,102 1,658,856 16,58,856 51,946 10,842	Feb-15 Billed \$277,049.48 \$\$88.05 \$82,901.38 \$68.88 \$360,657.79 \$107,806.83 \$477.81 \$73,427.20 \$352,55 \$9,062.40 \$1,410.41 	\$0.1153 \$0.1092 \$0.1144 \$0.1172 \$0.1172 \$0.1192 \$0.1192 \$0.1157 \$0.1105 \$0.1165	Mar-15 # of Bills 3,339 100 6055 1 3,955 744 4 3888 22 166 9 9 1,163 1,163	5,285 856,052 584 919,993 2,956 661,524 3,211 34,185 12,137 1,634,006 53,616	Mar-15 Billed \$275,884.01 \$596.76 \$90,527.43 \$65.32 \$367,073.52 \$105,142.88 \$354.25 \$74,112.64 \$354.25 \$74,112.64 \$354.20 \$3,784.23 \$1,378.93 	Cost / kWH For Month \$0.1095 \$0.1129 \$0.1057 \$0.1118 \$0.1086 \$0.1143 \$0.1198 \$0.1125 \$0.1125 \$0.1125 \$0.1125 \$0.1133 \$0.1133 \$0.1133 \$0.1353 \$0.1662
Class and/or Ra Schedule Co Residential (Dom-In) w/Ecosmart E1 Residential (Dom-In - All Electric) E Residential (Dom-In - All Electric) E Residential (Dom-In - All Electric) E Total Residential (Domestic) E Residential (Rural-Out) W/Ecosmart E Residential (Rural-Out - All Electric) E Residential (Rural-Out - All Electric) E Residential (Rural-Out - All Electric) w/Ecosmart E Residential (Rural-Out - All Electric) w/Ecosmart E Residential (Rural-Out - All Electric) w/Ecosmart E Residential (Rural-Out - All Electric w/Dm E Total Residential (Rural-Out w/Dmd) E Commercial (1 Ph-In - No Dmd) EC Commercial (1 Ph-Out - No Dmd) EC Commercial (1 Ph-Out - w/Demand) EC Commercial (1 Ph-Out - No Dmd) EC Total Commercial (1 Ph) w/Demand EC Commercial (3 Ph-Out - N/Dm Asub-St.C EC Commercial (3 Ph-Out - w/Dmd.&Sub-St.C EC Commercial (3 Ph-Out - w/Dmd.&Sub-St.C EC Commercia	Atde	Jan-16 # of Bills 3,336 10 10 10 10 10 10 10 10 10 10	Jan-16 (kWh Usage) 1,861,416 4,037 469,722 481 	Billed \$195,822.68 \$441.29 \$47,982.01 \$51.43 	of Demand 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 550 665 14 0	For Month \$0.1052 \$0.1093 \$0.1093 \$0.1021 \$0.1021 \$0.1021 \$0.1021 \$0.1046 \$0.1046 \$0.1046 \$0.1046 \$0.1046 \$0.1046 \$0.1031 \$0.1031 \$0.1033 \$0.1091 \$0.1056 \$0.1086 \$0.1324 \$0.1324	Prior 12 Mo <u>Average</u> \$0.1064 \$0.1086 \$0.1051 \$0.1058 \$0.1025 \$0.1123 \$0.1123 \$0.1123 \$0.1123 \$0.1123 \$0.1123 \$0.1123 \$0.1123 \$0.1123 \$0.1125 \$0.1060 \$0.1089 \$0.1115 \$0.1340 \$0.1340 \$0.1340	# of <u>Bills</u> 3,343 10 609 1 3,963 743 4 389 2 155 9 1,162 73	(kWh Usage) 2,460,842 5,535 759,081 602 	Billed \$277,049.48 \$638.05 \$82,901.38 \$68.88 \$360,657.79 \$107,806.83 \$477.81 \$73,427.20 \$352.55 \$9,062.40 \$1,410.41 \$192,537.20 \$7,203.69	For Month \$0.1126 \$0.1153 \$0.1092 \$0.1144 \$0.1172 \$0.1172 \$0.1172 \$0.1192 \$0.1152 \$0.1157 \$0.1165 \$0.1161 \$0.1161 \$0.1387	# of Bills 3,339 10 6055 1 1 3,955 744 4 3888 22 166 99 	(kWh Usage) 2,519,592 5,285 586,052 584	Billed \$275,884.01 \$596.76 \$90,527.43 \$65.32 	For Month \$0.1095 \$0.1129 \$0.1129 \$0.1057 \$0.1057 \$0.1057 \$0.1086 \$0.1086 \$0.1120 \$0.1120 \$0.1125 \$0.1125 \$0.1126 \$0.1125 \$0.1133 \$0.1133
Schedule Co. Residential (Dom-In) WEcosmart E1 Residential (Dom-In) - All Electric) E Residential (Dom-In - All Electric) E Residential (Dom-In - All Electric) E Total Residential (Domestic) Image: Commercial (Rural-Out) Residential (Rural-Out) w/Ecosmart ER Residential (Rural-Out) w/Ecosmart ER Residential (Rural-Out - All Electric) EF Residential (Rural-Out - All Electric) w/Ecosmart ER Residential (Rural-Out - All Electric w/Dm) EF Residential (Rural-Out - All Electric w/Dm) EF Residential (Rural-Out - No Dmd) EC Commercial (1 Ph-In - No Dmd) EC Commercial (1 Ph-Out - No Dmd) EC Commercial (1 Ph-Out - w/Demand) EC Commercial (3 Ph-Out - No Dmd) EC Commercial (3 Ph-In - w/Demand) EC Commercial (3 Ph-In - w	ate	# of Bills 3,336 10 603 1 	(kWh Usage) 1,861,416 4,037 466,722 481 	Billed \$195,822.68 \$441.29 \$47,982.01 \$51.43 	of Demand 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 550 665 14 0	For Month \$0.1052 \$0.1093 \$0.1093 \$0.1021 \$0.1021 \$0.1021 \$0.1021 \$0.1046 \$0.1046 \$0.1046 \$0.1046 \$0.1046 \$0.1046 \$0.1031 \$0.1031 \$0.1033 \$0.1091 \$0.1056 \$0.1086 \$0.1324 \$0.1324	Prior 12 Mo <u>Average</u> \$0.1064 \$0.1086 \$0.1051 \$0.1058 \$0.1025 \$0.1123 \$0.1123 \$0.1123 \$0.1123 \$0.1123 \$0.1123 \$0.1123 \$0.1123 \$0.1123 \$0.1125 \$0.1060 \$0.1089 \$0.1115 \$0.1340 \$0.1340 \$0.1340	# of <u>Bills</u> 3,343 10 609 1 3,963 743 4 389 2 155 9 1,162 73	(kWh Usage) 2,460,842 5,535 759,081 602 	Billed \$277,049.48 \$638.05 \$82,901.38 \$68.88 \$360,657.79 \$107,806.83 \$477.81 \$73,427.20 \$352.55 \$9,062.40 \$1,410.41 \$192,537.20 \$7,203.69	For Month \$0.1126 \$0.1153 \$0.1092 \$0.1144 \$0.1172 \$0.1172 \$0.1172 \$0.1192 \$0.1152 \$0.1157 \$0.1165 \$0.1161 \$0.1161 \$0.1387	# of Bills 3,339 10 6055 1 1 3,955 744 4 3888 22 166 99 	(kWh Usage) 2,519,592 5,285 586,052 584	Billed \$275,884.01 \$596.76 \$90,527.43 \$65.32 	For Month \$0.1095 \$0.1129 \$0.1129 \$0.1057 \$0.1057 \$0.1057 \$0.1086 \$0.1086 \$0.1120 \$0.1120 \$0.1125 \$0.1125 \$0.1126 \$0.1125 \$0.1133 \$0.1133
Schedule Co Residential (Dom-In) E Residential (Dom-In) w/Ecosmart E1 Residential (Dom-In - All Electric) E Res.(Dom-In - All Electric) E Res.(Dom-In - All Electric) E Res.(Dom-In - All Electric) E Total Residential (Rural-Out) Kessomart Residential (Rural-Out) w/Ecosmart ER Residential (Rural-Out - All Electric) EF Residential (Rural-Out - All Electric) EF Residential (Rural-Out - All Electric w/Dm) EF Residential (Rural-Out - All Electric w/Dm) EF Residential (Rural-Out - Nall Electric w/Dm) EF Commercial (1 Ph-In - No Dmd) EC Commercial (1 Ph-Out - No Dmd) EC Commercial (1 Ph-Out - w/Demand) EC Commercial (1 Ph-Out - w/Demand) EC Commercial (3 Ph-Out - No Dmd) EC Commercial (3 Ph-In - w/Demand) EC	bde i1 11 12 23 240 40	Bills 3.336 10 603 1	(kWh Usage) 1,861,416 4,037 466,722 481 	Billed \$195,822.68 \$441.29 \$47,982.01 \$51.43 	of Demand 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 550 665 14 0	For Month \$0.1052 \$0.1093 \$0.1093 \$0.1021 \$0.1021 \$0.1021 \$0.1021 \$0.1046 \$0.1046 \$0.1046 \$0.1046 \$0.1046 \$0.1046 \$0.1031 \$0.1031 \$0.1033 \$0.1091 \$0.1056 \$0.1086 \$0.1324 \$0.1324	Average \$0.1064 \$0.1051 \$0.1055 \$0.1052 \$0.1123 \$0.1123 \$0.1172 \$0.1172 \$0.1172 \$0.1172 \$0.1172 \$0.1172 \$0.1172 \$0.1172 \$0.1172 \$0.1172 \$0.1168 \$0.1060 \$0.1060 \$0.1051 \$0.1051 \$0.1051 \$0.1172	Bills 3,343 10 609 1	(kWh Usage) 2,460,842 5,535 759,081 602 	Billed \$277,049.48 \$638.05 \$82,901.38 \$68.88 \$360,657.79 \$107,806.83 \$477.81 \$73,427.20 \$352.55 \$9,062.40 \$1,410.41 \$192,537.20 \$7,203.69	For Month \$0.1126 \$0.1153 \$0.1092 \$0.1144 \$0.1172 \$0.1172 \$0.1172 \$0.1192 \$0.1152 \$0.1157 \$0.1165 \$0.1161 \$0.1161 \$0.1387	Bills 3,339 10 605 1 3,955 744 4 4 388 28 16 9	(kWh Usage) 2,519,592 5,285 586,052 584	Billed \$275,884.01 \$596.76 \$90,527.43 \$65.32 	For Month \$0.1095 \$0.1129 \$0.1129 \$0.1057 \$0.1057 \$0.1057 \$0.1086 \$0.1086 \$0.1120 \$0.1120 \$0.1125 \$0.1125 \$0.1126 \$0.1125 \$0.1133 \$0.1133
Residential (Dom-In) E Residential (Dom-In) w/Ecosmart E1 Residential (Dom-In-All Electric) E Res.(Dom-In - All Electric) E Residential (Rural-Out) WEcosmart Residential (Rural-Out) EF Residential (Rural-Out) - All Electric) EF Residential (Rural-Out - All Electric) EF Residential (Rural-Out - All Electric) EF Residential (Rural-Out - All Electric) w/Ecosmart EF Residential (Rural-Out - All Electric) w/Ecosmart EF Residential (Rural-Out - All Electric w/Dm EF Total Residential (Rural-Out - All Electric w/Dm EF Total Residential (Rural) EC Commercial (1 Ph-In - No Dmd) EC Commercial (1 Ph-Out - No Dmd) EC Commercial (1 Ph-Out - w/Demand) EC Commercial (3 Ph-Out - No Dmd) EC Commercial (3 Ph-In - w/Demand)	:1 IE IE :2 :2 :2 :2 :2 :2 :2 :2 :2 :2 :2 :11E :12E :2 :2 :2 :2 :2 :2 :2 :2 :2 :110	3,336 10 603 1 3,950 756 4 383 2 16 9 9 1,170 74 43 117 74 43 117 255 24	1,861,416 4,037 469,722 481 2,335,656 692,545 2,902 425,593 2,005 98,686 13,792 43,794 8,154 	\$195,022.68 \$441.29 \$47,982.01 \$51.43 \$76,216.42 \$327.89 \$46,020.44 \$1,455.82 \$134,133.60 \$5,800.34 \$1,432.14 \$7,232.48 \$36,491.09	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	\$0.1052 \$0.1093 \$0.1021 \$0.1069 \$0.1046 \$0.1046 \$0.1101 \$0.103 \$0.1091 \$0.1003 \$0.1056 \$0.1086 \$0.1324 \$0.1324	\$0.1064 \$0.1086 \$0.1051 \$0.1058 \$0.1062 \$0.1123 \$0.1123 \$0.1123 \$0.1172 \$0.1134 \$0.1060 \$0.1134 \$0.1340 \$0.1340 \$0.1340	3,343 10 609 1 3,963 743 4 389 2 15 9 2 15 9 1,162 73	2,460,842 5,535 759,081 602 3,226,060 920,136 4,010 637,576 3,047 81,985 12,102 1,658,856 51,946	\$277,049.48 \$638.05 \$82,901.38 \$68.88 \$107,806.83 \$477.81 \$73,427.20 \$352.55 \$9,062.40 \$1,410.41 \$192,537.20 \$7,203.69	\$0.1126 \$0.1153 \$0.1092 \$0.1144 \$0.1118 \$0.1172 \$0.1172 \$0.1152 \$0.1155 \$0.1155 \$0.1161 \$0.1161 \$0.1387	3,339 10 605 1 3,955 744 4 388 2 16 9 9 1,163 72	2,519,592 5,285 856,052 584 3,381,513 919,993 2,956 661,524 3,211 3,4,185 12,137 	\$275,884.01 \$596.76 \$90,527.43 \$65.32 ************************************	\$0.1095 \$0.1129 \$0.1057 \$0.1118 \$0.1086 \$0.1143 \$0.1143 \$0.1120 \$0.1120 \$0.1125 \$0.1120 \$0.1133 \$0.1133
Residential (Dom-In) w/Ecosmart E1 Residential (Dom-In - All Electric) E Res. (Dom-In - All Elect.) w/Ecosmart E2 Total Residential (Domestic) E Residential (Rural-Out) EF Residential (Rural-Out) w/Ecosmart ER Residential (Rural-Out - All Electric) E Residential (Rural-Out - All Electric) EF Residential (Rural-Out - All Electric) EF Residential (Rural-Out - All Electric) w/Ecosmart ER Residential (Rural-Out - All Electric) w/Ecosmar ER Residential (Rural-Out - No Dmd) EC Commercial (1 Ph-In - No Dmd) EC Commercial (1 Ph-In - w/Demand) EC Commercial (1 Ph-In - w/Demand) EC Commercial (3 Ph-Out - No Dmd) EC Commercial (3 Ph-Out - N/Demand) EC Commercial (3 Ph-Out - w/Demand) EC Commercial (3 Ph-Out - w/Demand) EC Commercial (3 Ph-In - w/Dem	1E 12 12 12 12 12 11 11 11 11 11	10 603 1 3,950 756 4 383 2 16 9 1,170 74 43 1,177 255 24 279	4,037 469,722 481 2,335,656 692,545 2,902 425,593 2,005 98,686 13,792 1,235,523 1,235,523 43,794 8,154 51,948 275,088 30,192	\$441.29 \$47,982.01 \$51.43 \$76,216.42 \$327.89 \$46,020.44 \$218.79 \$9.894.24 \$1.455.82 \$134,133.60 \$5,800.34 \$1,432.14 \$7,232.48 \$36,491.09	0 0 0 0 550 115 	\$0.1093 \$0.1021 \$0.1069 \$0.1046 \$0.1101 \$0.1130 \$0.1081 \$0.1003 \$0.1056 \$0.1086 \$0.1086 \$0.1324 \$0.1324	\$0.1086 \$0.1051 \$0.1058 \$0.1062 \$0.1123 \$0.1123 \$0.1123 \$0.1134 \$0.1134 \$0.1060 \$0.1089 \$0.1134 \$0.1340 \$0.1340	10 609 1 3,963 4 389 2 15 9 9 9 1,162 73	5,535 759,081 602 920,136 4,010 637,576 3,047 81,985 12,102 1,658,856 51,946	\$638.05 \$82,901.38 \$82,901.38 \$360,657.79 \$107,806.83 \$477.81 \$73,427.20 \$352.55 \$9,062.40 \$1,410.41 \$192,537.20	\$0.1153 \$0.1094 \$0.1144 \$0.1118 \$0.1172 \$0.1172 \$0.1157 \$0.1155 \$0.1155 \$0.1165 \$0.1161 \$0.1387	10 605 1 3,955 744 4 388 2 16 9 9 9 1,163 72	5,285 856,052 584 919,993 2,956 661,524 3,211 34,185 12,137 1,634,006 53,616	\$596.76 \$90,527.43 \$65.32 \$367,073.52 \$105,142.88 \$354.25 \$74,112.64 \$361,20 \$3,784.23 \$1,378.93 \$185,134.13 \$7,253.04	\$0.1129 \$0.1057 \$0.1018 \$0.1086 \$0.1143 \$0.1198 \$0.1120 \$0.1120 \$0.1120 \$0.1125 \$0.1133 \$0.1133
Res.(Dom-In - All Elec.) w/Ecosmart E2 Total Residential (Domestic) E Residential (Rural-Out) w/Ecosmart ER Residential (Rural-Out) all Electric) EF Residential (Rural-Out - All Electric w/Dm EF Residential (Rural-Out - All Electric w/Dm EF Total Residential (Rural-Out - All Electric w/Dm EF Commercial (1 Ph-In - No Dmd) EC Commercial (1 Ph-Out - No Dmd) EC Commercial (1 Ph-Out - No Dmd) EC Commercial (1 Ph-Out - w/Demand) EC Commercial (3 Ph-Out - No Dmd) EC Commercial (3 Ph-Out - No Dmd) EC Commercial (3 Ph-Out - No Dmd) EC Commercial (3 Ph-Out - w/Demand) EC Commercial (3 Ph-In - w/Demand) EC Commercial (3 P	2E R1 IIIE R2 IZE R3 R4 IIIE R2 IZE R3 C2 IZE C2 IZ	1 3,950 756 4 383 2 16 9 9 9 1,170 74 43 1177 2255 24 279	481 2,335,656 692,545 2,902 425,593 2,005 98,686 13,792 1,235,523 43,794 8,154 	\$51.43 \$244,297.41 \$76,216.42 \$327.93 \$46,020.44 \$218.79 \$9,894.24 \$1,455.82 \$134,133.60 \$5,800.34 \$1,432.14 \$7,232.48 \$36,491.09	0 0 0 0 550 115 	\$0.1069 \$0.1046 \$0.1101 \$0.1130 \$0.1031 \$0.1003 \$0.1003 \$0.1056 \$0.1086 \$0.1086 \$0.1086 \$0.1086 \$0.1086 \$0.1086 \$0.1016 \$0.1016 \$0.1016 \$0.1016 \$0.1016 \$0.1016 \$0.1016 \$0.1016 \$0.1016 \$0.1016 \$0.1016 \$0.1016 \$0.1016 \$0.1016 \$0.1016 \$0.1007 \$0.1081 \$0.1081 \$0.1097 \$0.1081 \$0.1097 \$0.1081 \$0.1097 \$0.	\$0.1058 \$0.1062 \$0.1123 \$0.1172 \$0.1132 \$0.1172 \$0.1172 \$0.1172 \$0.1172 \$0.1172 \$0.1108 \$0.1060 \$0.0089 \$0.1089 \$0.1089 \$0.1089 \$0.1021 \$0.1123 \$0.1021 \$0.1021 \$0.1021 \$0.1021 \$0.1021 \$0.1021 \$0.1021 \$0.1172 \$0.1134 \$0.1060 \$0.1089 \$0.1134 \$0.	1 3,963 743 4 389 2 15 9 1,162 73	602 3,226,060 4,010 637,576 3,047 81,985 12,102 1,658,856 51,946	\$68.88 \$360,657.79 \$107,806.83 \$477.81 \$73,427.20 \$352,55 \$9,062.40 \$1,410.41 \$192,537.20 \$7,203.69	\$0.1144 \$0.1172 \$0.1172 \$0.1152 \$0.1155 \$0.1105 \$0.1105 \$0.1105 \$0.1105 \$0.1105 \$0.1105 \$0.1105 \$0.1105 \$0.1101 \$0.1101 \$0.1101 \$0.1102 \$0.1105 \$0.105 \$0.10	1 3,955 744 4 388 2 16 9 9 1,163 72	584 3,381,513 919,993 2,956 661,524 3,211 34,185 12,137 	\$65.32 \$367,073.52 \$105,142.88 \$354.25 \$74,112.64 \$361.20 \$3,784.23 \$1,378.93 \$1	\$0.1118 \$0.1086 \$0.1143 \$0.1198 \$0.1120 \$0.1125 \$0.1120 \$0.1133 \$0.1133 \$0.1353
Total Residential (Domestic) Residential (Rural-Out) Residential (Rural-Out) w/Ecosmart Residential (Rural-Out) - All Electric) Res. (Rural-Out - All Electric) Residential (Rural-Out - All Electric) Residential (Rural-Out - All Electric) Residential (Rural-Out - All Electric) w/Ecosmart Residential (Rural-Out - All Electric w/Dr Fites. (Rural-Out - All Electric) w/Ecosmart Residential (Rural-Out - All Electric w/Dr Total Residential (Rural) Commercial (1 Ph-In - No Dmd) Commercial (1 Ph-No Dmd) Commercial (1 Ph-Out - No Dmd) Commercial (1 Ph-Out - w/Demand) Commercial (1 Ph-Out - No Dmd) Commercial (3 Ph-Out - No Dmd) Commercial (3 Ph-Out - No Dmd) Commercial (3 Ph-Out - w/Demand) Commercial (3 Ph-Out - w/Dmd.&Sub-St.C Commercial (3 Ph-Out - w/Dmd.&Sub-St.E Commercial (3 Ph-Out - w/Dmd.&Sub-St.C Commercial (3 Ph-In - w/Demand) Commercial (3 Ph-In - w/Demand) Commercial (3 Ph-In - w/Demand) Commercial (3 Ph-In - w/Demand, No Ta Commercial (3 Ph-In - w/Demand, No Ta Commercial (3 Ph-In - w/Demand, No Ta Commercial (R1 11E R2 12E R3 R4 C2 22O C1 C1 C1 C1 C1 C1 C1 C1 C1 C1 C1 C1 C1	3,950 756 4 383 2 16 9 1,170 74 43 1177 255 24 279	2,335,656 692,545 2,902 425,593 2,005 98,686 13,792 1,235,523 43,794 8,154 	\$244,297.41 \$76,216.42 \$327.89 \$46,020.44 \$1.455.82 \$134,133.60 \$5,800.34 \$1,432.14 \$1,432.14 \$7,232.48 \$36,491.09	0 0 0 0 550 115 	\$0.1046 \$0.1101 \$0.1130 \$0.1081 \$0.1003 \$0.1056 \$0.1086 \$0.1324 \$0.1324	\$0.1062 \$0.1123 \$0.1172 \$0.1108 \$0.1134 \$0.1060 \$0.1089 \$0.1135 \$0.1340 \$0.1340	3,963 743 4 389 2 15 9 1,162 73	3,226,060 920,136 4,010 637,576 3,047 81,985 12,102 1,658,856 51,946	\$360,657.79 \$107,806.83 \$477.81 \$73,427.20 \$352.55 \$9,962.40 \$1,410.41 \$192,537.20 \$7,203.69	\$0.1118 \$0.1172 \$0.1192 \$0.1152 \$0.1105 \$0.1105 \$0.1105 \$0.1105 \$0.1161 \$0.1161	3,955 744 4 388 2 16 9 9 1,163 72	3,381,513 919,993 2,956 661,524 3,211 34,185 12,137 1,634,006 53,616	\$367,073.52 \$105,142.88 \$354.25 \$74,112.64 \$361.20 \$3,784.23 \$1,378.93 \$185,134.13 \$7,253.04	\$0.1086 \$0.1143 \$0.1143 \$0.1120 \$0.1125 \$0.1107 \$0.1107 \$0.1133 \$0.1133
Residential (Rural-Out) EF Residential (Rural-Out) w/Ecosmart ER Residential (Rural-Out - All Electric) EF Residential (Rural-Out - All Electric w/Dm EF Total Residential (Rural-Out - All Electric w/Dm EF Total Residential (Rural-Out - All Electric w/Dm EF Commercial (1 Ph-In - No Dmd) EC Commercial (1 Ph-Out - No Dmd) EC Commercial (1 Ph-Out - w/Demand) EC Commercial (1 Ph-Out - w/Demand) EC Commercial (3 Ph-Out - No Dmd) EC Commercial (3 Ph-In - w/Demand) EC Commercial	11E R2 12E R3 R4 0<	3,950 756 4 383 2 16 9 1,170 74 43 1177 255 24 279	2,335,656 692,545 2,902 425,593 2,005 98,686 13,792 	\$244,297.41 \$76,216.42 \$327.89 \$46,020.44 \$218.79 \$9,894.24 \$1,455.82 \$134,133.60 \$5,800.34 \$1,432.14 \$7,232.48 \$36,491.09	0 0 0 0 550 115 	\$0.1101 \$0.1130 \$0.1081 \$0.1091 \$0.1003 \$0.1056 \$0.1086 \$0.1324 \$0.1324	\$0.1123 \$0.1172 \$0.1108 \$0.1108 \$0.1060 \$0.1089 \$0.1089 \$0.1340 \$0.1340	3,963 743 4 389 2 15 9 1,162 73	3,226,060 920,136 4,010 637,576 3,047 81,985 12,102 	\$360,657.79 \$107,806.83 \$477.81 \$73,427.20 \$352,55 \$9,062.40 \$1,410.41 \$192,537.20 \$7,203.69	\$0.1172 \$0.1192 \$0.1152 \$0.1157 \$0.1105 \$0.1165 \$0.1161 \$0.1161 \$0.1387	3,955 744 4 388 2 16 9 1,163 72	3,381,513 919,993 2,956 661,524 3,211 34,185 12,137 	\$367,073.52 \$105,142.88 \$354.25 \$74,112.64 \$361.20 \$3,784.23 \$1,378.93 	\$0.1143 \$0.1198 \$0.1120 \$0.1125 \$0.1107 \$0.1136 \$0.1133 \$0.1353
Residential (Rural-Out) EF Residential (Rural-Out) w/Ecosmart ER Residential (Rural-Out - All Electric) EF Residential (Rural-Out - All Electric w/Dm EF Total Residential (Rural-Out - All Electric w/Dm EF Total Residential (Rural-Out - All Electric w/Dm EF Commercial (1 Ph-In - No Dmd) EC Commercial (1 Ph-Out - No Dmd) EC Commercial (1 Ph-Out - w/Demand) EC Commercial (1 Ph-Out - w/Demand) EC Commercial (3 Ph-Out - No Dmd) EC Commercial (3 Ph-In - w/Demand) EC Commercial	11E R2 12E R3 R4 0<	756 4 383 2 16 9 1,170 74 43 117 255 24 279	692,545 2,902 425,593 2,005 98,686 13,792 	\$76,216.42 \$327.89 \$46,020.44 \$218.79 \$9,894.24 \$1,455.82 \$134,133.60 \$5,800.34 \$1,432.14 \$7,232.48 \$36,491.09	0 0 0 550 115 	\$0.1101 \$0.1130 \$0.1081 \$0.1091 \$0.1003 \$0.1056 \$0.1086 \$0.1324 \$0.1324	\$0.1123 \$0.1172 \$0.1108 \$0.1108 \$0.1060 \$0.1089 \$0.1089 \$0.1340 \$0.1340	743 4 389 2 15 9 1,162 73	920,136 4,010 637,576 3,047 81,985 12,102 	\$107,806.83 \$477.81 \$73,427.20 \$352.55 \$9,062.40 \$1,410.41 \$192,537.20 \$7,203.69	\$0.1172 \$0.1192 \$0.1152 \$0.1157 \$0.1105 \$0.1165 \$0.1161 \$0.1161 \$0.1387	744 4 388 2 16 9 1,163 72	919,993 2,956 661,524 3,211 34,185 12,137 	\$105,142.88 \$354.25 \$74,112,64 \$361.20 \$3,784.23 \$1,378.93 	\$0.1143 \$0.1198 \$0.1120 \$0.1125 \$0.1107 \$0.1136 \$0.1133 \$0.1353
Residential (Rural-Out) w/Ecosmart ER Residential (Rural-Out - All Electric) Residential (Rural-Out - All Electric) Res. (Rural-Out - All Electric) w/Ecosmar ER Residential (Rural-Out - All Electric) w/Ecosmar ER Residential (Rural-Out - All Electric) w/Ecosmar ER Total Residential (Rural) Ef Total Residential (Rural) Ef Commercial (1 Ph-In - No Dmd) EC Commercial (1 Ph-No Dmd) EC Commercial (1 Ph-In - w/Demand) EC Commercial (1 Ph-Out - w/Demand) EC Total Commercial (1 Ph) w/Demand EC Commercial (3 Ph-Out - No Dmd) EC Total Commercial (3 Ph-Out - No Dmd) EC Commercial (3 Ph-Out - N/Demand) EC Commercial (3 Ph-In - w/Demand) EC Commercial (3 Ph-In - w/Demand, No Ta EC T	11E R2 12E R3 R4 0<	4 383 2 16 9 9 1,170 74 43 117 255 24 279	2,902 425,593 2,005 98,686 13,792 1,235,523 43,794 8,154 51,948 275,088 30,192	\$327.89 \$46,020.44 \$218.79 \$9,894.24 \$1,455.82 \$134,133.60 \$5,800.34 \$1,432.14 \$1,432.14 \$7,232.48 \$36,491.09	0 0 550 115 	\$0.1130 \$0.1081 \$0.1091 \$0.1003 \$0.1056 \$0.1086 \$0.1324 \$0.1324	\$0.1172 \$0.1108 \$0.1134 \$0.1060 \$0.1089 \$0.1115 \$0.1340 \$0.1736	4 389 2 15 9 1,162 73	4,010 637,576 3,047 81,985 12,102 1,658,856 51,946	\$477.81 \$73,427.20 \$352.55 \$9,062.40 \$1,410.41 	\$0.1192 \$0.1152 \$0.1157 \$0.1105 \$0.1105 \$0.1165 \$0.1161 \$0.1387	4 388 2 16 9 1,163 72	2,956 661,524 3,211 34,185 12,137 1,634,006 53,616	\$354.25 \$74,112.64 \$361.20 \$3,784.23 \$1,378.93 \$185,134.13 \$7,253.04	\$0.1198 \$0.1120 \$0.1125 \$0.1107 \$0.1136 \$0.1133 \$0.11353
Residential (Rural-Out) w/Ecosmart ER Residential (Rural-Out - All Electric) Residential (Rural-Out - All Electric) Res. (Rural-Out - All Electric) w/Ecosmar ER Residential (Rural-Out - All Electric) w/Ecosmar ER Residential (Rural-Out - All Electric) w/Ecosmar ER Total Residential (Rural) Ef Total Residential (Rural) Ef Commercial (1 Ph-In - No Dmd) EC Commercial (1 Ph-No Dmd) EC Commercial (1 Ph-In - w/Demand) EC Commercial (1 Ph-Out - w/Demand) EC Total Commercial (1 Ph) w/Demand EC Commercial (3 Ph-Out - No Dmd) EC Total Commercial (3 Ph-Out - No Dmd) EC Commercial (3 Ph-Out - N/Demand) EC Commercial (3 Ph-In - w/Demand) EC Commercial (3 Ph-In - w/Demand, No Ta EC T	11E R2 12E R3 R4 0<	4 383 2 16 9 9 1,170 74 43 117 255 24 279	2,902 425,593 2,005 98,686 13,792 1,235,523 43,794 8,154 51,948 275,088 30,192	\$327.89 \$46,020.44 \$218.79 \$9,894.24 \$1,455.82 \$134,133.60 \$5,800.34 \$1,432.14 \$1,432.14 \$7,232.48 \$36,491.09	0 0 550 115 	\$0.1130 \$0.1081 \$0.1091 \$0.1003 \$0.1056 \$0.1086 \$0.1324 \$0.1324	\$0.1172 \$0.1108 \$0.1134 \$0.1060 \$0.1089 \$0.1115 \$0.1340 \$0.1736	4 389 2 15 9 1,162 73	4,010 637,576 3,047 81,985 12,102 1,658,856 51,946	\$477.81 \$73,427.20 \$352.55 \$9,062.40 \$1,410.41 	\$0.1192 \$0.1152 \$0.1157 \$0.1105 \$0.1105 \$0.1165 \$0.1161 \$0.1387	4 388 2 16 9 1,163 72	2,956 661,524 3,211 34,185 12,137 1,634,006 53,616	\$354.25 \$74,112.64 \$361.20 \$3,784.23 \$1,378.93 \$185,134.13 \$7,253.04	\$0.1198 \$0.1120 \$0.1125 \$0.1107 \$0.1136 \$0.1133 \$0.11353
Res. (Rural-Out - All Electric) w/Ecosmar ER Residential (Rural-Out w/Dmd) EF Residential (Rural-Out - All Electric w/Dm EF Total Residential (Rural) E Commercial (1 Ph-In - No Dmd) EC Commercial (1 Ph-Out - No Dmd) EC Total Commercial (1 Ph-Out - No Dmd) EC Commercial (1 Ph-Out - No Dmd) EC Commercial (1 Ph-Out - w/Demand) EC Commercial (1 Ph-Out - w/Demand) EC Total Commercial (1 Ph) w/Demand EC Total Commercial (3 Ph-Out - No Dmd) EC Commercial (3 Ph-Out - No Dmd) EC Commercial (3 Ph-In - w/Demand) EC Commercial (3 Ph-In - w/Demand, No Ta EC Total Commercial (3 Ph-In - w/Demand, No Ta <t< td=""><td>R2E R3 R4 C22 C20 C1 C1 C1 C1 C1 C1 C1 C1 C1 C1 C1 C1 C1</td><td>2 16 9 1,170 74 43 117 255 24 279</td><td>2,005 98,686 13,792 1,235,523 43,794 8,154 51,948 275,088 30,192</td><td>\$218.79 \$9,894.24 \$1,455.82 \$134,133.60 \$5,800.34 \$1,432.14 \$7,232.48 \$36,491.09</td><td>115 665 14 0 </td><td>\$0.1091 \$0.1003 \$0.1056 \$0.1086 \$0.1324 \$0.1756</td><td>\$0.1134 \$0.1060 \$0.1089 \$0.1115 \$0.1340 \$0.1736</td><td>2 15 9 1,162 73</td><td>3,047 81,985 12,102 1,658,856 51,946</td><td>\$352.55 \$9,062.40 \$1,410.41 \$192,537.20 \$7,203.69</td><td>\$0.1157 \$0.1105 \$0.1165 \$0.1161 \$0.1387</td><td>2 16 9 1,163 72</td><td>3,211 34,185 12,137 1,634,006 53,616</td><td>\$361.20 \$3,784.23 \$1,378.93 \$185,134.13 \$7,253.04</td><td>\$0.1125 \$0.1107 \$0.1136 \$0.1133 \$0.1353</td></t<>	R2E R3 R4 C22 C20 C1 C1 C1 C1 C1 C1 C1 C1 C1 C1 C1 C1 C1	2 16 9 1,170 74 43 117 255 24 279	2,005 98,686 13,792 1,235,523 43,794 8,154 51,948 275,088 30,192	\$218.79 \$9,894.24 \$1,455.82 \$134,133.60 \$5,800.34 \$1,432.14 \$7,232.48 \$36,491.09	115 665 14 0 	\$0.1091 \$0.1003 \$0.1056 \$0.1086 \$0.1324 \$0.1756	\$0.1134 \$0.1060 \$0.1089 \$0.1115 \$0.1340 \$0.1736	2 15 9 1,162 73	3,047 81,985 12,102 1,658,856 51,946	\$352.55 \$9,062.40 \$1,410.41 \$192,537.20 \$7,203.69	\$0.1157 \$0.1105 \$0.1165 \$0.1161 \$0.1387	2 16 9 1,163 72	3,211 34,185 12,137 1,634,006 53,616	\$361.20 \$3,784.23 \$1,378.93 \$185,134.13 \$7,253.04	\$0.1125 \$0.1107 \$0.1136 \$0.1133 \$0.1353
Residential (Rural-Out w/Dmd) EF Residential (Rural-Out - All Electric w/Dm EF Total Residential (Rural) E Commercial (1 Ph-In - No Dmd) EC Commercial (1 Ph-Out - No Dmd) EC Total Commercial (1 Ph-No Dmd) EC Commercial (1 Ph-In - w/Demand) EC Commercial (1 Ph-Out - w/Demand) EC Total Commercial (1 Ph-Out - w/Demand) EC Total Commercial (3 Ph-Out - No Dmd) EC Total Commercial (3 Ph-Out - No Dmd) EC Commercial (3 Ph-Out - No Dmd) EC Commercial (3 Ph-Out - w/Demand) EC Commercial (3 Ph-In - w/Demand) EC Commercial (3 Ph-In - w/Dmd.&Sub-St.C EC Commercial (3 Ph-In - w/Dmd.&Sub-St.E E3 Commercial (3 Ph-In - w/Dmd.&Sub-St.E E4 Large Power (In - w/Dmd & Rct, w/SbCr) E1 Large Power (In - w/Dmd & Rct, w/SbCr) E1 Large Power (In - w/Dmd & Rct, w/SbCr) E1 Large Powe	R3 R4 C2 20 C1 C1 C1 C1 C1 C1 C1 C1 C1 C1 C1 C1 C1	16 9 1,170 74 43 117 255 24 279	98,686 13,792 1,235,523 43,794 8,154 51,948 2275,088 30,192	\$9,894.24 \$1,455.82 \$134,133.60 \$5,800.34 \$1,432.14 \$7,232.48 \$36,491.09	115 665 14 0 	\$0.1003 \$0.1056 \$0.1086 \$0.1324 \$0.1756	\$0.1060 \$0.1089 \$0.1115 \$0.1340 \$0.1736	9 1,162 73	81,985 12,102 1,658,856 51,946	\$9,062.40 \$1,410.41 \$192,537.20 \$7,203.69	\$0.1105 \$0.1165 \$0.1161 \$0.1387	16 9 1,163 72	34,185 12,137 1,634,006 53,616	\$3,784.23 \$1,378.93 \$185,134.13 \$7,253.04	\$0.1107 \$0.1136 \$0.1133 \$0.1353
Residential (Rural-Out - All Electric w/Dm EF Total Residential (Rural)	C2 20 20 21 210 240	9 1,170 74 43 117 255 24 279	13,792 1,235,523 43,794 8,154 51,948 275,088 30,192	\$1,455.82 \$134,133.60 \$5,800.34 \$1,432.14 \$7,232.48 \$36,491.09	115 665 14 0 	\$0.1056 \$0.1086 \$0.1324 \$0.1756	\$0.1089 \$0.1115 \$0.1340 \$0.1736	9 1,162 73	12,102 1,658,856 51,946	\$1,410.41 \$192,537.20 \$7,203.69	\$0.1165 \$0.1161 \$0.1387	9 1,163 72	12,137 1,634,006 53,616	\$1,378.93 	\$0.1136 \$0.1133 \$0.1353
Total Residential (Rural) Commercial (1 Ph-In - No Dmd) Commercial (1 Ph-Out - No Dmd) EC Total Commercial (1 Ph) No Dmd Commercial (1 Ph-Out - W/Demand) Commercial (1 Ph-Out - w/Demand) Commercial (1 Ph-Out - w/Demand) Total Commercial (1 Ph) w/Demand) Commercial (3 Ph-Out - No Dmd) Commercial (3 Ph-Out - No Dmd) Commercial (3 Ph-Out - w/Demand) Commercial (3 Ph-In - w/Dmd.&Sub-St.C Commercial (3 Ph-In - w/Demand) Experimential (3 Ph-In - w/Dmd.&Sub-St.E Commercial (3 Ph-In - w/Dmd.&Sub-St.C Eurge Power (In - w/Dmd & Rct, w/SbCr) EL Large Power (In - w/Dmd & Rct, w/SbCr)	C2 520 C1 510 540	1,170 74 43 117 255 24 279	1,235,523 43,794 8,154 51,948 275,088 30,192	\$134,133.60 \$5,800.34 \$1,432.14 \$7,232.48 \$36,491.09	665 14 0 	\$0.1086 \$0.1324 \$0.1756	\$0.1115 \$0.1340 \$0.1736	1,162 73	 1,658,856 51,946	\$192,537.20 \$7,203.69	\$0.1161 \$0.1387	1,163	1,634,006 53,616	\$185,134.13 \$7,253.04	\$0.1133 \$0.1353
Commercial (1 Ph-In - No Dmd) EC Commercial (1 Ph-Out - No Dmd) EC Total Commercial (1 Ph) No Dmd EC Commercial (1 Ph-In - w/Demand) EC Commercial (1 Ph-Out - w/Demand) EC Total Commercial (1 Ph) w/Demand) EC Total Commercial (1 Ph) w/Demand EC Commercial (3 Ph-Out - w/Demand) EC Total Commercial (3 Ph-Out - No Dmd) EC Commercial (3 Ph-Out - w/Demand) EC Commercial (3 Ph-In - w/Demand, No Ta EC Commercial (3 Ph-In - w/Dmd.&Sub-St. E E3 Commercial (3 Ph-In - w/Dmd.&Sub-St. E E4 Large Power (In - w/Dmd & Rct, w/SbCr) E1 Large Power (In - w/Dmd & Rct, w/SbCr) E1 Large Power (In - w/Dmd & Rct, w/SbCr) E1 Large Power (I	20 C1 10 40	74 43 117 255 24 279	43,794 8,154 	\$5,800.34 \$1,432.14 	14 0 14	\$0.1324 \$0.1756	\$0.1340 \$0.1736	1,162 73	51,946	\$7,203.69	\$0.1387	1,163 72	53,616	\$7,253.04	\$0.1353
Commercial (1 Ph-In - No Dmd) EC Commercial (1 Ph-Out - No Dmd) EC Total Commercial (1 Ph) No Dmd EC Commercial (1 Ph-In - w/Demand) EC Commercial (1 Ph-Out - w/Demand) EC Total Commercial (1 Ph) w/Demand) EC Total Commercial (1 Ph) w/Demand EC Commercial (3 Ph-Out - w/Demand) EC Total Commercial (3 Ph-Out - No Dmd) EC Commercial (3 Ph-Out - w/Demand) EC Commercial (3 Ph-In - w/Demand, No Ta EC Commercial (3 Ph-In - w/Dmd.&Sub-St. E E3 Commercial (3 Ph-In - w/Dmd.&Sub-St. E E4 Large Power (In - w/Dmd & Rct, w/SbCr) E1 Large Power (In - w/Dmd & Rct, w/SbCr) E1 Large Power (In - w/Dmd & Rct, w/SbCr) E1 Large Power (I	20 C1 10 40	74 43 117 255 24 279	43,794 8,154 	\$5,800.34 \$1,432.14 	14 0 14	\$0.1324 \$0.1756	\$0.1340 \$0.1736	73	51,946	\$7,203.69	\$0.1387	72	53,616	\$7,253.04	\$0.1353
Commercial (1 Ph-Out - No Dmd) EC Total Commercial (1 Ph) No Dmd EC Commercial (1 Ph-In - w/Demand) EC Commercial (1 Ph-Out - w/Demand) EC Total Commercial (1 Ph-Out - w/Demand) EC Total Commercial (1 Ph-Out - No Dmand) EC Commercial (3 Ph-Out - No Dmd) EC Total Commercial (3 Ph-Out - No Dmd) EC Commercial (3 Ph-In - w/Demand) EC Commercial (3 Ph-In - w/Dmd.&Sub-St.C EC Commercial (3 Ph-In - w/Dmd.&Sub-St.E E3 Commercial (3 Ph-In - w/Dmd.&Sub-St.E E4 Large Power (In - w/Dmd & Rct, w/SbCr) E1 Large Power (In - w/Dmd & Rct, w/SbCr) E1	20 C1 10 40	43 255 24 279	8,154 51,948 275,088 30,192 	\$1,432.14 	0 14	\$0.1756	\$0.1736								
Commercial (1 Ph-Out - No Dmd) EC Total Commercial (1 Ph) No Dmd Commercial (1 Ph-In - w/Demand) EC Commercial (1 Ph-Out - w/Demand) EC EC Total Commercial (1 Ph-Out - w/Demand) EC EC Total Commercial (1 Ph-Out - No Dmand) EC EC Total Commercial (3 Ph-Out - No Dmd) EC EC Total Commercial (3 Ph-Out - No Dmd) EC EC Commercial (3 Ph-Out - w/Demand) EC Commercial (3 Ph-Out - w/Dmd.&Sub-St. C Commercial (3 Ph-Out - w/Dmd.&Sub-St. E EX Commercial (3 Ph-Out - w/Dmd.&Sub-St. E Commercial (3 Ph-In - w/Dmd.&Sub-St. E EX Commercial (3 Ph-In - w/Dmd.&Sub-St. E Commercial (3 Ph-In - w/Dmd.&Sub-St. E EX Commercial (3 Ph-In - w/Dmd.&Sub-St. E Commercial (3 Ph-In - w/Dmd.&Sub-St. E EX Commercial (3 Ph-In - w/Dmd.&Sub-St. E Commercial (3 Ph-In - w/Dmd.&Sub-St. E EX Commercial (3 Ph-In - w/Dmd.&Sub-St. E Commercial (3 Ph-In - w/Dmd.&Sub-St. E EX Commercial (3 Ph-In - w/Dmd.&Sub-St. E Commercial (3 Ph-In - w/Dmd.& Rct. w/SbCr) EL Large Power (In - w/Dmd & Rct, w/SbCr) EL Large	20 C1 10 40	43 255 24 279	8,154 51,948 275,088 30,192 	\$1,432.14 	0 14	\$0.1756	\$0.1736								
Commercial (1 Ph-In - w/Demand) EC Commercial (1 Ph-Out - w/Demand) EC Total Commercial (1 Ph) w/Demand EC Commercial (3 Ph-Out - No Dmd) EC Total Commercial (3 Ph-No Dmd) EC Total Commercial (3 Ph-In - w/Demand) EC Commercial (3 Ph-In - w/Demand) EC Commercial (3 Ph-In - w/Demand) EC Commercial (3 Ph-Out - w/Dmd.&Sub-St. C EC Commercial (3 Ph-In - w/Dmd.&Sub-St. E E3 Commercial (3 Ph-In - w/Dmd.&Sub-St. E E3 Commercial (3 Ph-In - w/Dmd.&Sub-St. E E4 Commercial (3 Ph-In - w/Dmd.&Sub-St. E E3 Commercial (3 Ph-In - w/Dmd.&Sub-St. E E4 Large Power (In - w/Dmd & Rct, w/SbCr) E4 Large Power (In - w/Dmd & Rct, w/SbC F) E4 Large Power (In - w/Dmd & Rct, w/SbC F) E4 Large Power (In - w/Dmd & Rct, w/SbC F) E4 Large Power (In - w/Dmd & Rct, w/SbC F) E4 Large Power (In - w/Dmd & Rct, w/SbC F) E4 Large Power (In - w/Dmd & Rct, w/SbC F) E4	40	255 24 279	275,088 30,192	\$7,232.48 \$36,491.09	14	\$0.1392					φ0.1000	42	10,770		
Commercial (1 Ph-In - w/Demand) EC Commercial (1 Ph-Out - w/Demand) EC Total Commercial (1 Ph) w/Demand EC Commercial (3 Ph-Out - No Dmd) EC Total Commercial (3 Ph-No Dmd) EC Total Commercial (3 Ph-In - w/Demand) EC Commercial (3 Ph-In - w/Demand) EC Commercial (3 Ph-In - w/Demand) EC Commercial (3 Ph-Out - w/Dmd.&Sub-St. C EC Commercial (3 Ph-In - w/Dmd.&Sub-St. E E3 Commercial (3 Ph-In - w/Dmd.&Sub-St. E E3 Commercial (3 Ph-In - w/Dmd.&Sub-St. E E4 Commercial (3 Ph-In - w/Dmd.&Sub-St. E E3 Commercial (3 Ph-In - w/Dmd.&Sub-St. E E4 Large Power (In - w/Dmd & Rct, w/SbCr) E4 Large Power (In - w/Dmd & Rct, w/SbC F) E4 Large Power (In - w/Dmd & Rct, w/SbC F) E4 Large Power (In - w/Dmd & Rct, w/SbC F) E4 Large Power (In - w/Dmd & Rct, w/SbC F) E4 Large Power (In - w/Dmd & Rct, w/SbC F) E4 Large Power (In - w/Dmd & Rct, w/SbC F) E4	40	255 24 279	275,088 30,192	\$36,491.09		\$0.1392									
Commercial (1 Ph-Out - w/Demand) EC Total Commercial (1 Ph) w/Demand Commercial (3 Ph-Out - No Dmd) EC Total Commercial (3 Ph-Out - No Dmd) EC Total Commercial (3 Ph-Out - No Dmd) EC Commercial (3 Ph-In - w/Demand) EC Commercial (3 Ph-In - w/Demand) EC Commercial (3 Ph-In - w/Demand) EC Commercial (3 Ph-In - w/Demand, Scub-St. ES Commercial (3 Ph-In - w/Demand, No Ta EC Total Commercial (3 Ph-In - w/Demand, No Ta EC Total Commercial (3 Ph-In - w/Demand, No Ta EC Total Commercial (3 Ph-In - w/Demand, No Ta EC Total Commercial (3 Ph-In - w/Demand, No Ta EC Total Commercial (3 Ph-In - w/Demand, No Ta EC Total Commercial (3 Ph-In - w/Demand, No Ta EC Large Power (In - w/Dmd & Rct) EL Large Power (In - w/Dmd & Rct, w/SbCr) EL Large Power (In - w/Dmd & Rct, w/SbCr) EL Large Power (In - w/Dmd & Rct, w/SbCr) EL Large Power (In - w/Dmd & Rct, w/SbCr) EL	40	24 279	30,192	1007 0 00	1649		\$0.1403	116	62,788	\$9,046.04	\$0.1441	114	64,394	\$9,044.58	\$0.1405
Commercial (1 Ph-Out - w/Demand) EC Total Commercial (1 Ph) w/Demand Commercial (3 Ph-Out - No Dmd) EC Total Commercial (3 Ph-Out - No Dmd) EC Total Commercial (3 Ph-Out - No Dmd) EC Commercial (3 Ph-In - w/Demand) EC Commercial (3 Ph-In - w/Demand) EC Commercial (3 Ph-In - w/Demand) EC Commercial (3 Ph-In - w/Demand, Scub-St. ES Commercial (3 Ph-In - w/Demand, No Ta EC Total Commercial (3 Ph-In - w/Demand, No Ta EC Total Commercial (3 Ph-In - w/Demand, No Ta EC Total Commercial (3 Ph-In - w/Demand, No Ta EC Total Commercial (3 Ph-In - w/Demand, No Ta EC Total Commercial (3 Ph-In - w/Demand, No Ta EC Total Commercial (3 Ph-In - w/Demand, No Ta EC Large Power (In - w/Dmd & Rct) EL Large Power (In - w/Dmd & Rct, w/SbCr) EL Large Power (In - w/Dmd & Rct, w/SbCr) EL Large Power (In - w/Dmd & Rct, w/SbCr) EL Large Power (In - w/Dmd & Rct, w/SbCr) EL	40	24 279	30,192	1007 0 00	1649										
Total Commercial (1 Ph) w/Demand Commercial (3 Ph-Out - No Dmd) EC Total Commercial (3 Ph) No Dmd Commercial (3 Ph-In - w/Demand) Commercial (3 Ph-In - w/Demand) Commercial (3 Ph-In - w/Dmd.&Sub-St.C Total Commercial (3 Ph) w/Demand Large Power (In - w/Dmd & Rct, w/SbCr) El Large Power (In - w/Dmd & Rct, w/SbCr) El Large Power (In - w/Dmd & Rct, w/SbCr) El Large Power (In - w/Dmd & Rct, w/SbCr) El	40	279		\$3,885.43		\$0.1327	\$0.1319	260	318,336	\$44,230.24	\$0.1389	263		\$47,446.55	\$0.1323
Commercial (3 Ph-Out - No Dmd) EC Total Commercial (3 Ph) No Dmd EC Commercial (3 Ph-In - w/Demand) EC Commercial (3 Ph-In - w/Demand) EC Commercial (3 Ph-In - w/Demand) EC Commercial (3 Ph-In - w/Demand, Scub-St. C EC Commercial (3 Ph-In - w/Demand, No Ta ES Commercial (3 Ph-In - w/Demand, No Ta ET Total Commercial (3 Ph) w/Demand EI Large Power (In - w/Dmd & Rct) EI Large Power (In - w/Dmd & Rct, w/SbC) EL Large Power (In - w/Dmd & Rct, w/SbC) EL Large Power (In - w/Dmd & Rct, w/SbC) EL			305,280		166	\$0.1287	\$0.1281	25	43,725	\$5,738.12	\$0.1312	25	49,390	\$6,199.88	\$0.1255
Commercial (3 Ph-Out - No Dmd) EC Total Commercial (3 Ph) No Dmd Commercial (3 Ph-In - w/Demand) EC Commercial (3 Ph-In - w/Demand) EC Commercial (3 Ph-In - w/Demand) EC Commercial (3 Ph-In - w/Demand) EC Commercial (3 Ph-In - w/Demand, Scub-St. C EC Commercial (3 Ph-In - w/Demand, Scub-St. E ES Commercial (3 Ph-In - w/Demand, No Ta ET Total Commercial (3 Ph) w/Demand EI Large Power (In - w/Dmd & Rct) EI Large Power (In - w/Dmd & Rct, w/SbCr) EI Large Power (In - w/Dmd & Rct, w/SbCr) EI Large Power (In - w/Dmd & Rct, w/SbCr) EI Large Power (In - w/Dmd & Rct, w/SbCr) EI			000,200	\$40,376.52	1,815	\$0.1323	\$0.1315	285	362,061	\$49,968.36	\$0.1380	288	408,043	\$53.646.43	\$0.1315
Total Commercial (3 Ph) No Dmd Commercial (3 Ph-In - w/Demand) EC Commercial (3 Ph-In - w/Dmd.&Sub-St.C EC Commercial (3 Ph-In - w/Dmd.&Sub-St.E ES Large Power (In - w/Dmd & Rct, w/SbCr) EL Large Power (In - w/Dmd & Rct, w/SbCr) EL Large Power (In - w/Dmd & Rct, w/SbCr) EL Large Power (In - w/Dmd & Rct, w/SbCr) EL		0		φ40,010.0L	1,010	\$0.1020	<i>\\</i> 0.1010	200	002,001	φ40,000.00	¢0.1000	200	400,040	400,040.40	
Total Commercial (3 Ph) No Dmd Commercial (3 Ph-In - w/Demand) EC Commercial (3 Ph-In - w/Dmd.&Sub-St.C EC Commercial (3 Ph-In - w/Dmd.&Sub-St.E ES Large Power (In - w/Dmd & Rct, w/SbCr) EL Large Power (In - w/Dmd & Rct, w/SbCr) EL Large Power (In - w/Dmd & Rct, w/SbCr) EL Large Power (In - w/Dmd & Rct, w/SbCr) EL		2	15,040	\$1,719.24	75	\$0.1143	\$0.1307	2	11,240	\$1,405.73	\$0.1251	2	2,120	\$289.03	\$0.1363
Commercial (3 Ph-In - w/Demand) EC Commercial (3 Ph-In - w/Demand) EC Commercial (3 Ph-In - w/Dmd.&Sub-St.C EC Commercial (3 Ph-In - w/Dmd.&Sub-St.E Si Commercial (3 Ph-In - w/Dmd.&Sub-St ES Commercial (3 Ph-In - w/Demand, No Ta EC Total Commercial (3 Ph) w/Demand Large Power (In - w/Dmd & Rct, w/SbC) EL Large Power (In - w/Dmd & Rct, w/SbC) EL Large Power (In - w/Dmd & Rct, w/SbC) EL						.	4011001								
Commercial (3 Ph-Out - w/Demand) EC Commercial (3 Ph-In - w/Dmd.&Sub-St.C EC Commercial (3 Ph-Out - w/Dmd.&Sub-St.C EC Commercial (3 Ph-In - w/Demand, No Ta EC Total Commercial (3 Ph-In - w/Demand, No Ta EC Total Commercial (3 Ph) w/Demand Large Power (In - w/Dmd & Rct) EL Large Power (In - w/Dmd & Rct, w/SbCr) EL Large Power (Out - w/Dmd & Rct, w/SbCr) EL Large Power (In - w/Dmd & Rct, w/SbCr) EL Large Power (In - w/Dmd & Rct, w/SbCr) EL		2	15,040	\$1,719.24	75	\$0.1143	\$0.1307	2	11,240	\$1,405.73	\$0.1251	2	2,120	\$289.03	\$0.1363
Commercial (3 Ph-Out - w/Demand) EC Commercial (3 Ph-In - w/Dmd.&Sub-St.C EC Commercial (3 Ph-Out - w/Dmd.&Sub-St.C EC Commercial (3 Ph-In - w/Demand, No Ta EC Total Commercial (3 Ph-In - w/Demand, No Ta EC Total Commercial (3 Ph) w/Demand Large Power (In - w/Dmd & Rct) EL Large Power (In - w/Dmd & Rct, w/SbCr) EL Large Power (Out - w/Dmd & Rct, w/SbCr) EL Large Power (In - w/Dmd & Rct, w/SbCr) EL Large Power (In - w/Dmd & Rct, w/SbCr) EL															
Commercial (3 Ph-In - w/Dmd.&Sub-St.C EC Commercial (3 Ph-Out - w/Dmd.&Sub-St. E3 Commercial (3 Ph-In - w/Demand, No Ta EC Total Commercial (3 Ph) w/Demand Large Power (In - w/Dmd & Rct, w/SbC) EL Large Power (In - w/Dmd & Rct, w/SbC) EL Large Power (In - w/Dmd & Rct, w/SbC) EL Large Power (In - w/Dmd & Rct, w/SbC) EL		205	1,414,090	\$158,505.09	4983	\$0.1121	\$0.1141	206	1,484,549	\$179,779.52	\$0.1211	206		\$182,632.23	\$0.1175
Commercial (3 Ph-Out - w/Dmd.&Sub-St E3: Commercial (3 Ph-In - w/Demand, No Ta EC Total Commercial (3 Ph) w/Demand Large Power (In - w/Dmd & Rct) EL Large Power (In - w/Dmd & Rct, w/SbC) EL Large Power (In - w/Dmd & Rct, w/SbC) EL Large Power (In - w/Dmd & Rct, w/SbC) EL		39	438,660	\$48,468.19	1632	\$0.1105	\$0.1137	39	441,177	\$54,737.85	\$0.1241	39		\$50,528.66	\$0.1170
Commercial (3 Ph-In - w/Demand, No Ta EC Total Commercial (3 Ph) w/Demand Large Power (In - w/Dmd & Rct) EL Large Power (In - w/Dmd & Rct, w/SbC EL: Large Power (Out - w/Dmd & Rct, w/SbC EL: Large Power (In - w/Dmd & Rct, w/SbCr) EL		0	0 137,480	\$0.00	0 481	\$0.0000 \$0.1036	\$0.1068 \$0.1070	2	35,160	\$4,376.14	\$0.1245 \$0.1119	2		\$6,997.97	\$0.1171 \$0.1101
Total Commercial (3 Ph) w/Demand Large Power (In - w/Dmd & Rct) EL Large Power (In - w/Dmd & Rct, w/SbCr) EL Large Power (Out - w/Dmd & Rct, w/SbC EL: Large Power (In - w/Dmd & Rct, w/SbC EL:		3 1	1.840	\$14,239.58 \$211.56	401	\$0.1036	\$0.1070	3	142,800 1,760	\$15,978.00 \$220.15	\$0.1119	3		\$16,065.70 \$228.87	\$0.1217
Large Power (In - w/Dmd & Rct) EL Large Power (In - w/Dmd & Rct, w/SbCr) EL Large Power (Out - w/Dmd & Rct, w/SbC EL: Large Power (In - w/Dmd & Rct, w/SbCr) EL						<i>\</i> 0.1100	<i>\</i>				\$0.1201			<i>QLL0.07</i>	
Large Power (In - w/Dmd & Rct, w/SbCr) EL Large Power (Out - w/Dmd & Rct, w/SbC EL: Large Power (In - w/Dmd & Rct, w/SbCr) EL		248	1,992,070	\$221,424.42	7,102	\$0.1112	\$0.1132	251	2,105,446	\$255,091.66	\$0.1212	251	2,193,335	\$256,453.43	\$0.1169
Large Power (In - w/Dmd & Rct, w/SbCr) EL Large Power (Out - w/Dmd & Rct, w/SbC EL: Large Power (In - w/Dmd & Rct, w/SbCr) EL															
Large Power (Out - w/Dmd & Rct, w/SbC EL Large Power (In - w/Dmd & Rct, w/SbCr) EL		21	2,403,640	\$211,797.66	5692	\$0.0881	\$0.0902	20	2,012,124	\$202,074.39	\$0.1004	20		\$211,633.90	\$0.0950
Large Power (In - w/Dmd & Rct, w/SbCr) EL		3	994,472	\$79,375.27	1927	\$0.0798	\$0.0781	1	833,540	\$69,635.03	\$0.0835	1		\$62,063.40	\$0.0817
		1	295,200 70,607	\$26,076.76 \$7,256.69	707 220	\$0.0883 \$0.1028	\$0.0952 \$0.1182	1	230,400 88,088	\$26,226.17 \$7,543.29	\$0.1138 \$0.0856	1		\$32,659.20 \$7,302.78	\$0.0969 \$0.0829
Total Large Power	10	2	70,007	\$7,230.09		φ0.1020	φ0.1102	2		\$7,545.25	\$0.0650	2		φ1,302.76	\$0.0629
		27	3,763,919	\$324,506.38		\$0.0862	\$0.0885	24	3,164,152	\$305,478.88	\$0.0965	24		\$313,659.28	\$0.0919
Industrial (In - w/Dmd & Rct, w/SbCr) E		1	1,156,158	\$87,758.35	2190	\$0.0759	\$0.0778	1	847,503	\$79,203.45	\$0.0935	1	1,123,360	\$91,332.81	\$0.0813
Industrial (In - w/Dmd & Rct, No/SbCr) E	12	1	1,023,505	\$77,586.44	1891	\$0.0758	\$0.0766	1	1,013,882	\$84,741.29	\$0.0836	1	1,101,193	\$88,302.30	\$0.0802
Total Industrial			0.470.000		4 004	00.0750	*** **		4 004 005		* 0.0001				00.0000
Total Industrial		2	2,179,663	\$165,344.79	4,081	\$0.0759	\$0.0772	2	1,861,385	\$163,944.74	\$0.0881	2	2,224,553	\$179,635.11	\$0.0808
Interdepartmental (In - No Dmd) ED	D1	8	63,180	\$6,320.99	163	\$0.1000	\$0.0980	48	168,336	\$16,489.89	\$0.0980	48	174,867	\$16,615.11	\$0.0950
Interdepartmental (Out - No Dmd) ED		0	00,100	\$0.00	00	\$0.0000	\$0.0919			\$0.00				\$0.00	\$0.0000
Interdepartmental (Out - w/Dmd) ED	20	2	238	\$50.86	0	\$0.2137	\$0.1472	0	0	\$0.00	\$0.0000	0	0	\$0.00	\$0.0000
Interdepartmental (In - w/Dmd) EI	D2	27	49,447	\$5,868.15	0	\$0.1187	\$0.0955	20	366,684	\$35,085.73	\$0.0957	20	374,462	\$34,779.41	\$0.0929
Interdepartmental (3Ph-In - w/Dmd) EI	D3	11	205,612	\$21,129.50	685	\$0.1028	\$0.1041	0	0	\$0.00	\$0.0000	0	0	\$0.00	\$0.0000
Interdepartmental (Street Lights) ED		7	62,879	\$5,850.15	0	\$0.0930	\$0.0931	0	0	\$0.00		0	-	\$0.00	\$0.0000
Interdepartmental (Traffic Signals) ED		15	1,837 19,199	\$169.84	0	\$0.0925	\$0.0924 \$0.0000	0	0 21,158	\$0.00	\$0.0000 \$0.0336	0		\$0.00	\$0.0000 \$0.0441
	IV2 IV5	1	19,199	\$676.19 \$465.04		\$0.0352 \$0.0352		1	21,158	\$710.91 \$603.39		1		\$1,085.50 \$822.28	\$0.0441 \$0.0441
				φ+05.04		Ψ0.000Z	<i>40.0000</i>							ψυΖΖ.ΖΟ	\$0.0771
Total Interdepartmental	1	72	415,596	\$40,530.72	910	\$0.0975	\$0.0942	71	574,136	\$52,889.92	\$0.0921	71	592,599	\$53,302.30	\$0.0899
SUB-TOTAL CONSUMPTION & DEMAND		5,867	12,294,695	\$1,179,565.56	,	\$0.0959	\$0.0985	5,876	, ,	\$1,391,020.32	\$0.1068	5,870	, ,	\$1,418,237.81	\$0.1019
								-]
Oter et L'estate (les)	_		-	A10	-	#0.00C-	#C 005			A10	#0.000		_	A10	#C 000
Street Lights (In) SL Street Lights (Out) SL		15 2	0	\$13.59 \$0.77		\$0.0000 \$0.0000	\$0.0000 \$0.0000	15	0	\$13.58 \$0.77		15 2		\$13.59 \$0.77	\$0.0000 \$0.0000
Street Lights (Out) SLC		2	0	\$0.77	0	φ0.0000	φυ.υυυυ	2	U	\$0.77	φυ.υυυυ	2		\$0.77	φυ.υυυυ
Total Street Light Only	00	17	0	\$14.36		\$0.0000	\$0.0000	17	0	\$14.35	\$0.0000	17			\$0.0000
~ /															
TOTAL CONSUMPTION & DEMAND			12,294,695	\$1,179,579.92	23,208	\$0.0959	\$0.0985	5,893	13,026,124	\$1,391,034.67	\$0.1068	5,887	13,911,892	\$1,418,252.17	\$0.1019

BILLING SUMMARY AN	ID CO	1															
FEBRUARY, 2016																	
2016 - FEBRUARY BILLING WITH JAN	UARY 201	Apr-15				May-15				Jun-15				Jul-15			
Class and/or	Rate	# of	Apr-15	Apr-15	Cost / kWH	# of	May-15	May-15	Cost / kWH	# of	Jun-15	Jun-15	Cost / kWH	# of	Jul-15	Jul-15	Cost / kWH
Schedule	Code	Bills	(kWh Usage)	Billed	For Month	Bills	(kWh Usage)	Billed	For Month	Bills	(kWh Usage)	Billed	For Month	Bills	(kWh Usage)	Billed	For Month
Residential (Dom-In)	E1	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	3,351	2,075,385	\$230,585.66	\$0.1111
Residential (Dom-In) w/Ecosmart	E1E	10	4,713	\$526.09	\$0.1116	10		\$490.55	\$0.1109	10		\$455.42	\$0.1133	10		\$621.73	\$0.1122
Residential (Dom-In - All Electric)	E2	609	790,810	\$81,820.65	\$0.1035	607	563,183	\$58,474.50	\$0.1038	608	367,420	\$39,775.31	\$0.1083	611		\$41,369.32	\$0.1113
Res.(Dom-In - All Elec.) w/Ecosmart	E2E	1	566	\$61.97	\$0.1095	1	615	\$65.88	\$0.1071	1	461	\$51.33	\$0.1113	1	677	\$74.67	\$0.1103
Total Residential (Domestic)		3,973	3,054,966	\$325,911.15	\$0.1067	3,966	2,548,522	\$271,929.67	\$0.1067	3,968	2,015,899	\$222,053.18	\$0.1102	3,973	2,453,341	\$272,651.38	\$0.1111
Pasidential (Purel Qut)	ER1	744	945.000	\$94,938.92	\$0.1123	744	723,533	\$81,281.84	\$0.1123	748	562,029	\$65,398.07	\$0.1164	749	670,690	\$79,620.30	\$0.1171
Residential (Rural-Out) Residential (Rural-Out) w/Ecosmart	ER1E	/44	845,069 2,722	\$94,938.92 \$322.15	\$0.1123	744		\$81,281.84	\$0.1123	748	2,029	\$65,398.07 \$252.09	\$0.1164	749	679,680 2,199	\$79,620.30 \$273.52	\$0.1171 \$0.1244
Residential (Rural-Out - All Electric)	ER2	386	610,664	\$67,063.60	\$0.1104	387	_,	\$54,202.13	\$0.1109	388		\$39,581.00	\$0.1220	386		\$44,881.69	\$0.1244
Res. (Rural-Out - All Electric) w/Ecosmai	ER2E	2	2,810	\$311.12	\$0.1107	2		\$246.28	\$0.1111	2	1,345	\$158.58	\$0.1179	2	1,153	\$142.35	\$0.1235
Residential (Rural-Out w/Dmd)	ER3	14		\$2,065.16	\$0.1110	15		\$2,394.91	\$0.1087	15		\$4,115.04	\$0.1066	15		\$3,430.53	\$0.1107
Residential (Rural-Out - All Electric w/Dn		9	11,828	\$1,314.56	\$0.1111	9		\$1,079.90	\$0.1114	9	7,050	\$816.43	\$0.1158	9	7,011	\$834.01	\$0.1190
Total Residential (Rural)		1,159	1,491,706	\$166,015.51	\$0.1113	1,161	1,253,168	\$139,494.87	\$0.1113	1,166	957,513	\$110,321.21	\$0.1152	1,165	1,107,561	\$129,182.40	\$0.1166
Commercial (1 Ph-In - No Dmd)	EC2	73	49,146	\$6,602.06	\$0.1343	73		\$6,412.51	\$0.1332	72		\$5,602.99	\$0.1372	74		\$6,275.38	\$0.1388
Commercial (1 Ph-Out - No Dmd)	EC2O	43	11,360	\$1,842.30	\$0.1622	43		\$1,725.43	\$0.1645	43	7,705	\$1,411.91	\$0.1832	42	7,061	\$1,346.71	\$0.1907
Total Commercial (1 Ph) No Prod		116		\$8,444.36	\$0.1396	116		\$8,137.94	\$0.1388	115	40 500	e7 014 00	\$0.1445	116	52,288	\$7,622.09	¢0 1450
Total Commercial (1 Ph) No Dmd		116	60,506	\$8,444.36	\$0.1396	116	58,635	\$8,137.94	\$0.1388	115	48,536	\$7,014.90	\$0.1445	116	52,288	\$7,622.09	\$0.1458
Commercial (1 Ph-In - w/Demand)	EC1	261	337,480	\$44,282.75	\$0.1312	260	328,539	\$42,760.94	\$0.1302	259	284,829	\$38,606.84	\$0.1355	257	300,429	\$42,301.06	\$0.1408
Commercial (1 Ph-Out - w/Demand)	EC10	201	45.917	\$5,650.20	\$0.1312	260		\$5,320.61	\$0.1302	259	33.206	\$4,345.55	\$0.1355	257		\$4,240.82	\$0.1408
Commerciai (1 Ph-Out - w/Demand)	ECIO		40,917		φ0.1231	20			φ0.1230		33,200	\$4,343.33	φ0.1309			φ4,240.02	φ0.1378
Total Commercial (1 Ph) w/Demand		286		\$49,932.95	\$0.1302	285		\$48,081.55	\$0.1294	284	318,035	\$42.952.39	\$0.1351	282		\$46,541.88	\$0.1405
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Commercial (3 Ph-Out - No Dmd)	EC4O	2	40	\$40.67	\$1.0168	2	1,160	\$169.60	\$0.1462	2	160	\$54.59	\$0.3412	2	80	\$45.54	\$0.5693
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Total Commercial (3 Ph) No Dmd		2	40	\$40.67	\$1.0168	2	1,160	\$169.60	\$0.1462	2	160	\$54.59	\$0.3412	2	80	\$45.54	\$0.5693
Commercial (3 Ph-In - w/Demand)	EC3	206	1,532,298	\$176,808.22	\$0.1154	207		\$165,075.33	\$0.1145	207	1,452,965	\$168,573.29	\$0.1160	207	1,555,155	\$185,286.12	\$0.1191
Commercial (3 Ph-Out - w/Demand)	EC3O	39	416,052	\$47,645.15	\$0.1145	39		\$41,976.45	\$0.1135	39	338,498	\$40,047.49	\$0.1183	38		\$48,498.64	\$0.1181
Commercial (3 Ph-In - w/Dmd.&Sub-St.C	EC3S	2	71,760	\$8,159.09	\$0.1137	2		\$11,375.57	\$0.1066	4	132,480	\$15,824.02	\$0.1194	2		\$16,349.54	\$0.1098
Commercial (3 Ph-Out - w/Dmd.&Sub-St	E3SO	3		\$15,333.57	\$0.1086	3		\$14,380.98	\$0.1084	3		\$15,336.38	\$0.1091	3	200,100	\$21,574.45	\$0.1077
Commercial (3 Ph-In - w/Demand, No Ta	EC3T	1	1,720	\$204.83	\$0.1191	1	1,560	\$187.94	\$0.1205	1	1,800	\$215.71	\$0.1198	1	2,000	\$274.19	\$0.1371
Total Commercial (3 Ph) w/Demand		251	2,162,990	\$248,150.86	\$0.1147	252	2,052,344	\$232,996.27	\$0.1135	254	2,066,263	\$239,996.89	\$0.1162	251	2,317,090	\$271,982.94	\$0.1174
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Large Power (In - w/Dmd & Rct)	EL1	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	21	2,481,914	\$235,268.97	\$0.0948
Large Power (In - w/Dmd & Rct, w/SbCr)	EL2	1	700,316	\$57,506.54	\$0.0821	1	670,523	\$51,650.04	\$0.0770	1	662,477	\$51,806.61	\$0.0782	1	753,680	\$60,286.30	\$0.0800
Large Power (Out - w/Dmd & Rct, w/SbC	EL2O	1	295,200	\$29,423.85	\$0.0997	1	286,800	\$27,782.97	\$0.0969	1	319,200	\$30,456.43	\$0.0954	1	313,200	\$31,319.52	\$0.1000
Large Power (In - w/Dmd & Rct, w/SbCr)	EL3	2	82,101	\$6,908.38	\$0.0841	2	55,869	\$6,524.97	\$0.1168	2	41,376	\$5,522.76	\$0.1335	2	81,846	\$16,481.63	\$0.2014
Total Large Power		24	3,186,290	\$296,154.04	\$0.0929	24	3,297,572	\$293,460.76	\$0.0890	25	3,409,034	\$308,305.53	\$0.0904	25	3,630,640	\$343,356.42	\$0.0946
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Industrial (In - w/Dmd & Rct, w/SbCr) Industrial (In - w/Dmd & Rct, No/SbCr)	El1 El2	1	1,013,401 991,550	\$83,488.50	\$0.0824 \$0.0785	1	1,030,321	\$80,038.20	\$0.0777	1	1,070,789	\$83,886.09	\$0.0783 \$0.0773	1	1,152,988	\$93,054.84	\$0.0807
Industrial (In - W/Dmd & Rct, No/SbCr)	EIZ		991,550	\$77,788.63	\$0.0785		1,107,040	\$83,449.52	\$0.0754		1,059,232	\$81,867.50	\$0.0773		1,077,121	\$88,456.90	\$0.0821
Total Industrial		2	2,004,951	\$161,277.13	\$0.0804	2		\$163,487.72	\$0.0765	2	2,130,021	\$165,753.59	\$0.0778	2		\$181,511.74	\$0.0814
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Interdepartmental (In - No Dmd)	ED1	48	159,637	\$14,757.99	\$0.0924	48	138,905	\$12,636.25	\$0.0910	48	91,122	\$8,411.66	\$0.0923	8	49,074	\$5,581.34	\$0.1137
Interdepartmental (Out - No Dmd)	ED10	1	0	\$0.00	\$0.0000	1	9	\$0.83	\$0.0922	1	244	\$22.43	\$0.0919	0	0	\$0.00	\$0.0000
Interdepartmental (Out - w/Dmd)	ED2O	0			\$0.0000	0		\$0.00	\$0.0000	0		\$0.00	\$0.0000	2		\$122.51	\$0.1485
Interdepartmental (In - w/Dmd)	ED2	20	346,492	\$31,272.53	\$0.0903	20		\$24,506.50	\$0.0887	20		\$18,542.20	\$0.0895	30		\$3,137.40	\$0.1342
Interdepartmental (3Ph-In - w/Dmd)	ED3	0	0	\$0.00		0	-	\$0.00	\$0.0000	0	-	\$0.00	\$0.0000	11		\$18,902.11	\$0.1120
Interdepartmental (Street Lights)	EDSL	0	0		\$0.0000	0		\$0.00	\$0.0000	0	0	\$0.00		7	62,879	\$5,850.15	
Interdepartmental (Traffic Signals)	EDTS	0	0	\$0.00	\$0.0000	0	-	\$0.00	\$0.0000	0	0	\$0.00	\$0.0000	15		\$164.29	\$0.0922
Generators (JV2 Power Cost Only)	GJV2	1	20,605	\$1,068.78	\$0.0519	1		\$1,034.98	\$0.0534	1	17,280	\$748.40	\$0.0433	1	16,671	\$695.01	\$0.0417
Generators (JV5 Power Cost Only)	GJV5	1	15,792	\$819.13	\$0.0519		9,449	\$504.67	\$0.0534	1	U	\$0.00	\$0.0000	1	28,010	\$1,167.74	\$0.0417
Total Interdepartmental		71	542,526	\$47,918.43	\$0.0883	71	443,996	\$38,683.23	\$0.0871	71	315,837	\$27,724.69	\$0.0878	75	351,446	\$35,620.55	\$0.1014
. etc. intervepartmentar				ψ - 7,310.43					ψ0.0071			Ψ=1,127.03	ψ 0.0070			ψ0 0,020.0 0	<i>4</i> 0.1014
SUB-TOTAL CONSUMPTION & DEMAN	1D	5,884	12,887,372	\$1,303,845.10	\$0.1012	5,879	12,164,277	\$1,196,441.61	\$0.0984	5,887	11,261,298	\$1,124,176.97	\$0.0998	5,891	12,473,752	\$1,288,514.94	\$0.1033
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Street Lights (In)	SLO	15			\$0.0000	15		\$13.58	\$0.0000	15			\$0.0000	15		\$13.59	\$0.0000
Street Lights (Out)	SLOO	2	0		\$0.0000	2		\$0.77	\$0.0000	2	0		\$0.0000	2	0	\$0.77	\$0.0000
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Total Street Light Only		17	0	\$14.36	\$0.0000	17	0	\$14.35	\$0.0000	17	0	\$14.35	\$0.0000	17	0	\$14.36	\$0.0000
TOTAL CONSUMPTION & DEMAND		 5 001	10 007 070	#1 200 0F0 10	60 40 40	E 906	10 101 077	¢1 100 455 00	¢0.000.1		11 001 000	¢1 104 101 00	60.0000	E 000	10 470 750	¢1 000 500 00	60 1000
TOTAL CONSUMPTION & DEMAND		5,901	12,887,372	\$1,303,859.46	\$0.1012	5,896	12,164,277	\$1,196,455.96	\$0.0984	5,904	11,261,298	\$1,124,191.32	\$0.0998	5,908	12,473,752	\$1,288,529.30	\$0.1033

BILLING DETERMINANTS

BILLING SUMMARY AN	D CO																		
FEBRUARY, 2016																			
2016 - FEBRUARY BILLING WITH JANU	IARY 2010	Aug-15				Sep-15				Oct-15				Nov-15				Dec-15	
Class and/or	Rate	# of	Aug-15	Aug-15	Cost / kWH	# of	Sep-15	Sep-15	Cost / kWH	# of	Oct-15	Oct-15	Cost / kWH	# of	Nov-15	Nov-15	Cost / kWH	# of	Dec-15
Schedule	Code	Bills	(kWh Usage)	Billed	For Month	Bills	(kWh Usage)	Billed	For Month	Bills	(kWh Usage)	Billed	For Month	Bills	(kWh Usage)	Billed	For Month	Bills	(kWh Usage)
Residential (Dom-In)	E1	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	1,988,662	\$204,893.24	\$0.1030	3,356	1,798,371
Residential (Dom-In) w/Ecosmart	E1E	10	6,313	\$685.86	\$0.1086	10	8,544	\$880.66	\$0.1031	10	6,667	\$668.28	\$0.1002	10	4,698	\$496.63	\$0.1057	10	4,126
Residential (Dom-In - All Electric)	E2	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	341,222	\$35,380.27	\$0.1037	608	377,629
Res.(Dom-In - All Elec.) w/Ecosmart	E2E	1	917	\$96.91	\$0.1057	1	1,019	\$103.88	\$0.1019	1	889	\$87.10	\$0.0980	1	781	\$78.58	\$0.1006	1	616
Total Residential (Domestic)		3,963	2,841,232	\$305,322.69	\$0.1075	3,976	3,494,593	\$359,468.20	\$0.1029	3,964	3,044,569	\$301,553.64	\$0.0990	3,966	2,335,363	\$240,848.72	\$0.1031	3,975	2,180,742
Residential (Rural-Out)	ER1	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	599,673	\$66.098.28	\$0.1102	758	639,997
Residential (Rural-Out) w/Ecosmart	ER1E	4	2,524	\$302.24	\$0.1197	4	3.050	\$347.44	\$0.1139	4	2,854	\$313.96	\$0.1100	4	2,178	\$252.82	\$0.1161	4	
Residential (Rural-Out - All Electric)	ER2	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	347,574	\$37,798.14	\$0.1087	387	392,331
Res. (Rural-Out - All Electric) w/Ecosmar	ER2E	2	1,201	\$144.72	\$0.1205	2	1,369	\$157.93	\$0.1154	2	1,268	\$141.65	\$0.1117	2	1,369	\$153.67	\$0.1122	2	1,653
Residential (Rural-Out w/Dmd)	ER3	15		\$2,003.96	\$0.1121	15		\$1,118.35	\$0.1162	15	20,298	\$2,093.89	\$0.1032	15	18,711	\$1,972.49	\$0.1054	15	
Residential (Rural-Out - All Electric w/Dm	ER4	9	7,864	\$906.42	\$0.1153	9	9,346	\$1,031.20	\$0.1103	9	8,917	\$945.17	\$0.1060	9	9,782	\$1,044.46	\$0.1068	9	28,708
Total Residential (Rural)		1,168	1,150,878	\$131,177.50	\$0.1140	1,171	1,339,705	\$146,669.41	\$0.1095	1,169	1,247,574	\$131,375.48	\$0.1053	1,170	979,287	\$107,319.86	\$0.1096	1,175	1,119,264
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Commercial (1 Ph-In - No Dmd)	EC2	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	44,720	\$5,835.07	\$0.1305	74	46,142
Commercial (1 Ph-Out - No Dmd)	EC2O	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	6,331	\$1,218.01	\$0.1924	43	10,729
Total Commercial (1 Ph) No Dmd		117	50,834	\$7,344.13	\$0.1445	117	53,300	\$7,468.60	\$0.1401	119	54,060	\$7,319.05	\$0.1354	117	51,051	\$7,053.08	\$0.1382	117	56,871
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Commercial (1 Ph-In - w/Demand)	EC1	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	350,282	\$44,482.88	\$0.1270	255	
Commercial (1 Ph-Out - w/Demand)	EC10	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	29,420	\$3,757.18	\$0.1277	24	25,782
Total Commercial (1 Ph) w/Demand		281	373,594	\$50,035.58	\$0.1339	281	414,719	\$52,735.65	\$0.1272	281	425,035	\$52,861.08	\$0.1244	279	379,702	\$48,240.06	\$0.1270	279	305,507
Total Commercial (1 Ph) w/Demand		201	373,334	\$30,033.30	ψ0.1555	201	414,713	<i>452,155.05</i>	\$0.1272	201	423,033	<i>4</i> 52,001.00	\$0.1244	213	515,102	φ 1 0,240.00	\$0.1270	213	505,507
Commercial (3 Ph-Out - No Dmd)	EC4O	2	40	\$40.68	\$1.0170	2	80	\$45.11	\$0.5639	2	40	\$40.37	\$1.0093	2	80	\$44.86	\$0.5608	2	40
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Total Commercial (3 Ph) No Dmd		2	40	\$40.68	\$1.0170	2	80	\$45.11	\$0.5639	2	40	\$40.37	\$1.0093	2	80	\$44.86	\$0.5608	2	40
Commercial (3 Ph-In - w/Demand)	EC3	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	1,707,544	\$189,181.38	\$0.1108	206	
Commercial (3 Ph-Out - w/Demand)	EC3O	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	396,941	\$44,312.51	\$0.1116	39	556,051
Commercial (3 Ph-In - w/Dmd.&Sub-St.C		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	203,880	\$20,524.88	\$0.1007	0	0
Commercial (3 Ph-Out - w/Dmd.&Sub-St.	E3SO	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	89,680	\$10,157.73	\$0.1133	3	135,280
Commercial (3 Ph-In - w/Demand, No Ta	EC3T	1	2,960	\$362.43	\$0.1224		3,280	\$414.79	\$0.1265	1	4,720	\$498.23	\$0.1056		4,280	\$461.32	\$0.1078		2,400
Total Commercial (3 Ph) w/Demand		252	2,327,213	\$268,051.73	\$0.1152	254	2,473,560	\$276,099.82	\$0.1116	252	2,871,972	\$303,188.33	\$0.1056	253	2,402,325	\$264,637.82	\$0.1102	249	2,205,663
Large Power (In - w/Dmd & Rct)	EL1	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	2,689,846	\$229,516.76	\$0.0853	21	2,693,896
Large Power (In - w/Dmd & Rct, w/SbCr)	EL2	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	878,844	\$65,588.24	\$0.0746	3	1,099,839
Large Power (Out - w/Dmd & Rct, w/SbC		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	307,200	\$27,818.14	\$0.0906	1	332,400
Large Power (In - w/Dmd & Rct, w/SbCr)	EL3	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	78,297	\$6,047.70	\$0.0772	2	79,597
Total Large Power		25	3,539,465	\$330,373.70	\$0.0933	25	4,051,528	\$346,827.49	\$0.0856	25	4,173,962	\$346,176.23	\$0.0829	25	3,954,187	\$328,970.84	\$0.0832	27	4,205,732
Industrial (In - w/Dmd & Rct, w/SbCr)	El1	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	1,127,275	\$81,054.43	\$0.0719	1	1,206,433
Industrial (In - w/Dmd & Rct, No/SbCr)	El2	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	1,158,099	\$83,221.66	\$0.0719	1	1,128,579
Total Industrial		2	2,051,155	\$168,576.78	\$0.0822	2	2,466,562	\$183,893.52	\$0.0746	2	2,365,318	\$166,768.82	\$0.0705	2	2,285,374	\$164,276.09	\$0.0719	2	2,335,012
		-	2,001,100	\$100,010110	\$0.0022	-	2,100,002	¢.00,000.02	Q	-	2,000,010	¢100,700.02	<i>Q</i>	-	2,200,011	¢101,210100	\$0.0110		2,000,012
Interdepartmental (In - No Dmd)	ED1	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	32,267	\$3,472.77	\$0.1076	8	34,464
Interdepartmental (Out - No Dmd)	ED10	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	0
Interdepartmental (Out - w/Dmd)	ED2O	2	885	\$127.65	\$0.1442	2	1,033	\$141.76	\$0.1372	2	961	\$128.94		2	743	\$106.42	\$0.1432	2	
Interdepartmental (In - w/Dmd)	ED2	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	25,670	\$3,168.51	\$0.1234	29	
Interdepartmental (3Ph-In - w/Dmd)	ED3	11		\$23,641.06	\$0.1094	11		\$21,275.17	\$0.1056	11	207,274	\$20,069.48		11	161,092	\$16,726.53		11	
Interdepartmental (Street Lights)	EDSL	7	62,879	\$5,850.15	\$0.0930	7	62,879	\$5,850.15		7	62,879	\$5,848.05		7	62,879	\$5,849.08	\$0.0930	7	62,879
Interdepartmental (Traffic Signals)	EDTS	15		\$154.50	\$0.0922	15		\$153.18		14	1,707	\$157.86		14	1,820	\$168.31	* *	15	
Generators (JV2 Power Cost Only) Generators (JV5 Power Cost Only)	GJV2 GJV5	1	15,739 11.638	\$712.35 \$526.74	\$0.0453 \$0.0453	1	14,697 11,234	\$625.95 \$478.46	\$0.0426 \$0.0426	1	15,735 12,197	\$630.97 \$489.10	\$0.0401 \$0.0401		17,347 11,408	\$621.37 \$408.63	\$0.0358 \$0.0358	1	17,671 12,297
Generators (0V0 FOWER COSt Only)	0070		11,038	ჶე∠ ე./4	φ0.0433		11,234	φ470.46	φU.U42b		12,197	<u>ቅ</u> 409.10	φU.U4U1		11,408		φυ.υ358		12,297
Total Interdepartmental		76	381,331	\$39,494.91	\$0.1036	72	371,425	\$37,413.19	\$0.1007	71	368,517	\$34,747.05	\$0.0943	71	313,226	\$30,521.62	\$0.0974	74	380,724
SUB-TOTAL CONSUMPTION & DEMAN	D	5,886	12,715,742	\$1,300,417.70	\$0.1023	5,900	14,665,472	\$1,410,620.99	\$0.0962	5,885	14,551,047	\$1,344,030.05	\$0.0924	5,885	12,700,595	\$1,191,912.95	5 \$0.0938	5,900	12,789,555
COL CONCOMPTION & DEMAN	-	0,000	12,715,742	\$1,300,417.70	ψ 0.102 3	3,300	14,005,472	\$1,410,020.33	ψ0.030Z		14,551,047	\$1,344,030.05	ψ0.03 2 4	5,005	12,700,595	\$1,191,912.95		5,500	
																		1	
Street Lights (In)	SLO	15	0	\$13.59	\$0.0000	15	0	\$13.59	\$0.0000	15	0	\$13.59		14	0	\$13.43		15	0
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	0
Total Street Light Only		17	0	\$14.36	\$0.0000	17	0	\$14.36	\$0.0000	17	0	\$14.36	\$0.0000	16	0	\$14.20	\$0.0000	17	0
TOTAL CONSUMPTION & DEMAND		5,903	12,715,742	\$1,300,432.06	\$0.1023	5,917	14,665,472	\$1,410,635.35	\$0.0962	5,902	14,551,047	\$1,344,044.41	\$0.0924	5,901	12,700,595	\$1,191,927.15	5 \$0.0938	5,917	12,789,555
		3,303	12,110,142	φ1,300,432.00	ψ0.1023	3,917	17,000,472	φι,τι0,030.35	φ 0.0 302	3,302	17,001,047	ψ1, 374 ,044.41	φ0.0524	3,301	12,700,090	ψι, ισι, σ21.13	φ υ.υ σ30	3,31/	12,109,000

BILLING SUMMARY AN	D CO											
FEBRUARY, 2016												
2016 - FEBRUARY BILLING WITH JANU	JARY 201	t										
				Jan-16				TOTAL	TOTAL	Avg.Cost	Avg.Num.	Avg.Per.%
Class and/or	Rate	Dec-15	Cost / kWH	# of	Jan-16	Jan-16	Cost / kWH	KWH USEAGE	BILLING	Per kWH	of Bills	of Bills
Schedule	Code	Billed	For Month	Bills	(kWh Usage)	Billed	For Month	PRIOR 12 MO	PRIOR 12 MO	For Period	For Period	For Period
Residential (Dom-In)	E1	\$184,274.36		3,336	1,861,416	\$195,822.68		26,646,669	\$2,835,792.37		3,347	56.7170%
Residential (Dom-In) w/Ecosmart	E1E	\$436.57	\$0.1058	10		\$441.29		63,900 6,193,679	\$6,937.89		10	0.1695%
Residential (Dom-In - All Electric) Res.(Dom-In - All Elec.) w/Ecosmart	E2 E2E	\$38,115.47 \$62.21	\$0.1009 \$0.1010	603	469,722 481	\$47,982.01	\$0.1021 \$0.1069	6,193,679	\$651,057.54		608	0.0169%
Res.(Dom-In - All Elec.) W/Ecosman	E2E	\$02.21	\$0.1010		401	\$51.43	\$0.1069	0,200	\$868.16	\$0.1056		0.0169%
Total Residential (Domestic)		\$222,888.61	\$0.1022	3,950	2,335,656	\$244,297.41	\$0.1046	32,912,456	\$3,494,655.96	\$0.1062	3,966	67.2080%
Total Residential (Domestic)		\$222,000.01	\$0.1022	3,950	2,335,050	\$244,257.41	\$0.1040	32,912,450	\$3,494,000.90	\$0.1002	3,900	07.2000 /8
Residential (Rural-Out)	ER1	\$69,004.14	\$0.1078	756	692,545	\$76,216.42	\$0.1101	8,956,012	\$1,005,641.99	\$0.1123	750	12.7025%
Residential (Rural-Out) w/Ecosmart	ER1E	\$268.56	\$0.1078	4	2,902	\$327.89		32,278	\$3,782.54		750	0.0678%
Residential (Rural-Out) w/Ecosman	ER2	\$41,522.79	\$0.1128	383		\$46.020.44		5,580,105	\$618,190.78		387	6.5567%
Res. (Rural-Out - All Electric) w/Ecosmar	ER2E	\$178.64	\$0.1056	2		\$46,020.44		5,580,105	\$2,567.48		367	0.0339%
Residential (Rural-Out w/Dmd)	ER3	\$5,333.52	\$0.1081	16		\$9,894.24		445,763	\$47,268.72		15	0.0339%
Residential (Rural-Out - All Electric w/Dm	ER4	\$2,837.96	\$0.0984	9		\$1,455.82		138,235	\$15,055.27		15	0.2556%
Residentiai (Rurai-Out - Ali Electric W/Dil	En4	\$2,037.90	\$0.0969	9	13,792	\$1,400.6Z	\$0.1056	130,235	\$15,055.27	\$0.1069	9	0.1525%
Total Residential (Rural)		\$119,145.61	\$0.1064	1,170	1,235,523	\$134,133.60	\$0.1086	15,175,041	\$1,692,506.78	\$0.1115		19.7690%
rotar nesideritiar (nural)		\$119,145.01	\$0.1004	1,170	1,235,525	\$134,133.00	\$0.1000	15,175,041	\$1,092,500.78	\$0.1115	1,107	19.7090 %
Commercial (1 Ph-In - No Dmd)	EC2	\$5,915.34	\$0.1282	74	43,794	\$5,800.34	\$0.1324	559,852	\$75,036.14	\$0.1340	74	1.2512%
Commercial (1 Ph-In - No Dmd) Commercial (1 Ph-Out - No Dmd)	EC2 EC2O	\$5,915.34		43		\$5,800.34		105,359	\$18,292.78		43	0.7216%
Commercial (T FII-Out - NO DITU)	E020	φ1,000.33	φU.1572	43	0,104	φ1,432.14	φυ.1756	105,359	φ10,292.78	φυ.1736	43	0.7210%
Total Commercial (1 Ph) No Dmd		\$7,601.67	\$0.1337	117	51,948	\$7,232.48	\$0.1392	665,211	\$93,328.92	\$0.1403		1.9728%
rotar Commerciar (TPR) NO DMd		¢،1001.67	əU.1337	11/	51,948	ə1,232.48	φ 0.1392	005,211	ə93,328.92	əU.1403	116	1.9728%
	504	* • 7 •• 7 ••	* 0.4000	055	075 000	* *** *** ***	* 0.4007	0.040 700	AF00 405 50	** ***	050	4.07070/
Commercial (1 Ph-In - w/Demand)	EC1	\$37,007.69	\$0.1323	255	275,088	\$36,491.09		3,946,700	\$520,425.50		258	4.3707%
Commercial (1 Ph-Out - w/Demand)	EC1O	\$3,300.75	\$0.1280	24	30,192	\$3,885.43	\$0.1287	431,389	\$55,255.39	\$0.1281	25	0.4166%
Total Commercial (1 Ph) w/Demand		\$40,308.44	\$0.1319	279	305,280	\$40,376.52	\$0.1323	4,378,089	\$575,680.89	\$0.1315	283	4.7873%
Total Commercial (TPh) w/Demand		\$40,306.44	\$0.1319	2/9	305,200	\$40,376.52	\$0.1323	4,370,009	\$575,000.09	\$0.1315	203	4.7073%
O a restrict (0 Dh. Out. No. Dec.el)	5040	\$10.07	¢1.0000		15 0 10	01 710 01	#0.4440	00.100	#0.005 7 0	#0.4007		0.00000/
Commercial (3 Ph-Out - No Dmd)	EC4O	\$40.37	\$1.0093	2		\$1,719.24	\$0.1143	30,120	\$3,935.79	\$0.1307	2	0.0339%
Total Communial (8 Db) No Drud			61 0000				00 11 10		*0 005 70	*0 1007		0.00000/
Total Commercial (3 Ph) No Dmd		\$40.37	\$1.0093	2	15,040	\$1,719.24	\$0.1143	30,120	\$3,935.79	\$0.1307	2	0.0339%
Commercial (3 Ph-In - w/Demand)	EC3	\$165,693.78	\$0.1096	205	1,414,090	\$158,505.09	\$0.1121	19,074,018	\$2,175,929.26		207	3.5050%
Commercial (3 Ph-Out - w/Demand)	EC3O	\$58,181.67	\$0.1046	39		\$48,468.19		5,011,613	\$569,980.64		39	0.6581%
Commercial (3 Ph-In - w/Dmd.&Sub-St.C	EC3S	\$0.00	\$0.0000	0		\$0.00		1,314,960	\$140,445.24		2	0.0311%
Commercial (3 Ph-Out - w/Dmd.&Sub-St	E3SO	\$13,741.63	\$0.1016	3		\$14,239.58	\$0.1036	1,739,480	\$186,056.09		3	0.0508%
Commercial (3 Ph-In - w/Demand, No Ta	EC3T	\$284.95	\$0.1187	1	1,840	\$211.56	\$0.1150	30,200	\$3,564.97	\$0.1180	1	0.0169%
Total Commercial (3 Ph) w/Demand		\$237,902.03	\$0.1079	248	1,992,070	\$221,424.42	\$0.1112	27,170,271	\$3,075,976.20	\$0.1132	252	4.2619%
Large Power (In - w/Dmd & Rct)	EL1	\$220,257.42	\$0.0818	21	2,403,640	\$211,797.66		29,459,981	\$2,657,524.23		21	0.3502%
Large Power (In - w/Dmd & Rct, w/SbCr)	EL2	\$82,880.55	\$0.0754	3		\$79,375.27	\$0.0798	9,826,358	\$767,506.58		1	0.0226%
Large Power (Out - w/Dmd & Rct, w/SbC	EL2O	\$28,057.68	\$0.0844	1		\$26,076.76		3,600,000	\$342,780.34		1	0.0169%
Large Power (In - w/Dmd & Rct, w/SbCr)	EL3	\$5,934.15	\$0.0746	2		\$7,256.69	\$0.1028	901,471	\$106,588.20	\$0.1182	2	0.0339%
Total Large Power		\$337,129.80	\$0.0802	27	3,763,919	\$324,506.38	\$0.0862	43,787,810	\$3,874,399.35	\$0.0885	25	0.4237%
Industrial (In - w/Dmd & Rct, w/SbCr)	El1	\$83,318.08	\$0.0691	1	, ,	\$87,758.35		13,103,684	\$1,019,079.70		1	0.0169%
Industrial (In - w/Dmd & Rct, No/SbCr)	El2	\$79,886.73	\$0.0708	1	1,023,505	\$77,586.44	\$0.0758	13,167,780	\$1,008,595.14	\$0.0766	1	0.0169%
Total Industrial		\$163,204.81	\$0.0699	2	2,179,663	\$165,344.79	\$0.0759	26,271,464	\$2,027,674.84	\$0.0772	2	0.0339%
Interdepartmental (In - No Dmd)	ED1	\$3,802.92	\$0.1103	8		\$6,320.99	\$0.1000	1,061,847	\$104,093.49		25	0.4180%
Interdepartmental (Out - No Dmd)	ED10	\$0.00		0		\$0.00		253	\$23.26		0	0.0071%
Interdepartmental (Out - w/Dmd)	ED2O	\$59.81	\$0.1829	2		\$50.86	\$0.2137	5,012	\$737.95	\$0.1472	1	0.0198%
Interdepartmental (In - w/Dmd)	ED2	\$4,336.96	\$0.1186	27		\$5,868.15	\$0.1187	1,774,703	\$169,486.45	\$0.0955	25	0.4208%
Interdepartmental (3Ph-In - w/Dmd)	ED3	\$21,414.53	\$0.0998	11	205,612	\$21,129.50	\$0.1028	1,375,001	\$143,158.38	\$0.1041	6	0.1087%
Interdepartmental (Street Lights)	EDSL	\$5,862.30	\$0.0932	7	62,879	\$5,850.15	\$0.0930	440,153	\$40,960.03	\$0.0931	4	0.0692%
Interdepartmental (Traffic Signals)	EDTS	\$182.51		15		\$169.84		12,453	\$1,150.49		9	0.1455%
Generators (JV2 Power Cost Only)	GJV2	\$662.84	\$0.0375	1	19,199	\$676.19		220,100	\$9,273.25		1	0.0169%
Generators (JV5 Power Cost Only)	GJV5	\$461.26		1	13,204	\$465.04		161,837	\$6,746.44		1	0.0169%
Total Interdepartmental		\$36,783.13	\$0.0966	72	415,596	\$40,530.72	\$0.0975	5,051,359	\$475,629.74	\$0.0942	72	1.2229%
SUB-TOTAL CONSUMPTION & DEMAN	D	\$1,165,004.47	\$0.0911	5,867	12,294,695	\$1,179,565.56	\$0.0959	155,441,821	\$15,313,788.47	\$0.0985	5,884	99.7133%
		===========										
Street Lights (In)	SLO	\$13.59	\$0.0000	15	0	\$13.59	\$0.0000	0	\$162.89		15	0.2528%
Street Lights (Out)	SLOO	\$0.77		2	0	\$0.77		0	\$9.24		2	0.0339%
Total Street Light Only		\$14.36	\$0.0000	17	0	\$14.36	\$0.0000	0	\$172.13	\$0.0000	17	0.2867%
TOTAL CONSUMPTION & DEMAND		\$1,165,018.83	\$0.0911	5,884	12,294,695	\$1,179,579.92	\$0.0959	155,441,821	\$15,313,960.60	\$0.0985	5,901	100.0000%



00-0-M -Q-PC -001-04 01240904 12409 0116208-00-00546-04 Page 2 of 5 ACCOUNT NUMBER: 12-6239-05 AMERICAN MUNICIPAL POWER,INC. RATE STABILIZATION FUND FOR THE CITY OF NAPOLEON OHIO STABILIZATION FUND

This statement is for the period from December 1, 2015 to December 31, 2015

MARKET VALUE SUMMARY

	Current Period 12/01/15 to 12/31/15	
Beginning Market Value	\$1,290,416.04	
Investment Results		
Interest, Dividends and Other Income	6.39	
Total Investment Results	\$6.39	
Ending Market Value	\$1,290,422.43	





00-0-M -Q-PC -001-04 01240904 12409 0116208-00-00546-04 Page 3 of 5 ACCOUNT NUMBER: 12-6239-05 AMERICAN MUNICIPAL POWER, INC. RATE STABILIZATION FUND FOR THE CITY OF NAPOLEON OHIO STABILIZATION FUND

This statement is for the period from December 1, 2015 to December 31, 2015

	ASSET DETAIL AS OF 12/31/15										
Shares or Face Amount	Security Description	Market Value/ Price	Tax Cost/ Unit Cost	% of Total Yield at Market	Est Ann Inc						
Cash Equi	valents										
1,290,422.430	First American Government Obligation Fund CI A 31846V849	1,290,422.43 1.0000	1,290,422.43 1.00	100.0 .01 *	76.13 *						
Total Cash	n Equivalents	\$1,290,422.43	\$1,290,422.43	100.0	\$76.13						
Cash											
	Principal Cash	- 422.43	- 422.43								
	Income Cash	422.43	422.43								
	Total Cash	\$0.00	\$0.00	0.0							
Total Ass	sets	\$1,290,422.43	\$1,290,422.43	100.0	\$76.13						

ASSET DETAIL MESSAGES

Time of trade execution and trading party (if not disclosed) will be provided upon request.

Publicly traded assets are valued in accordance with market quotations or valuation methodologies from financial industry services believed by us to be reliable. Assets that are not publicly traded may be reflected at values from other external sources. Assets for which a current value is not available may be reflected at a previous value or as not valued, at par value, or at a nominal value. Values shown do not necessarily reflect prices at which assets could be bought or sold. Values are updated based on internal policy and may be updated less frequently than statement generation.

For further information, please contact your Analyst.

** The Yield at Market set forth in this statement for any money market fund is based on the interest rate applicable to that money market fund as of the last business day of the statement period only and may not be relied upon as (i) a yield estimate for the statement period as a whole, or (ii) a guarantee of future performance.



00-0-M -Q-PC -001-04 01240904 12409 0116208-00-00546-04 Page 4 of 5 ACCOUNT NUMBER: 12-6239-05 AMERICAN MUNICIPAL POWER,INC. RATE STABILIZATION FUND FOR THE CITY OF NAPOLEON OHIO STABILIZATION FUND

This statement is for the period from December 1, 2015 to December 31, 2015

CASH SUMMARY								
	Income Cash	Principal Cash	Total Cash					
Beginning Cash Balance as of 12/01/2015	\$416.04	- \$416.04	\$.00					
Taxable Interest	6.39		6.39					
Net Money Market Activity		- 6.39	- 6.39					
Ending Cash Balance as of 12/31/2015	\$422.43	- \$422.43	\$0.00					

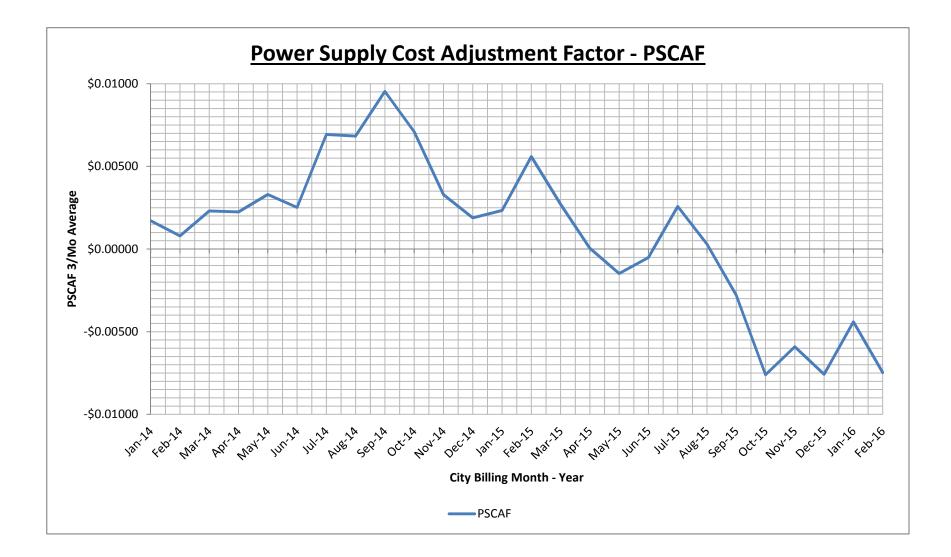




00-0-M -Q-PC -001-04 01240904 12409 0116208-00-00546-04 Page 5 of 5 ACCOUNT NUMBER: 12-6239-05 AMERICAN MUNICIPAL POWER,INC. RATE STABILIZATION FUND FOR THE CITY OF NAPOLEON OHIO STABILIZATION FUND

This statement is for the period from December 1, 2015 to December 31, 2015

	TRANSACTION DETAIL									
Date Posted	Description	Income Cash	Principal Cash	Tax Cost						
	Beginning Balance 12/01/2015	\$416.04	- \$416.04	\$1,290,416.04						
12/01/15	Interest Earned On First Amer Govt Oblig Fund CI A Interest From 11/1/15 To 11/30/15 31846V849	6.39								
12/02/15	Purchased 6.39 Units Of First Amer Govt Oblig Fund CI A Trade Date 12/2/15 31846V849		- 6.39	6.39						
	Ending Balance 12/31/2015	\$422.43	- \$422.43	\$1,290,422.43						



RATE REVIEW COMPARISONS - Current to Prior Month and Prior Year

2016 JANUARY - ELECTRIC P	SCAF - E	ILLING	COMPARISIC	ONS TO PRIOR	PERIODS						
Rate Comparisons to Prior Month an	nd Prior Ye	ear for San	ne Period								
			Current	Prior Month	Prior Year				Current	Prior Month	Prior Year
	Service	Service	February	January	February		Service	Service	February	January	February
Customer Type	<u>Usage</u>	<u>Units</u>	2016 Rate	2016 Rate	2015 Rate		<u>Usage</u>	<u>Units</u>	2016 Rate	2016 Rate	2015 Rate
Customer Trme		PECID		R - (w/Gas Hea	at)			PESID		R - (All Electi	rio
<u>Customer Type -></u>		<u>nesidi</u>	56.00	<u>\$6.00</u>	al) \$6.00			<u>nesid</u>	\$6.00	6.00	\$6.00
Customer Charge Distribution Energy Charge			\$20.93	\$20.93	\$20.93				\$33.39	\$33.39	\$33.39
Distribution Demand Charge			φ20.93	φ20.93	φ20.93				<i></i> 	φ 3 3.39	
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	910	K VVII	φ71.20	φ/1.20	φ/1.20		1,970	K VVII	φ145.65	φ145.05	φ143.03
PSCAF - Monthly Factor	978	kWh	-\$7.31	-\$4.30	\$5.47		1,976	kWh	-\$14.76	-\$8.69	\$11.05
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	910	K VV II	\$4.55	φ 4.00	φ4.00	+	1,970	K VVII	φ 9 .19	φ9.19	φ 9 .19
kWH Tax- Level 2											
		-									
Total Electric			\$95.37	\$98.38	\$108.15				\$177.67	\$183.74	\$203.48
Weter	6	CCF	\$42.27	¢41.07	#00 EZ		11	005	ACO 00	<u>Фсс от</u>	¢c0.07
Water	6			\$41.37	\$39.57			CCF	\$68.02	\$66.37	\$63.07
Sewer (w/Stm.Sew. & Lat.)	6	CCF	\$70.89	\$64.63	\$54.58		11	CCF	\$98.89	\$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
Sub-Other Services			\$140.66	\$133.50	\$121.65	Π			\$194.41	\$183.95	\$167.35
Total Billing - All Services		-	\$236.03	\$231.88	\$229.80			-	\$372.08	\$367.69	\$370.83
Verification Totals->			\$236.03	\$231.88	\$229.80				\$372.08	\$367.69	\$370.83
				Cr.Mo to Pr.Mo	Cr.Yr to Pr.Yr					Cr.Mo to Pr.Mo	Cr.Yr to Pr.Yr
Dollar Chg.to Prior Periods				\$4.15	\$6.23					\$4.39	\$1.25
% Inc/Dec(-) to Prior Periods				1.79%	2.71%					1.19%	0.34%
	=====	=====	======			 = =	====	=====:	=======		=========
	070	1.347	#0.00750	0 0 10050	AC 11070		1 070	1.367	#0 0000 (\$2,00000	# 0.40000
Cost/kWH - Electric	978	kWh	\$0.09752	\$0.10059	\$0.11058		1,976	kWh	\$0.08991	\$0.09299	\$0.10298
% Inc/Dec(-) to Prior Periods				-3.05%	-11.81%	\mathbb{H}				-3.31%	-12.69%
Cost/CCF - Water	6	CCF	\$7.04500	\$6.89500	\$6.59500	Ħ	11	CCF	\$6.18364	\$6.03364	\$5.73364
Cost/GALLONS - Water	4,488	GAL	\$0.00942	\$0.00922	\$0.00882	Π	8,229	GAL	\$0.00827	\$0.00807	\$0.00766
% Inc/Dec(-) to Prior Periods				2.18%	6.82%					2.49%	7.85%
Cost/CCF - Sewer	6	CCF	\$11.81500	\$10.77167	\$9.09667	\mathbb{H}	11	CCF	\$8.99000	\$8.18909	\$6.98000
Cost/GALLON - Sewer	4,488	GAL	\$0.01580	\$0.01440	\$0.01216		8,229	GAL	\$0.01202	\$0.01095	\$0.00933
% Inc/Dec(-) to Prior Periods	.,		<i>_</i> 0.01000	9.69%	29.88%		0,220	9 ,716	\$0.0120Z	9.78%	28.80%
(Listed Accounts Assume SAME USA	<u>GE for kW</u> ł	Hand Wate	r (CCF) for All I								

RATE REVIEW COMPARISONS - Current to Prior Month and Prior Year

2016 JANUARY - ELECTRIC P											
Rate Comparisons to Prior Month ar											
			Current	Prior Month	Prior Year				Current	Prior Month	Prior Year
	Service	Service	February	January	February		Service	Service	February	January	February
Customer Type	Usage	Units	2016 Rate	2016 Rate	2015 Rate		Usage	Units	2016 Rate	2016 Rate	2015 Rate
<u>Customer Type -></u>	<u>C(</u>	OMMERC	IAL USER - (/3 Phase w/De			<u>//</u>	IDUSTRI	AL USER - (′3 Phase w/De	
Customer Charge			\$18.00	\$18.00	\$18.00				\$100.00	\$100.00	\$100.00
Distribution Energy Charge	7,040		\$38.02	\$38.02	\$38.02		98,748	Reactive	\$2,303.85	\$2,303.85	\$2,303.85
Distribution Demand Charge	20.32		\$92.86	\$92.86	\$92.86		1510.1	kW/Dmd	\$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
Power Supply Demand Charge									\$15,296.55	\$15,296.55	\$15,296.55
PSCAF - Monthly Factor	7,040	kWh	-\$52.59	-\$30.98	\$39.35				-\$6,146.34	-\$3,620.33	\$4,599.47
kWH Tax- Level 1			\$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
kWH Tax- Level 3									\$3,087.71	\$3,087.71	\$3,087.71
		-									
Total Electric			\$749.79	\$771.40	\$841.73				\$62,088.39	\$64,614.40	\$72,834.20
Water	25	CCF	\$137.32	\$133.57	\$126.07		300	CCF	\$1,555.51	\$1,555.51	\$1,420.51
Sewer (w/Stm.Sew. & Lat.)	25	CCF	\$178.69	\$162.74	\$138.94		300	CCF	\$1,718.69	\$1,562.49	\$1,359.94
Storm Water (Rate/ERU)	25	001	\$9.50	\$9.50	\$9.50		500	001	\$330.00	\$330.00	\$330.00
Refuse (Rate/Service)			\$5.00	\$5.00	\$5.00				\$5.00	\$5.00	\$5.00
		_	ψ5.00	φ0.00	ψ0.00				ψ5.00	φ5.00	φ3.00
Sub-Other Services			\$330.51	\$310.81	\$279.51				\$3,609.20	\$3,453.00	\$3,115.45
		-							<i></i>		
Total Billing - All Services			\$1,080.30	\$1,082.21	\$1,121.24				\$65,697.59	\$68,067.40	\$75,949.65
Verification Totals->			\$1,080.30	\$1,082.21	\$1,121.24				\$65,697.59	\$68,067.40	\$75,949.65
				<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				-\$1.91	-\$40.94					-\$2,369.81	-\$10,252.06
% Inc/Dec(-) to Prior Periods				-0.18%	-3.65%					-3.48%	-13.50%
	=====	=====					=====	=====		=========	
Cost/kWH - Electric	7,040	kWh	\$0.10650	\$0.10957	\$0.11956	\vdash	866,108	kWh	\$0.07169	\$0.07460	\$0.08409
% Inc/Dec(-) to Prior Periods				-2.80%	-10.92%					-3.90%	-14.75%
Cost/CCF - Water	25	CCF	\$5.49280	\$5.34280	\$5.04280		300	CCF	\$5.18503	\$5.18503	\$4.73503
Cost/GALLONS - Water	18,701	GAL	\$0.00734	\$0.00714	\$0.00674		224,415	GAL	\$0.00693	\$0.00693	\$0.00633
% Inc/Dec(-) to Prior Periods				2.81%	8.92%					0.00%	9.50%
Cost/CCF - Sewer	25	CCF	\$7.14760	\$6.50960	\$5.55760		300	CCF	\$5.72897	\$5.20830	\$4.53313
Cost/GALLON - Sewer	18,701	GAL	\$0.00956	\$0.00870	\$0.00743		224,415	GAL	\$0.00766	\$0.00696	\$0.00606
% Inc/Dec(-) to Prior Periods				9.80%	28.61%	I I				10.00%	26.38%
(Listed Accounts Assume SAME USA)											

Electric Dept. Report January 2016

Line Division/Service Truck: Line crews replaced a service pole on Rd. M. Linemen replaced a single phase pole on Rd. V due to an accident and repaired a service on South Perry street. Crews completed turn offs for billing dept. Linemen removed the temp. poles at Ritter Park used for Christmas lights. Crews took down Christmas lights in down town Napoleon. Crews removed old street lights on East Clinton Street and removed the school flashing lights at all the unoccupied building locations. Crews attended AMP safety meetings with Sandy. Crews performed truck maintenance and washed service bays. Crews pulled poles and relocated street lights at Riverview and Industrial. Crews trimmed trees at corner of 424 and road N. Crews replaced 3 phase pole hit by car on Road U east of Road 16. Crews replaced 3 transmission poles on Road 12 North of Road O. Crews upgraded and added new lighting for school crossing on Westmoreland and attended sexual harassment class at Oberhaus Park. The serviceman completed work orders, locates and helped crews as needed.

Substation Division: Personnel finished a relay upgrade project at Industrial Substation for arc flash mitigation. They also performed monthly inspections and routine maintenance at all substations. They also attended yearly USDA classes for substation spraying license renewal and sexual harassment class.

Forestry Division: The tree crew performed tree maintenance on West Barnes, West Washington, Road 15, Appian, and Road 12 south of the river. They also attended sexual harassment class.

Store room/Inventory/Metering: Shawn read meters , performed purchasing duties, cleaned and organized inventory and helped with projects as needed.

The Peak Load for January, 2016 was 25.66 MW occurring on the 18th at 7:30 P.M. This was a decrease of .56 MW from January 2015. The average load for January, 2016 was 19.63 MW. This was a decrease of .07 MW from January 2015. JV2 ran on 1/15/16 and produced 1.57 MW and JV5 ran on 1/15/16 and produced .65 MW. The Gas Turbines did not run this month. The AMP Solar Field showed a peak of 3.55 MW on 1/29/16. The output of the solar field for the month of January was 269,466.5 kWh.

2//2/16 DPC

City of Napoleon, Ohio



SUMMARY OF JANUARY 2016 OUTAGE/STANDBY CALL-OUTS

January 4, 2016:

Electric personnel were dispatched at 5:20 p.m. to County Road O & 12 to check an electric pole after an accident. Crews replaced the pole.

January 9, 2016:

One employee was dispatched at 9:30 a.m. to 710 W. Main St. to do an emergency line locate for a water main break.

January 10, 2016:

Electric personnel were dispatched at 9:10 a.m. to 9506 State Route 110 due to flickering lights. The personnel checked the connections and ran out the line for any problems.

January 15, 2016:

Electric personnel were dispatched at 3:35 p.m. to 1247 N. Scott St. due to moisture in capacitor bank that blew fuses. The crews took capacitor bank out of service temporarily and replaced the fuses.

January 17, 2016:

Electric personnel were dispatched at 7:41 a.m. to E. Washington St. to do an emergency locate for a water main break.

January 23, 2016:

Electric personnel were dispatched at 3:53 a.m. to County Road U by Road 16 due to a power outage. The outage lasted two hours and thirty minutes and affected one hundred and four customers. The outage was due to a car accident. The personnel spliced two primary wires and a neutral back together and reset two reclosers on Road S west of 14C.

January 29, 2016:

Electric personnel were dispatched at 10:45 p.m. to 1050 Highland Ave.due to a pole fire that was caused by a squirrel. Upon arrival the fire was out.

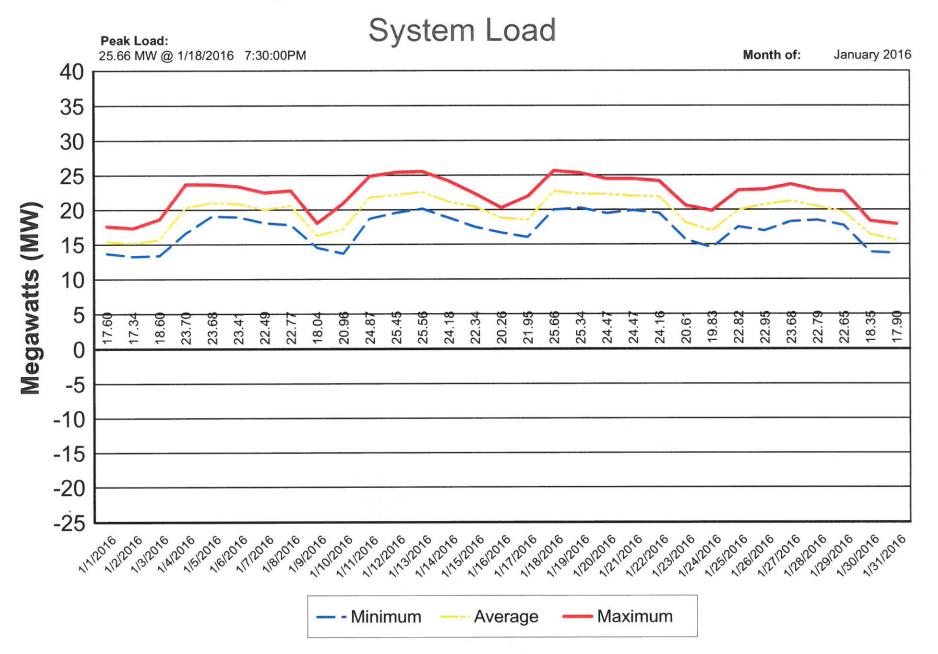
January 30, 2016:

One employee was dispatched at 8:00 a.m. to Industrial & Independence due to a car that hit the crosswalk pedestal. The employee coned the pedestal off.

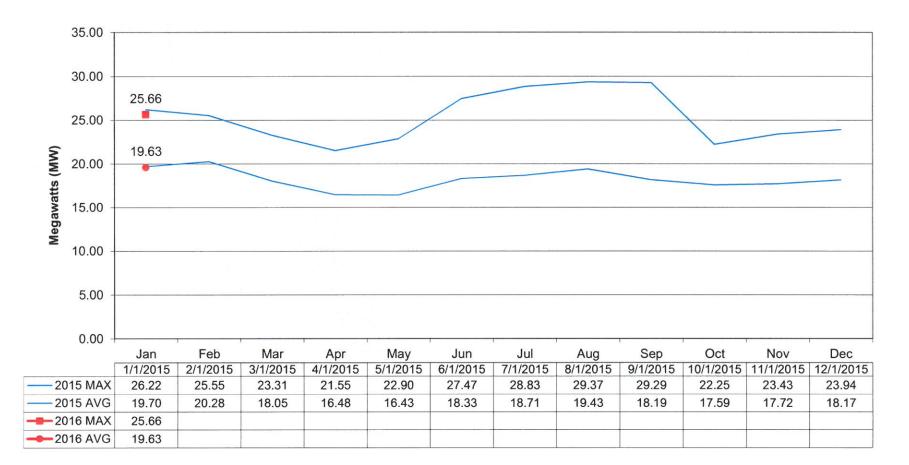
January 31, 2016:

Electric personnel were dispatched at 10:30 a.m. to Subway on Scott St. due to a power outage. The outage lasted three hours and affected one customer. The outage was due to a bad transformer. The personnel replaced the transformer.

Napoleon Power & Light



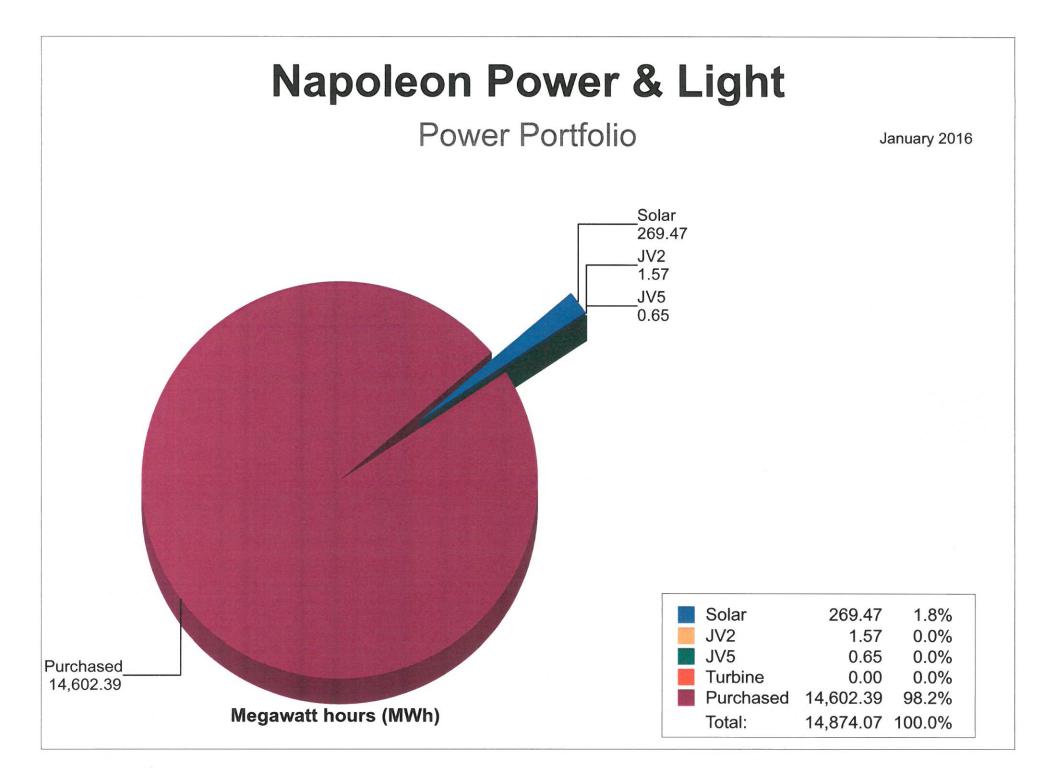
NAPOLEON POWER & LIGHT



NAPOLEON POWER & LIGHT

Solar Field Output Trend

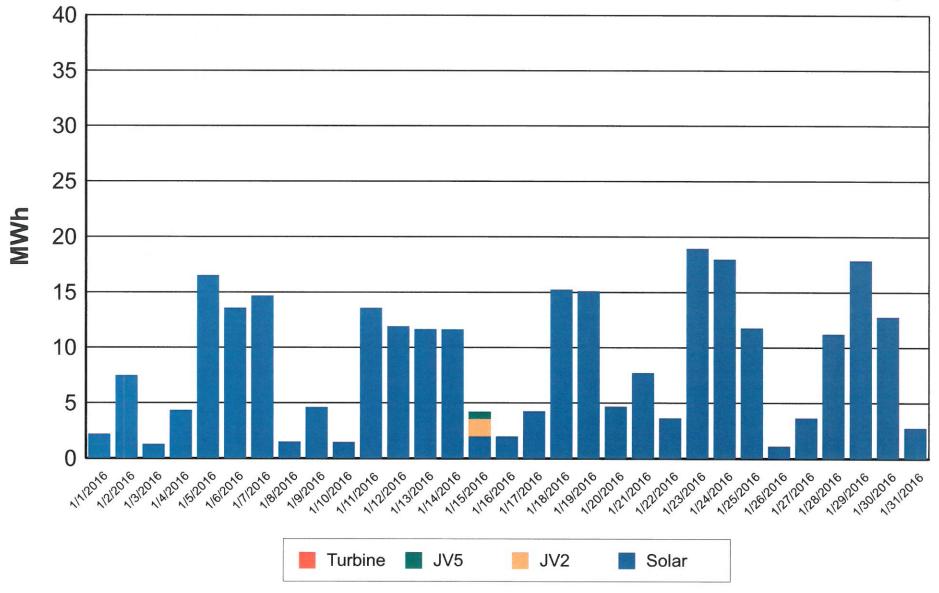




Napoleon Power & Light

Daily Generation Output







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 www.napoleonohio.com

Memorandum

To: Electric Committee From: Monica Irelan, City Manager *RE: Project Update*

Since the Hydro projects are starting to come online, I felt I should share an update.

Existing Hydro Facilities:

The Belleville Hydroelectric Facility

The City of Napoleon is one of the largest participants in the Belleville Hydro facility (#4 out of 42). (You will hear me refer to this is JV5). Besides being a two unit hydropower facility, this project also owns 15 diesel units which can generate 27 MW. There are a few Units housed behind the meter in Napoleon.

AMP developed and manages a 42 MW run-of-the-river hydroelectric generation facility on behalf of 42 member communities. The Belleville Hydroelectric Facility is located on the Ohio River at the Belleville (W.Va.) Locks and Dam and went online in April 1999. New York Power Authority (NYPA)

The Niagara plant, located about 4 1/2 miles downstream from the Falls, consists of two main facilities: the Robert Moses Niagara Power Plant, with 13 turbines, and the Lewiston Pump-Generating Plant, with 12 pump-turbines. In between the two plants is a forebay capable of holding about 740 million gallons of water; behind the Lewiston plant, a 1,900-acre reservoir holds additional supplies of this liquid fuel.

Put very simply, NYPA diverts water from the Niagara River—up to 748,000 gallons a second and convey it through conduits under the City of Niagara Falls to Lewiston. From there, water flowing through the Robert Moses plant spins turbines that power generators, converting this mechanical energy into electrical energy.

Phase 1 Hydroelectric Project

The Phase 1 hydroelectric projects include the run-of-the-river generating facilities currently under construction at the Cannelton, Smithland and Willow Island dams on the Ohio River. Seventy-nine AMP member communities are participating in the projects. **Cannelton**

The Cannelton Project will divert water from the existing Corps Cannelton Locks and Dam through bulb turbines to generate an average gross annual output of approximately 458 million kilowatt-hours (kWh). The site will include an intake approach channel, a reinforced concrete powerhouse, and a tailrace channel. The powerhouse will house three horizontal 29.3-MW bulb-

type turbine and generating units with an estimated total rated capacity of 88 MW at a gross head of 25 feet. A 1,000-ft-long 138-kV transmission line interconnection is planned to connect to MISO.

Cannelton is substantially constructed and is under commissioning. The project has three units. <u>Unit 3</u> was under trial run starting December 19. The trial should have been completed on January 27. In December this unit generated 3,412.8 MWhs. In January it is expected to generate 14-17,000 MWhs.

<u>Unit 2</u> trial run was scheduled to start on January 27. In January it is expected to have generated 3-5,000 MWhs.

<u>Unit 1</u> was wet commissioned on January 18 (initial mechanical rill). The trial run is scheduled to begin today (Monday, January 8).

Smithland

The Smithland Project will divert water from the existing Corps Smithland Locks and Dam through bulb turbines to generate an average gross annual output of approximately 379 million kWh. The site will include an intake approach channel, a reinforced concrete powerhouse, and a tailrace channel. The powerhouse will house three horizontal 25.3-MW bulb-type turbine and generating units with an estimated total rated capacity of 72 MW at a gross head of 22 feet. A 2-mile-long 161-kV transmission line interconnection is planned to connect to MISO. Smithland is still under construction and will continue to install the turbine/generators. **Willow Island**

The Willow Island Project will divert water from the existing Corps Willow Island Locks and Dam through bulb turbines to generate an average annual output of approximately 239 million kWh. The site will include an intake approach channel, a reinforced concrete powerhouse, and a tailrace channel. The powerhouse will house two horizontal 22-MW bulb-type turbine and generating units with an estimated total rated capacity of 44 MW at a gross head of 20 feet. A 1.6-mile-long 138-kV transmission line interconnection is planned to connect to PJM. Willow Island is substantially constructed and is under commissioning. The project has two units.

<u>Unit 1</u> Trial turn was completed January 1. In December, this unit generated 11,783.9 net MWhs. <u>Unit 2</u> Trial run was started January 4. In December, this unit generated 202 MWhs.

Meldahl/Greenup Hydroelectric Project

The Meldahl/Greenup projects include the 105 MW run-of-the-river hydroelectric generating facility currently under construction at the Captain Anthony Meldahl Dam on the Ohio River and the existing generating facility at the Greenup Dam, also on the Ohio River. Forty-eight AMP member communities are participating in this project. AMP is developing the project with the member community of Hamilton, Ohio, which originally procured the development license from FERC. Hamilton retains the rights for a 51 percent share of the energy output from the facility, with AMP taking the remaining output for the 48 other AMP members participating in the project.

Meldahl

The Meldahl Project will divert water from the existing Corps Meldahl Locks and Dam through bulb turbines to generate an average gross annual output of approximately 558 million kWh. The site will include an intake approach channel, a reinforced concrete powerhouse, and a tailrace channel. The powerhouse will house three horizontal 35-MW bulb-type turbine and generating units with an FERC Licensed rated capacity of 105 MW at a gross head of 30 feet. Meldahl is substantially constructed and is under commissioning. The project has three units. Unit 2 Trial run was started December 7.

<u>Unit 1</u> Undergoing wet commissioning <u>Unit 3</u> Undergoing dry commissioning



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 <u>www.napoleonohio.com</u>

Memorandum

To: Electric Committee From: Monica Irelan, City Manager *RE: Extra information*

At January's meeting I promised to bring back some jargon and definitions for the Electric industry. You will find that information attached.

GLOSSARY

401 WATER QUALITY CERTIFICATION: state certification verifying a project will not violate water quality standards; required before obtaining a 404 Permit to discharge dredged or fill material into waters of the U.S.

404 PERMIT: permit issued by U.S. Army Corps of Engineers and required for anyone wishing to discharge dredged or fill material into waters of the U.S., regardless of whether on private or public property.

ADVANCED ENERGY PORTFOLIO STANDARD

(AEPS): policy that requires electric providers to obtain a minimum percent of their power using methods that bridge, adapt and/or spur cleaner energy development, often using traditional technologies as a base. These can include, but are not limited to, new clean-coal technologies, municipal waste-to-energy and other solid waste projects, cogeneration, energy efficiency, fuel cells and advanced nuclear applications.

ADVANCED METERING INFRASTRUCTURE

(AMI): the communications system that is used to provide customers with their metered usage data as well as send it to a utility via fiber optic, broadband or radio. This helps customers use energy more efficiently and provides utilities the ability to detect problems on their system and operate more efficiently.

AGGREGATOR: an entity that puts together groups of customers into a buying group that purchases a commodity service. Many communities are engaged in municipal aggregation programs for electric and natural gas.

ALLOWABLE EMISSIONS: maximum emissions for a pollutant that a plant or a source is allowed to discharge into the atmosphere legally. Set by government regulation.

AMERICAN PUBLIC POWER ASSOCIATION (APPA): the Washington, D.C.-based service organization for the nation's more than 2,000 community-owned electric utilities, including all of AMP's members.

AMPERE: the standard unit of measuring the strength of an electric current.

AMPO INC.: the wholly owned, taxable subsidiary of AMP that provides direction and service to local governments in evolving energy markets.

ANCILLARY SERVICES: services or tariff provisions related to provision of electricity, other than simple generation, transmission or distribution. Ancillary services

related to transmission service include: energy losses, energy imbalances, scheduling and dispatching, load following, system protections and reactive power. Ancillary services related to distribution include meter reading, billing and collections.

ATTAINMENT AREA: a geographical area determined to have air quality as good as or better than the National Ambient Air Quality Standards (NAAQS) for a particular pollutant(s). Area can be in attainment for some criteria pollutants and not others.

BALANCING AUTHORITY (BA): the responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time.

BASELOAD GENERATION: facilities designed to run 24 hours a day, seven days a week at near capacity levels, to meet basic demand; usually characterized as having higher capital costs and lower operating costs. (See also Distributed Generation, Intermediate Generation, Peak Generation.)

BEHIND THE METER GENERATION (BTMG): Generation that is located on the distribution side of the meter so that it results in a lowering of the communities reported load.

BEST AVAILABLE CONTROL TECHNOLOGY (**BACT**): maximum degree of emission reduction of pollutants regulated under the Prevention of Significant Deterioration (PSD) program which the administrator of the U.S. Environmental Protection Agency (USEPA) determines is achievable, taking into account energy, environmental and economic impacts and other costs.

BEST SYSTEM OF EMISSION REDUCTION: Under CAA section 111, states must establish, in their state plans, emission standards that reflect the degree of emission limitation achievable through the application of the "best system of emission reduction" that, taking into account the cost of achieving such reduction and any non-air quality health and environmental impacts and energy requirements, the Administrator determines has been adequately demonstrated (i.e., the BSER). Under CAA section 111(a)(1) and (d), the USEPA is authorized to determine the BSER and to calculate the amount of emission reduction achievable through applying the BSER.

GLOSSARY

BIOMASS ENERGY: biomass derived from organic materials, including wood and crops, as well as wastes from consumer, municipal and agricultural processes, used to generate heat and/or electricity.

BULK ELECTRIC SYSTEM (BES): as defined by NERC, the electrical generation resources, transmission lines, interconnections with neighboring systems, and associated equipment, generally operated at voltages of 100 kV or higher. Radial transmission facilities serving only load with one transmission source are generally not included in this definition. The definition is subject to specific inclusions and exclusions.

CAPACITY: the maximum electricity output, expressed in megawatts, that a generator can produce under specific conditions.

CAPACITY CREDIT: revenue received by selling capacity into a capacity market.

CAPACITY FACTOR: the ratio of net electricity generated over a period of time, and the potential energy that could have been generated at continuous full-power operation during the same period.

CAPACITY MARKET: market that ensures long-term grid reliability by securing the appropriate amount of resources needed to meet predicted energy demand in the future. See RPM.

CLEAN AIR ACT, SECTION 111(B): section 111 is a federal program for new sources and state programs for existing sources. USEPA uses its authority under section 111 of the Clean Air Act to issue standards, regulations or guidelines, as appropriate for controlling air pollution from stationary sources. Section 111(b) is the federal program to address new, modified and reconstructed sources by establishing standards.

CLEAN AIR ACT, SECTION 111(D): section 111 is a federal program for new sources and state programs for existing sources. USEPA uses its authority under section 111 of the Clean Air Act to issue standards, regulations or guidelines, as appropriate for controlling air pollution from stationary sources. Section 111(d) is a state-based program for existing sources. The USEPA establishes guidelines. The states then design programs that fit in those guidelines and get the needed reductions.

CLEAN AIR INTERSTATE RULE (CAIR):

federal requirements, established pursuant to the Clean Air Act, reducing SO2, NOx and particulate emissions from 28 Eastern states contributing to downwind attainment problems. The U.S. Court of Appeals for the D.C. Circuit vacated the rule in July 2008, then issued an order in December 2008 that put the rule back in effect while the USEPA developed new clean air rules that addressed the flaws the court found in CAIR (see Cross-State Air Pollution Rule). CAIR initially remained in effect pursuant to the Court of Appeals' overturning of CSAPR in August 2012. In 2014 courts lifted the stay on CSAPR, allowing its implementation, and effectively replacing the CAIR program.

CLEAN AIR TRANSPORT RULE (CATR): rule proposed in July 2010 to replace the Clean Air Interstate Rule and require additional SO2 and NOx reductions beginning in 2012. The USEPA issued the final rule in July 2011 as the Cross-State Air Pollution Rule (initially overturned by the Court of Appeals but now in implementation).

CLEAN POWER PLAN: a USEPA rule published on Oct. 23, 2015 establishing final emission guidelines for states to follow in developing plans to reduce greenhouse gas (GHG) emissions from existing fossil fuel-fired electric generating units (EGUs); established under the authority of the Clean Air Act (CAA) section 111(d).

CO2: carbon dioxide, a colorless gas produced by combustion processes. It also occurs naturally.

COAL COMBUSTION RESIDUALS: coal combustion residuals (CCR), commonly known as coal ash, are created when coal is burned by power plants to produce electricity. While often disposed of in surface impoundments or landfills, CCR can also be beneficially reused in a number of different products and materials.

COINCIDENT PEAK (CP): the maximum electric power demanded by a subsystem (municipality) that corresponds (in time) with the peak demand for a larger system. This is used by PJM to calculate transmission and capacity charges for electric utilities in its territory. For transmission billing, PJM uses 1 CP, which is a municipality's load at the same time the surrounding investor-owned utility is reaching its highest demand for the year. For capacity billing, PJM uses 5CP, which represents a municipality's load during PJM's five highest peak load days within the year.

COMBINED HEAT AND POWER (CHP): also known as cogeneration, CHP is the use of a heat engine or power station to simultaneously generate both electricity and useful heat. It is a common form of energy recycling. **CONGESTION:** charge to move power from point of receipt to point of delivery (can be charge or credit).

CO-OP: commonly used term for rural electric cooperative. Rural electric cooperatives generate and purchase wholesale power, arrange transmission of that power and then distribute the power to serve the demands of rural customers.

CRITICAL INFRASTRUCTURE PROTECTION

(CIP): a framework for the identification and protection of Critical Cyber Assets to support reliable operation of the Bulk Electric System. (Critical Cyber Assets are cyber assets that are essential to the reliable operation of facilities, systems and equipment which, if destroyed, degraded, or otherwise rendered unavailable, would affect the reliability or operability of the Bulk Electric System.) Under this framework the North American Electric Reliability Council (NERC) has developed and implemented enforceable standards designed to deter or mitigate threats to such assets. This includes protecting the U.S. power grid from threats – both physical and cyber – that may be caused by people, nature and hazardous materials. (See also Cyber Security and North American Electric Reliability Council.)

CRITERIA POLLUTANTS: pollutants listed pursuant to Clean Air Act Section 108, for which the USEPA has set a National Ambient Air Quality Standard (NAAQS). There are six criteria pollutants: sulfur dioxide, nitrogen dioxide, particulate matter, ozone, carbon monoxide and lead.

CROSS-STATE AIR POLLUTION RULE (**CSAPR**): was to have replaced the vacated Clean Air Interstate Rule (see CAIR); in August 2012, the Court of Appeals overturned CSAPR and sent it back to USEPA to be rewritten. CAIR remained in place until October 2014 when a D.C. court lifted the stay on CSAPR, providing for a 2015 implementation. Established pursuant to the Clean Air Act, CSAPR provides a specific SO2 and NOx emissions cap for each of 28 states, while allowing limited interstate trading.

CYBER SECURITY: measures protecting a computer, computer system, electronic data or other electronic communications from unauthorized access or attacks. A primary concern in the utility industry is a cyber attack intended to cripple the electric grid by targeting generation, transmission and distribution assets. NERC has established mandatory cyber security reliability standards that were approved by the Federal Energy Regulatory Commission (FERC). Major revisions to these standards are currently under review but are scheduled to go into effect on April 1, 2016. Additionally, earlier in 2014, FERC directed NERC to develop new, mandatory physical security standards that were developed and filed with FERC in June.

DAY AHEAD PRICING: future price of electricity determined the day before the electricity is needed. This is the market where the majority of power is bought and sold.

DEMAND RESPONSE: changes in electric usage by end-use customers from their normal consumption patterns in response to changes in the price of electricity over time, or to incentive payments designed to induce lower electricity use at times of high wholesale market prices or when system reliability is jeopardized.

DEMAND-SIDE MANAGEMENT: methods used by end-users to manage their energy usage. Methods may include energy efficiency efforts, load management, fuel substitution and load building.

DEREGULATION: the elimination of regulation from a previously regulated industry or sector of an industry.

DISTRIBUTED GENERATION: smaller generating units distributed throughout a region, where they are closer to the load and can be used for meeting energy needs or to mitigate the effects of transmission and capacity prices. (See also Baseload Generation, Intermediate Generation, Peak Generation.)

DISTRIBUTION COMPANY: the regulated electric utility that constructs and maintains distribution wires connecting the transmission grid to the final customer. Can also perform services such as aggregating customers, purchasing power supply and transmission service for customers, billing customers and reimbursing suppliers and offering regulated or nonregulated services to retail customers.

DISTRIBUTION SYSTEM: facilities that conduct electricity at a medium voltage used to transmit electricity to residential neighborhoods. This is generally voltage lower than 34kV.

E-RELIABILITY TRACKER (ERT): a web-based reliability software that allows members to track their outages, receive annual national reliability reports, and earn points toward its RP3 designation. This subscription based software from APPA is provided to each member as part of its AMP dues.

ENERGY EFFICIENCY: encompasses all changes that result in a reduction in the energy used for a given energy service (heating, lighting, etc.) or level of activity. This reduction in energy consumption can be a result of technical changes, better organization and management, or improved economic efficiency in the sector (productivity gains).

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EFFICIENCY SMART[¬]: an energy-efficiency program offered to subscribing AMP members by AMP and its partner, Vermont Energy Investment Corp. The program offers incentives and technical assistance for residential, commercial and industrial customers seeking to lower their power bills. AMP employs an independent third-party Evaluation, Measurement & Verification (EMV) contractor to determine the annual energy savings resulting from implementation of the Efficiency Smart measures (i.e., an impact evaluation) as part of the program. (See also Vermont Energy Investment Corp.)

EQUIVALENT AVAILABILITY FACTOR: the amount of time a generator is capable of producing power over a specific time period.

FEDERAL COMMUNICATIONS COMMISSION (**FCC**): an independent federal agency that regulates interstate and international communications by radio, television, wire, satellite and cable in all 50 states, the District of Columbia and U.S. territories.

FEDERAL ENERGY REGULATORY COM-MISSION (FERC): an independent agency within the Department of Energy that regulates the transmission and wholesale sales of electricity in interstate commerce; licenses and inspects private, municipal and state hydroelectric projects; oversees environmental matters related to natural gas, oil, electricity and hydroelectric projects; and administers accounting and financial reporting regulations and conduct of jurisdictional companies.

FEDERAL IMPLEMENTATION PLAN (FIP): a federally implemented plan to achieve attainment of air quality standards that is used when a state is unable to develop an adequate plan.

FIBER OPTIC: thin transparent fibers of glass or plastic that transmit light through their length by internal reflections, used for transmitting data, voice and images. Fiber-optic technology has virtually replaced copper wire in long-distance telephone lines and is used to link computers in local area networks, with digitized light pulses replacing the electric current formerly used for the signal.

FINANCIAL TRANSMISSION RIGHTS (FTR): financial instruments awarded to bidders in the FTR auctions that entitle the holder to a stream of revenues (or charges) based on the hourly Day Ahead congestion price differences across the path. (See also Day Ahead Pricing, Locational Marginal Pricing) **FINE PARTICULATE MATTER (PM):** an atmospheric pollutant linked to emissions from a variety of sources; once emitted, the material is subject to transport and transformation in the atmosphere. Fine particulate matter is characterized as being less than 2.5 microns in aerodynamic diameter.

FLY ASH: consists of fine particles of ash created as a byproduct of the combustion of solid fuels, such as coal. This fine material is prevented from escaping into the atmosphere by electrostatic precipitators or fabric filters. Once collected the ash can be reused in materials ranging from roofing and concrete paving to oil-well casings.

GENERATION COMPANY: a regulated or nonregulated entity (depending upon the industry structure) that operates and maintains generating plants. It may own the generation plants or interact with the shortterm market on behalf of plant owners.

GREENHOUSE GAS: any gas that absorbs infrared radiation in the atmosphere. Greenhouse gases include, carbon dioxide, methane, nitrous oxide and fluorinated gases.

GRID: utility term for the network of transmission and distribution lines that distribute electricity from a variety of sources across a geographic area.

GRID-TIE: term for renewable energy systems that are connected to the grid so that power can flow either direction (from the grid to the house or from the house to the grid).

HEAT RATE: a measurement used to calculate how efficiently a generator uses heat energy. Higher heat rates are less efficient. In the U.S., heat rate is typically expressed using the mixed English and SI units of British thermal units (Btu) per net kilowatt-hour (kWh) generated.

HEDGING CONTRACT: a contract to establish the sale of futures against the purchase of electric power or gas to protect against a decline in value; conversely, the purchase of futures against forward sales of, or anticipated need for, power or gas to protect against an increase in value.

HYDROELECTRIC POWER: electric energy generated by harnessing the power of moving water. Run-of-the-river facilities (which AMP uses) are a type of hydroelectric generation where the natural flow and elevation drop of a river are used to generate electricity. An impoundment facility uses a dam to store water in a reservoir, and the water may be released to meet electricity needs or to maintain water levels.

INDEPENDENT POWER PRODUCER (IPP): an

independent company, owned by investors, that generates electricity and is not regulated by FERC.

INDEPENDENT SYSTEM OPERATOR (ISO): a

company or organization that independently operates the electric transmission grid for a specified geographic area. Owners retain their assets and the ISO runs the system as a joint operation. The ISO files a single transmission tariff for the region, plans and schedules transmission outages, takes a lead role in transmission system planning, collects transmission charges and makes payments to facility owners. The organization operates various markets including, but not limited to, energy, capacity and ancillary services.

INTEGRATED GASIFICATION COMBINED

CYCLE (IGCC): a power generation system that produces synthesis gas (syngas) converted from fossil fuel, such as coal, which is then burned to generate electricity from the syngas by combined cycle.

INTERCONNECTION: the physical plant and equipment, usually at transmission-level voltage, that transfers electric energy between two or more entities. It can consist of a substation and an associated transmission line and communications facilities, or a simple electric power line or switching station.

INTERCONNECTION AGREEMENT: an agreement between two interconnected utilities that provides for mutual services across interconnections.

INTERMEDIATE GENERATION: facility designed to provide energy Monday through Friday during the 16 highest demand hours (See also Baseload Generation, Distributed Generation, Peak Generation.)

INTERMITTENT GENERATION: generation in which the source of energy is not continuously available due to uncontrollable factors. Wind generation is irregular and unpredictable because of variations in wind speed – just as solar generation depends on sunlight intensity.

INVESTOR-OWNED UTILITY (IOU): private, forprofit utility company owned by, and generating dividends for, shareholders. Regulated by state utility commissions.

JOINT VENTURES: programs through which AMP member communities access arrangements that help them accomplish their long-term goal of providing affordable, reliable electricity to local customers. The jointly owned projects are administered through the Ohio Municipal Electric Generation Agency (OMEGA).

KILOVOLT (KV): one thousand volts

KILOWATT (KW): one thousand watts

KILOWATT HOUR (KWH): one thousand watts used for one hour. For example, it is the amount of electricity needed to light ten 100-watt light bulbs for a one-hour period.

LANDFILL-GAS GENERATION: process that uses methane gas, produced by decaying waste in landfills, to generate electricity.

LOAD FACTOR: ratio of average energy demand (load) and the maximum demand (peak load) over a period of time.

LOCATIONAL MARGINAL PRICING (LMP): the market clearing price for electrical energy at the location the energy is delivered or received from the transmission system. The price is the cost of supplying the next increment of load, taking into account the physical limitations of the transmission system.

MAXIMUM ACHIEVABLE CONTROL TECH-NOLOGY (MACT): the 1990 Clean Air Act Amendments established a new and fairly complex program for the control of hazardous air pollutants through the application of this control technology standard. In setting standards USEPA looks at the level of emission control currently being achieved by the best-performing similar sources. MACT standards apply to major sources, as well as to many area or minor sources.

MEGAWATT (MW): the practical unit of electric measure equal to one million watts. Enough power to supply between 750 and 1,000 homes, based on electric usage patterns and weather, for one hour.

MEGAWATT HOUR (MWH): one million watts used for one hour.

MERCURY AND AIR TOXICS STANDARDS (MATS): USEPA regulations for coal- and oil-fired power plants, establishing maximum achievable control technology (MACT) requirements for mercury and air toxics for 1,300 utility boilers. This replaces the Clean Air Mercury Rule (CAMR), which was vacated by court order in 2008. On June 29, 2015, the U.S. Supreme Court overturned the MATS rule. The decision overturned an April 2014 ruling from the D.C. Circuit Court, which found the USEPA acted within its legal mandate. The Supreme Court remanded the regulation to the D.C. Circuit, which must now decide how to proceed with the USEPA.

MIDCONTINENT INDEPENDENT SYSTEM OPERATOR (MISO): one of two regional transmission organizations operating in the AMP service area, the other being the PJM Interconnection. MISO territory in the AMP service area is primarily in Michigan and Kentucky, although none of AMP's Kentucky members fall within MISO territory. (See also PJM Interconnection, Regional Transmission Organization.)

GLOSSARY

MINIMUM OFFER PRICE RULE (MOPR): a

rule to address generation owner claims that load interests might exercise buyer market power and market behavior that is anti-competitive and, thus, endanger adequate power supplies and risk higher than necessary costs for consumers. In theory, the rule prohibits offers below cost from otherwise uneconomic new natural gas-fired generation that could distort the market price signals by artificially lowering the price of capacity.

MMBTU: one million Btu (British thermal units)

MULTIPLE DELIVERY POINTS: more than one connection into a utility that provides electric transmission service to a wholesale or retail customer. These connections allow service to be fed to a customer from more than one point and can serve as backups in case of a problem with other delivery points.

MUNICIPAL ELECTRIC SYSTEMS: nonprofit electric utilities owned by municipalities. These utilities are operated and governed by the municipality's legislative authority; i.e., the council/board of public affairs elected by municipal residents.

MUNICIPALIZATION: the process through which a municipality assumes responsibility for supplying the electric utility service to its constituents using city-owned facilities. To supply electricity, the municipality may generate and distribute the power or purchase wholesale power from others and distribute it.

MUTUAL AID: a network of municipal electric systems that stands ready to provide assistance to fellow municipal systems when local utility emergencies occur that are too widespread to be handled by one system alone.

NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP):

federal requirements, established pursuant to the Clean Air Act, that establish emissions standards for hazardous air pollutants (HAPs) produced by such stationary sources as factories, refineries and power plants.

NATIONAL HYDROPOWER ASSOCIATION (NHA): a Washington, D.C.-based nonprofit national association that promotes the growth of clean and affordable hydropower.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT: permit required for any discharge of a water pollutant from a point source into waters of the United States. **NATURAL GAS COMBINED CYCLE (NGCC):** power plants that generate electricity using two method steam cycle, fuel is burned to boil water and create steam, which turns a steam turbine driving a generator. In the gas cycle, gas is burned in a gas turbine that directly turns a generator.

NET METERING: crediting a customer for electricity generated by the customer's system and sent to the grid rather than used on site. When a customer installs a renewable energy system on his building, at times the electricity flows into the utility grid, literally spinning the existing electrical meter backwards. Net metering allows renewable energy system owners to receive full value for the electricity they produce over a billing cycle without installing costly battery storage.

NETWORK INTEGRATION TRANSMISSION SERVICE: transmission service that allows a customer to vary its scheduled power and gen-charge for each schedule change. It allows the network customer to integrate, economically dispatch, and regulate its current and planned network resources to serve its network load in a manner comparable to that in which each transmission owner uses the system to serve its native load customers.

New Source Performance Standards (**NSPS**): under the Clean Air Act, NSPS refer to the level of emissions (for various criteria pollutants) that a new stationary source may produce. NSPS are generally established by the USEPA based on source category (e.g., type of industry) and type of technology used to control emissions.

New Source Review (NSR): a preconstruction permitting program established to ensure that air quality is not significantly degraded from the addition of new and modified factories, industrial boilers and power plants.

NITROGEN OXIDES (NOX): pollutants produced from burning fossil fuels and various industrial processes. Nitrogen dioxide (NO2) is one of the criteria pollutants. NOx reacts with volatile organic compounds to form ground-level ozone.

NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION (NERC): a not-for-profit international regulatory authority whose mission is to assure the reliability of the bulk power system in North America. NERC develops and enforces Reliability Standards; annually assesses seasonal and long-term reliability; monitors the bulk power system through system awareness; and educates, trains and certifies industry personnel. NERC's area of responsibility spans the continental United States, Canada and the northern portion of Baja California, Mexico. NERC is the electric reliability organization for North America, subject to oversight by the FERC and governmental authorities in Canada. NERC's jurisdiction includes users, owners, and operators of the bulk power system, which serves more than 334 million people.

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA): part of the Department of Labor, this organization is responsible for ensuing safe and healthful working conditions in the workplace by setting and enforcing standards and by providing training, outreach, education and assistance.

OHIO MUNICIPAL ELECTRIC ASSOCIATION (OMEA): formed in 1962, the association serves as the legislative liaison to AMP and is dedicated to protecting the independence and constitutional rights of Ohio's municipal electric systems by monitoring legislative processes at state and federal levels, and advocating with policy makers.

OHIO POWER SITING BOARD (OPSB): board responsible for reviewing and approving plans for the construction of new energy facilities in Ohio.

OPEN ACCESS TRANSMISSION TARIFF (OATT): a tariff approved by FERC that states the rules for purchasing and using transmission service as well as the price of the service.

PARALLEL FLOWS: refers to the flow of electricity over all paths of least resistance when one utility sends energy to another.

PEAK GENERATION: the maximum/most active period of generation. (See also Baseload Generation, Distributed Generation, Intermediate Generation.)

PEAK SHAVING: to minimize their electricity bills, many customers elect to lower their load at times of high demand – and high costs – by lowering their usage or running behind-the-meter generation.

PHANTOM LOADS: an energy draw that continues to use electricity even after an appliance is turned off; for example, televisions, computers, garage door openers, cell-phone chargers, microwaves and stoves with clocks.

PHOTOVOLTAIC (PV): PV cells convert sunlight directly into electricity. PV cells are made of semiconducting materials similar to those used in computer chips. When these materials absorb sunlight, the solar energy knocks electrons loose from their atoms, enabling the electrons to flow through the material to produce electricity. This process of converting light (photons) to electricity (voltage) is called the photovoltaic effect. **PJM INTERCONNECTION:** one of two regional transmission organizations operating in the AMP membership area; the other is the MISO. The PJM Interconnection territory covers all Ohio, Pennsylvania, Virginia and West Virginia AMP member communities, as well as those communities belonging to AMP member Delaware Municipal Electric Corp., a joint action agency. (See also MidContinent Independent Transmission System Operator, Regional Transmission Organization.)

PLANNING AUTHORITY (PA): the responsible entity that coordinates and integrates transmission facility and service plans, resource plans, and protection systems.

"POSTAGE STAMP" RATE: rate for electric transmission that doesn't vary according to distance from the source of the power supply. So-called because postage stamps for mail are typically at a fixed price, regardless of destination.

POWER MARKETER: an agent or facilitator who acts as an intermediary on behalf of energy producers by finding and selling to energy consumers. Alternately, marketers may sell to any entity in the supply chain that is downstream from the producer.

POWER POOL: collection of municipalities that serves the balance of energy needs as a group instead of individually with power that typically comes from shortterm purchases or the hourly power markets.

POWER PURCHASE AGREEMENT (PPA): a legal contract between two parties on the purchase and sale of power. PPAs are typically tied to output of specific generators and sometimes include RECs and capacity in addition to energy.

PRAIRIE STATE GENERATING CO. (PSGC): Prairie State Generating Company, LLC, (PSGC): the operating company overseeing the Prairie State Energy Campus (PSEC), which includes a 1,600 MW advancedcoal generating station and adjacent Lively Grove coal mine. PSGC's stated fundamental purpose is "to supply its nine owners with a reliable, low-cost and stable source of electric power produced in a safe and environmentally responsible manner." Its owners are AMP, Illinois Municipal Electric Agency, Indiana Municipal Power Agency, Missouri Joint Municipal Electric Utility Commission, Kentucky Municipal Power Agency, Northern Illinois Municipal Power Agency, Southern Illinois Power Cooperative, Prairie Power Inc. and Peabody Energy.

PUBLIC UTILITIES COMMISSION OR PUBLIC SERVICE COMMISSION: an agency that regulates investor-owned providers of various utility and transportation services. These include for-profit electric and natural gas companies, local and long distance telephone companies, water and wastewater companies, and rail and

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trucking companies. It typically does not regulate municipal systems. Various commissions include Public Utilities Commission of Ohio, Pennsylvania Public Utilities Commission, Michigan Public Service Commission, Kentucky Public Service Commission, Public Service Commission of West Virginia, Virginia State Corporation Commission, Maryland Public Service Commission, Indiana Utility Regulatory Commission, and Delaware Public Service Commission.

PULVERIZED COAL TECHNOLOGY: generation process where the coal is ground (pulverized) to a fine powder. The pulverized coal is blown with part of the combustion air into the boiler plant through a series of burner nozzles. Combustion takes place at temperatures from 2,300 degrees F. to 3,100 degrees F., depending largely on coal rank. Steam is created, driving a steam turbine and generator, resulting in the production of electricity.

PUMPED STORAGE: a type of hydroelectric power generation that stores and produces electricity by moving water between reservoirs at different elevations. Stored water is released through turbines to produce hydroelectricity during periods of high demand. At times of low demand, excess electrical capacity is used to pump water into the higher reservoir.

RATING AGENCY: a firm that provides its opinion on the creditworthiness of an entity and the financial obligations (such as bonds, preferred stock and commercial paper) issued by an entity. The three major rating agencies are Fitch Ratings, Moody's Investors Service and Standard & Poor's.

REAL-TIME PRICING: the instantaneous pricing of electricity based on the cost of the electricity available for use at the time the electricity is demanded by the customer.

REGIONAL TRANSMISSION ORGANIZATION

(RTO): an organization that is established to control and manage the transmission (at high voltage) and flows of electricity over an area that is generally larger than the typical investor-owned utility's transmission system. The organization operates various markets including, but not limited, to energy, capacity and ancillary services.

RELIABILITY: the degree to which the performance of elements of the electric system results in electricity being delivered to customers within accepted standards, and in the amount desired. Reliability may be measured by the frequency, duration and size of adverse effects on the electric supply (or service to customers). **RELIABILITY COORDINATOR (RC):** the entity that is the highest level of authority who is responsible for the reliable operation of the Bulk Electric System, has the Wide Area view of the Bulk Electric System, and has the operating tools, processes, and procedures, including the authority to prevent or mitigate emergency operating situations in both next-day analysis and realtime operations. The Reliability Coordinator has the purview that is broad enough to enable the calculation of Interconnection Reliability Operating Limits, which may be based on the operating parameters of transmission systems beyond any Transmission Operator's vision.

RELIABILITYFIRST CORPORATION (RF): the North American Electric Reliability Corporation (NERC) regional entity responsible for assessing compliance and enforcing the NERC standards for most of the area in which AMP and its members are located and/or have assets. Not included are southern Illinois, Kentucky and Virginia. (See also North American Electric Reliability Corporation.)

RELIABILITY PRICING MODEL (RPM): an administrative construct under which PJM procures generation capacity on behalf of the load in the PJM footprint. This is done on a three-year-ahead basis for one-year commitment periods to ensure there is sufficient generation to serve the load in the PJM footprint. (See also PJM Interconnection.)

RELIABLE PUBLIC POWER PROVIDER (**RP3**): the Reliable Public Power Provider program in an APPA program that recognizes utilities that demonstrate high proficiency in reliability, safety, work force development and system improvement. Criteria within each of the four RP3 areas are based upon sound business practices and recognized industry leading practices.

RENEWABLE ENERGY CERTIFICATE (REC):

a financial instrument that represents the value and environmental benefits of producing electricity with hydro, wind, solar and other renewable sources. Renewable facilities generate RECs – measured in 1 MWh increments – as they produce electricity. RECs are purchased to reduce an organization's environmental footprint or, as in the case of some utilities, to meet state-mandated renewable portfolio standards. Also known as a "renewable energy credit" or "green tag."

RENEWABLE GENERATION: generation using any form of energy that is replaced by nature, with or without human assistance. Renewable generation also is typically defined by various states for applicability toward their renewable portfolio standard (RPS) requirements. Common forms include wind, solar, geothermal, hydro, landfill gas and tidal energy.

RENEWABLE PORTFOLIO STANDARD (RPS):

typically state-established requirements that set minimum levels (by percentage) of renewable generation that must be provided by certain electricity providers. Resource Efficiency: using less physical resources to produce the same product or service. Resource efficiency involves a concern for the use of all physical resources and materials used in the production and use cycle.

RESOURCE PLANNER (RP): the entity that develops the long-term (generally one year and beyond) plan for the resource adequacy of specific loads (customer demand and energy requirements) within a Planning Authority Area.

RETAIL ELECTRIC MARKET: sale of electric power to the end-use customer.

RICE NESHAP: the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP) limits emissions of toxic air pollutants from stationary reciprocating internal combustion engines.

RUN-OF-THE-RIVER HYDROELECTRIC: generating facility that uses the power in river water as it passes through the plant without causing an appreciable change in the river flow. Normally, such systems are built on dams that impound little water.

SCRUBBER: an air pollution control device that applies a spray of water or reactant (wet or dry) to remove pollutants from an air stream before they leave the stack. It is known as flue gas desulfurization when used to control sulfur dioxide (SO2).

SELF-GENERATION: a generation facility dedicated to serving a particular retail customer, usually located on the customer's premises. The facility may either be owned directly by the retail customer or owned by a third party with a contractual arrangement to provide electricity to meet some, or all, of the customer's load.

SERC RELIABILITY CORPORATION (SERC): the NERC Regional Entity responsible for assessing compliance and enforcing the NERC standards for AMP members and assets located in southern Illinois, Kentucky (except those located on the Duke Kentucky and AEP transmission systems), and Virginia (except those located in on the AEP transmission system).

SERVICE AREA: the area a utility serves. Investorowned utilities and rural electric cooperatives generally have certified territories with boundaries established by regulatory agencies. Municipal electric systems do not have certified territories, but their service areas may be limited legislatively or constitutionally by individual states.

SMART GRID: the addition of digital technology and communication to utility infrastructure, allowing the utility to remotely monitor and control the grid. Throughout the entire electricity infrastructure – generation, transmission and distribution – the use of controls, automation and new technologies enable a digital and immediate response to quickly changing demand. Among the benefits touted are more efficient transmission of electricity, quicker restoration after outages, reduced operations costs, reduced peak demand and improved security.

SMART METER: in general, a digital electric meter that keeps detailed data on a customer's electricity usage. Smart Meters have remote two-way communication abilities, meaning the meter can both send and receive information to a utility collection point.

SOLAR THERMAL: a system whereby collector panels or evacuated tubes heat water or other fluids to be used and stored for domestic hot water or space heating systems.

SPILL PREVENTION, CONTROL AND COUNTERMEASURE (SPCC) RULE: the SPCC rule provides requirements for oil spill prevention, preparedness, and response to prevent oil discharges to navigable waters and adjoining shorelines. The rule requires specific facilities with oil storage greater than 1,320 gallons to prepare, amend and implement SPCC Plans. The SPCC rule is part of the Oil Pollution Prevention regulation.

STATE IMPLEMENTATION PLAN (SIP): a document that describes the plans a state has proposed to effect compliance with the National Ambient Air Quality Standards (NAAQS). A SIP is required by the federal Clean Air Act.

SUBSTATION: facility equipment that switches, changes or regulates electric voltage. Contains any combination of transformers and other equipment needed to ensure smooth, safe flow of current. Substations are most commonly seen in residential and industrial areas, where one or more high-voltage transmission lines can feed into the station and multiple lower-voltage distribution lines branch out to serve customers in the surrounding area.

SULFUR DIOXIDE (SO2): a criteria pollutant produced by burning fossil fuels, which combines with water vapor to form acid rain.

THE ENERGY AUTHORITY (TEA): a public power energy trading and risk management organization that is wholly owned and directed by its public power

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members, including AMP, which became a member of TEA in January 2014. TEA performs short-term trading services, RTO market participation functions, gas hedging, physical gas management and risk management services on behalf of AMP.

TIME-OF-USE RATES: the pricing of electricity based on its estimated cost during a particular time block. Time-of-use rates are usually divided into three or four time blocks per 24-hour period (on-peak, mid-peak, off-peak and sometimes super off-peak) and by seasons of the year (summer and winter). Real-time pricing differs from time-of-use rates in that it is based on actual (as opposed to forecast) prices that may fluctuate many times a day and are weather-sensitive, rather than varying with a fixed schedule.

TRANSFORMER: a piece of equipment, mounted on a pole or a pad, that converts electricity from one voltage to another voltage. This conversion may be to a higher voltage for a more economical transmission of power over long distances or to a lower voltage for use by the customer.

TRANSMISSION ACCESS: refers to the right to use facilities and infrastructure for transporting energy across a high-voltage transmission grid. More specifically, it refers to right granted to non-owners and non-operators of transmission to deliver energy along transmission lines to wholesale customers.

TRANSMISSION ACCESS POLICY STUDY GROUP (TAPS): an association of transmissiondependent utilities and other supporters of equal, nondiscriminatory access to the nation's transmission grids. TAPS members, which include AMP, are located in more than 35 states.

TRANSMISSION LOADING RELIEF (TLR): procedure used by transmission control area security coordinators to curtail energy schedules in an attempt to limit power flow across a transmission system element to avoid exceeding the equipment's peak operating limits.

TRANSMISSION OWNER (TO): the entity that owns and maintains transmission facilities.

TRANSMISSION OPERATOR (TOP): the entity responsible for the reliability of its "local" transmission system, and that operates or directs the operations of the transmission facilities.

TRANSMISSION PLANNER (TP): the entity that develops a long-term (generally one year and beyond) plan for the reliability (adequacy) of the interconnected bulk electric transmission systems within its portion of the Planning Authority Area.

TRANSMISSION SYSTEM: facilities that conduct electricity at higher voltages; used to transmit electricity over long distances. Generally, voltages are 138 kV or greater. Typically, voltages 38 kV to 138 kV are considered subtransmission.

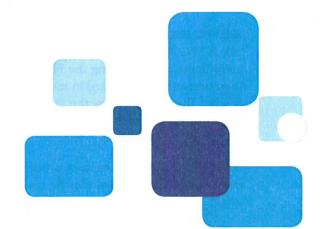
VERMONT ENERGY INVESTMENT CORPORATION (VEIC): nonprofit organization dedicated to reducing the economic, social and environmental costs of energy consumption through energy efficiency and renewable energy technologies. VEIC manages AMP's Efficiency Smart program, which promotes the adoption of energy-efficiency services by residential, commercial and industrial customers in participating member communities.

VOLT-AMPERE: the unit of apparent power in an alternating-current circuit equal to the product of the voltage in volts and the current in amperes with regard to phase.

WHOLESALE POWER PURCHASES: energy sales made between producers, marketers, brokers, utility companies and select high-volume, end-use customers. The most common form of wholesale energy transaction made between energy producers or marketers and utility companies that serve the general public.

WIND FARM: facility that harvests wind energy through a number of wind turbines. Most wind turbines have appearances similar to airplane propellers or windmills. The four-turbine, 7.2-MW AMP Wind Farm, owned by OMEGA JV6 near Bowling Green, Ohio, is the first such utility-scale facility in the state.

WIND TURBINE: a generator that uses the wind's energy to generate electricity.



ABBREVIATIONS

A

- A Ampere
- AC alternating current
- AECs alternative energy credits
- AEP American Electric Power Co.
- AEPS alternative/advanced energy portfolio standard
- AFEC AMP Fremont Energy Center
- ALJ administrative law judge
- AMI advanced metering infrastructure
- AMP American Municipal Power, Inc.
- ANSI American National Standards Institute
- APPA American Public Power Association
- APS Allegheny Power System (FirstEnergy)
- ARR auction revenue right

В

- BABs Build America Bonds
- BACT best available control technology
- BRPA Blue Ridge Power Agency
- BTM behind the meter
- BTU British thermal unit

С

- CAA Clean Air Act
- CAIR Clean Air Interstate Rule
- CATR Clean Air Transport Rule
- Ccf hundred cubic feet
- CDD cooling degree day
- **CEEP** Clean and Efficiency Energy Program
- CEI Cleveland Electric Illuminating Co. (FirstEnergy)
- CES clean energy standard
- cf cubic foot
- CFL compact fluorescent light bulb
- CHP combined heat and power
- CH4 methane gas
- CIP Critical Infrastructure Protection
- CO2 carbon dioxide
- Co-op rural electric cooperative
- CP coincident peak
- CPP Cleveland Public Power

- CPPClean Power PlanCREBsClean Renewable Energy BondsCSAPRCross State Air Pollution RuleCSPColumbus Southern Power (AEP)CVECCentral Virginia Electric Cooperative
 - **CWA** Clean Water Act

D

- DCdirect currentDEMECDelaware Municipal Electric CorporationDOEDepartment of EnergyDP&LDayton Power & LightDRdemand responseDSMdemand-responseEEEDRemergency demand response
- EEI Edison Electric Institute
- EIA Energy Information Administration
- EIS environmental impact statement
- **EMP** electromagnetic fields
- **EMRI** Electric Market Reform Initiative
- **EPACT** Energy Policy Act of 2005
- EPRI Electric Power Research Institute
- **EV** Electric vehicle
- EWG exempt wholesale generators

F

- Federal Communications Commission FCC FE FirstEnergy Corp. **FERC** Federal Energy Regulatory Commission FES FirstEnergy Solutions FIP federal implementation plan FLM federal land manager **FPA** Federal Power Act FTC Federal Trade Commission FTR financial transmission rights G
- **GAPP** General Agreement on Parallel Paths
- GHGs greenhouse gases
- G&T generation and transmission

GW GW gigawatt

GWh GWh gigawatt hour

Н	
НАР	hazardous air pollutant
HDD	heating degree day
HE	hour ending
Hg	mercury
H2S	hydrogen sulfide
HVAC	heating, ventilation and air conditioning
t I	
IEEE	Institute of Electrical & Electronics Engineers
IGCC	integrated gasification combined cycle
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- IMEA Indiana Municipal Electric Association
- IOU investor-owned utility
- **IPP** independent power producer
- IRP integrated resource planning
- **ISO** independent system operators
- IURC Indiana Utility Regulatory Commission

J

JV joint venture

K

- KAEC Kentucky Association of Electric Cooperatives
- **KMPA** Kentucky Municipal Power Agency
- KYMEA Kentucky Municipal Electric Agency
- KMUA Kentucky Municipal Utilities Association
- KPSC Kentucky Public Service Commission
- KU Kentucky Utilities (PPL)
- kV kilovolt
- kVA kilovolt ampere
- kW kilowatt
- **kWh** kilowatt hour

L

LDA locational deliverability area

- LED light-emitting diode
- LFG landfill gas
- LG&E Louisville Gas & Electric (PPL)
- LMP locational marginal pricing
- LPPC Large Public Power Council
- **LSE** load serving entity

Μ

MAAC	Mid-Atlantic Area Council	
MACT	maximum achievable control technology	
MATS	Mercury & Air Toxics Standards	
Mcf	thousand cubic feet	
MECA	Michigan Electric Cooperative Association	
MEP	Municipal Electric Partner	
MEPAV	Municipal Electric Power Association of Virginia	
MESA	Municipal Energy Services Agency	
MILLS	mills/KWh or \$0.001/KWh	
MISO	Midcontinent Independent System Operator	
MMEA	Michigan Municipal Electric Association	
MOPR	Minimum Offer Price Rule	
MPPA	Michigan Public Power Agency	
MPSC	Maryland Public Service Commission	
MPSC	Michigan Public Service Commission	
MSCPA	Michigan South Central Power Agency	
MV	megavolt	
MVA	megavolt ampere	
MW	megawatt	
MWh	megawatt hour	
N		

A RECEIVER AND PARTY		
NAAQS	National Ambient Air Quality Standards	
NARUC	National Association of Regulatory Utility Commissioners	
NEPA	National Environmental Policy Act	
NERC	North American Electrical Reliability Corp.	
NESC	National Electrical Safety Code	
NESHAP	National Emission Standards for Hazardous Air Pollutants	
NHA	National Hydropower Association	
NGCC	natural gas combined cycle	
Non-D	hourly non-displacement power	
NOx	nitrogen oxide	
NOPR	notice of proposed rulemaking	
NPDES	National Pollutant Discharge Elimination System	
NRC	Nuclear Regulatory Commission	
NRECA	National Rural Electric Cooperative Association	
NSPS	New Source Performance Standards	
NSR	New Source Review	
NUG	non-utility generators	
NYPA	New York Power Authority	

0

OASIS	open access same time information system	
OATT	open access transmission tariff	
OCC	Ohio Consumers' Counsel	
OE	Ohio Edison (FirstEnergy)	
O&M	operation and maintenance	
OMEA	Ohio Municipal Electric Association	
OMEGA	Ohio Municipal Electric Generation Agency	
OP	Ohio Power (AEP)	
OPSI	Organization of PJM States, Inc.	
OPSB	Ohio Power Siting Board	
OREC	Ohio Rural Electric Cooperatives Inc.	
OSHA	Occupational Safety & Health Administration	
D		

Ρ

PCB	polychlorinated biphenyls	
PECO	Philadelphia Electric Co. (Exelon)	
PEPCO	Potomac Electric Power Co.	
PEV	plug-in electric vehicle	
PHI	Pepco Holdings Inc.	
РЈМ	PJM Interconnection LLC	
РМ	particulate matter	
PMEA	Pennsylvania Municipal Electric Association	
PPL	Pennsylvania Power & Light	
PPM/PPB parts per million/billion		
PPUC	Pennsylvania Public Utilities Commission	
PREA	Pennsylvania Rural Electric Cooperative Association	
PSEC	Prairie State Energy Campus	
PSD	Prevention of Significant Deterioration	
PSGC	Prairie State Generating Co.	
PTC	production tax credit	
PTI	permit to install	
PUCO	Public Utilities Commission of Ohio	
PURPA	Public Utility Regulatory Policies Act	
PV	photovoltaics	
0		

Q

QFs qualifying facilities

R	
RCRA	Resource Conservation and Recovery Act
REA	Rural Electrification Administration
REC	rural electric cooperative
RECs	renewable energy credits

RES	renewable electricity standard	
RFP	request for proposal	
RICE	reciprocating internal combustion engine	
RP3	Reliable Public Power Provider (APPA)	
RPM	Reliability Pricing Model	
RPS	renewable portfolio standards	
RTO	regional transmission organization	
RTU	remote terminal unit	
RUS	rural utility service	
S		
SCADA	supervisory control and data acquisition system	
SCR	selective catalytic reduction	
SEC	Securities and Exchange Commission	
SF6	sulfur hexafluoride	
SILR	Schedule of Interruptible Load	
SIP	state implementation plan	
SO 2	sulfur dioxide	
SREC	Solar Renewable Energy Certificates	
S-T	short-term power	
Т		
TAPS	Transmission Access Policy Study Group	
T&D	transmission and distribution	
TE	Toledo Edison (FirstEnergy)	
TEA	The Energy Authority	
TLR	Transmission Loading Relief	
TVA	Tennessee Valley Authority	
U		
USACE	U.S. Army Corps of Engineers	
USEPA	U.S. Environmental Protection Agency	
USFWS	U.S. Fish & Wildlife Service	
V		
V	V volt	
VAR	voltage-ampere-reactive	

Vermont Energy Investment Corporation Virginia Electric & Power Co. (Dominion)

Virginia State Corporation Commission

VMDAEC Virginia, Maryland & Delaware Association

of Electric Cooperatives

volatile organic compound

WVPSC West Virginia Public Service Commission

VEIC

VOC

VSCC

W

W watt

W

VEPCO

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

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

Meeting Agenda Monday, February 8, 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 February: PSCAF three (3) month averaged factor: -\$0.00747
 JV2: \$0.032455
 JV5: \$0.032455
- III. Electric Department Report
- IV. AMP Project Update
- V.Any other matters to come before the Board
- VI. Adjournment

Gregory J. Heath, Finance Director/Clerk of Council

City of Napoleon, Ohio Board of Public Affairs

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

PRESENT			
Members	Mike DeWit – Chair, Dr. David Cordes		
Electric Committee	Travis Sheaffer – Chair, Patrick McColley, Dan Baer		
City Staff	Monica S. Irelan, City Manager		
	Gregory J. Heath, Finance Director/Clerk of Council		
	Lisa L. Nagel, Law Director		
	Jason P. Maassel, Mayor		
	Bobby Stites, Assistant MIS Director		
Recorder	Tammy Fein		
Others	Jon Tassler (arrived at 6:40pm)		
ABSENT	son russiei (unived at e. topin)		
BOPA Call To Order	Clerk of Council Heath called the BOPA meeting to order at 6:30pm.		
Election Of Board Of Public	Heath asked each member by seniority to nominate a member for BOPA Chair:		
Affairs Chair			
	Cordes nominated DeWit		
	DeWit passed		
Motion To Elect Board Chair	Motion: DeWit Second: Cordes		
	To elect as BOPA Chair		
Passed	Roll call vote on above motion:		
Yea- 2	Yea- Cordes, DeWit		
Nay- 0	Nay-		
	ar Chairman Sheaffer called the Electric Committee meeting to order at 6:22:		
Electric Committee Call To Order	Chairman Sheaffer called the Electric Committee meeting to order at 6:32pm.		
Annuaral Of Minutes	The Describer 14, 2015 meeting minutes stored commund as measured with no		
Approval Of Minutes	The December 14, 2015 meeting minutes stand approved as presented with no		
	objections or corrections.		
Destan Of Desses Samely Cost	The electric Device Sugaly Cost A directment Feeter for January was appeared		
Review Of Power Supply Cost	The electric Power Supply Cost Adjustment Factor for January was presented		
Adjustment Factor	for review.		
	Hooth reminded the Deerd and Committee that are of the hydrox has new		
	Heath reminded the Board and Committee that one of the hydros has now		
	come online. Irelan reported that the City is reviewing the potential impact of		
	electric cars, adding that the City is situated well and is continually reviewing		
	the power portfolio.		
PODA Motion To Decommend	Motion: Cordes Second: DeWit		
BOPA Motion To Recommend			
Approval Of Power Supply	To recommend approval of Power Supply Cost Adjustment Factor for January		
Cost Adjustment Factor	2016 as follows: DSC A E three (2) month everaged factor: \$0,00440		
	PSCAF three (3) month averaged factor: -\$0.00440		
	JV2: \$0.035222		
Doggod	JV5: \$0.035222 Roll call vote on above motion:		
Passed			

Yea- 2 Nay- 0	Yea- Cordes, DeWit Nay-		
	Heath explained the reason for the Power Supply Cost Adjustment Factor along with the power portfolio of the City to the Committee.		
Motion To Accept BOPA Recommendation For Approval Of Power Supply Cost Adjustment Factor	Motion:BaerSecond:McColleyTo accept the BOPA recommendation for approval of Power Supply CostAdjustment Factor for January 2016 as follows:PSCAF three (3) month averaged factor:JV2:\$0.035222JV5:\$0.035222		
Passed Yea- 3 Nay- 0	Roll call vote on above motion: Yea- Sheaffer, McColley, Baer Nay-		
Electric Department Report	The Electric Department Report was distributed for review.		
Any Other Matters To Come Before The BoardIrelan reviewed the American Municipal Power, Inc. (AMP) O Generation Projects Overview with the Board and Committee.			
BOPA Motion To Adjourn	Motion: Cordes Second: DeWit To adjourn the meeting at 6:50pm		
Passed Yea- 2 Nay- 0	Roll call vote on above motion: Yea- Cordes, DeWit Nay-		
Any Other Matters Assigned To The Committee	None		
Electric Motion To Adjourn	Motion:McColleySecond:BaerTo adjourn the Electric Committee meeting at 6:50pm		
Passed Yea- 3 Nay- 0	Roll call vote on above motion: Yea- Sheaffer, McColley, Baer Nay-		
Date	Mike DeWit, Chair		

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

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

Special Meeting Agenda Monday, February 8, 2016 at 7:00pm

- 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 (Tabled)
- IV. Discussion regarding St. Paul Methodist parking lot lease
- V. Dodd Street Project Review
- VI. Updated information from Staff on Economic Development (as needed)
- VII. Adjournment

Gregory J. Heath, Finance Director/Clerk of Council

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

Monday, January 11, 2016 at 7:30pm

PRESENT		
Committee Members	Patrick McColley - Chair, Travis Sheaffer, Jon Tassler, Jason Maassel	
City Staff	Greg Heath, Finance Director/Clerk of Council	
	Monica Irelan, City Manager	
	Lisa Nagel, Law Director	
Recorder	Tammy Fein	
Others		
ABSENT		
Committee Staff		
Call To Order	Chairman McColley called the meeting to order at 7:30pm.	
	channan weeding caned the meeting to order at 7.50pm.	
Approval Of Minutes	Minutes of the December 14 meeting stand approved as presented with no	
	objections or corrections.	
Review Of The Current		
Engineering Rules (Tabled)		
Motion To Untable Review Of	Motion: Tassler Second: Sheaffer	
The Current Engineering Rules	To untable review of the current Engineering Rules	
Passed	Roll call vote on above motion:	
Yea- 4	Yea- McColley, Sheaffer, Tassler, Maassel	
Nay- 0	Nay-	
Discussion	Irelan distributed the current Engineering Rules with proposed changes for	
	review, with deletions being struck through and additions added in red.	
	McColley stated that he is not in agreement with the change on Page 16; Irelan	
	explained there are places that it is unsafe to have a second driveway in the City	
	and this rule will reserve the right to make traffic flow safe in these locations.	
	McColley believes that development of higher income houses may be deterred	
	by this rule; Irelan stated that it is easier to enforce to make it illegal for everyone unless it is approved by the City Engineer. Sheaffer asked if the plans	
	for new developments are reviewed through the Committee; Irelan stated that	
	the City should be informed before these are installed, adding that this rule is	
	just to allow the City to make sure the drives and approaches remain safe.	
	McColley believes the intent will eventually disallow this for all residents;	
	Irelan stated there is still an appeals process that will bring the appeal before	
	Municipal Properties, Buildings, Land Use & Economic Development	
	Committee. Irelan reported that the City Engineer and the Police Chief both	
	review these for line of sight and safety, adding that this rule merely establishes	
	the City right to compel safety. Irelan asked McColley if he wanted more detail	
	in the rule with the same end result, allowing for safety; McColley would like	
	the access restrictions listed in more detail.	
	McColley stated that he has an issue with the change on Page 15 which lists	
	meconey stated that he has an issue with the change on 1 age 15 which lists	

Motion To Table Review Of The Current Engineering Rules

Passed Yea- 4 Nay- 0

Review Of Historic Data Regarding Previous Assessment Percentages going to a standard of twenty nine (29) feet for pavement; Irelan reported this is currently used due to emergency vehicle access with on street parking, however was not written in the rules. McColley stated that his street is twenty five (25) feet and has not seen any access issues for emergency vehicles. Irelan stated that on street parking will be removed from narrow streets for emergency access, and parking changes are not required to come before Council. McColley restated that his street only requires one lane for emergency vehicle access. Sheaffer asked what other communities have; Irelan stated that twenty nine (29) feet is the standard width for street width for comparable municipalities; Irelan will bring back this research to the Committee for review. Irelan stated that some streets will be widened during projects if possible, however if there is no project in the near future, the parking will be changed without a project; adding that the Police and Fire Chiefs and City Engineer do an analysis before this decision is made.

Motion: Sheaffer Second: Tassler To table review of the current Engineering Rules

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

Irelan reminded the Committee that at the last meeting the Committee directed staff to look into the history of assessments and the percentages that were assessed in the past; Irelan reviewed a memo written in 2007 outlining this requested information, adding that the information is still accurate as assessments have ranged from seven percent (7%) to eighty eight percent (88%)over the years with an average assessment percent of forty six percent (46%). Irelan reminded the Committee that this information is for Staff to have guidelines. Sheaffer believes thirty five percent (35%) to be a good starting point then factoring in Grant funding from that point; Irelan asked if the Grants would be on the City portion of the assessment; Heath stated the percentages listed include Grants off the entire project with the remainder being shared equitably. Sheaffer believes that projects with CDBG Grants should be handled separately for the low to moderate income properties; Heath stated that CDBG Grants are required to be applied to the low income properties first. McColley asked if the figures listed were for the entire project; Irelan stated that some Grants only cover certain portions of the project, with the percentage being assessed on the overall cost. Heath reminded the Committee that assessments are considered a funding source, adding that the Committee has control on assessments as necessary. McColley stated that he is against assessments, however a phase in of assessment may be the option; Heath believes that phasing in assessments is neither fair nor equitable; McColley restated that he believes a phase in would work better: Irelan stated the City liability and legal ramifications may be increased if a phase in of assessments is used, adding that she believes that assessments should be decided to be done or not. Maassel asked what the increase in service would be for the increase in cost; Irelan reported that the current budget does not have the funds to cover all infrastructure currently in the Capital Fund. McColley suggested a maximum percentage for assessments; Irelan stated this should be included in a Policy to allow for the five (5) and ten (10) year plans for the City.

Review Of Historic Data Regarding Previous Assessment Percentages (Continued)

Heath stated that all the assessments listed were started at one hundred percent (100%) and decreased as the project was net accessible and Grants funding was added. Maassel asked if there is a way to assess by the amount of footage on the project; Heath stated this is how most projects are figured. Maassel asked if a frontage maximum could be set; Irelan stated that each project has a different cost. Heath stated that assessment law sets certain parameters including value on property; Maassel asked if a certain figure could be attached per foot; McColley believes there should be a maximum per foot amount; Heath believes that this may make it difficult to create a base index; McColley suggested a maximum per linear foot. Irelan stated that municipalities going away from assessments have a dedicated millage revenue source. Heath stated the current projects could assume a one hundred percent (100%) assessment and Council could reduce this figure to a lower percentage for each project as deemed appropriate.

McColley asked Heath if he remembers an average cost per parcel for assessments on the listed projects; Heath stated that the Southside project was based on frontage, adding that this information could be researched if McColley would like the figures. McColley believes this information may help to explain the assessment decisions to the residents when it is asked: Heath will research this information. Maassel asked for the assessment process; Heath listed the steps in an assessment, including the design including the cost of assessment; then a Council Resolution of Necessity, after approval the project can be bid or started; the residents are then sent an assessment notice, and there is a board of appeals for residents to explain repairs they have previously paid for including sidewalks and driveways; then the complete project and net cost is filtered down for assessment, and the residents are allowed to either pay the entire amount upfront or debt the amount over determined period, adding that Council can determine a lower amount as appropriate. Maassel asked if there is interest added when the amount is paid over time; Heath stated yes, this is the last piece of Legislation of an assessment.

Irelan summarized that Council will have an estimate of the assessment cost before the project begins. Heath stated that the residents will pay either through rates, income tax or assessment. Irelan asked if the Committee would like research brought back; McColley stated yes. Heath suggested researching the current project of Park Lane with a one hundred percent (100%) assessment figure with the netted down amounts; Tassler agreed. Sheaffer agreed that the projects must be paid for; adding that a portion may be socialized, though the resident with the most benefit should pay a bit more. Heath reminded the Committee that Enterprise Funds are not saved to the General Fund, and rates cannot be used to build a standalone street but can be used for street replacement for sewer repair projects. Irelan reported that Park Lane is part of the LTCP; Tassler asked if projects are all part of LTCP; Irelan stated yes and other projects are currently being set aside but the City is continuing negotiations with EPA. Sheaffer stated that he would like to have the services prioritized before trying for an income tax increase then researching assessments; Tassler believes this will cause the assessment to begin at one hundred percent (100%): Irelan stated that she will bring the five (5) and ten (10) year capital plans for educational purposes. McColley requested a range of the resident cost; Heath stated this will depend on the project; Irelan will research this. Heath stated the previous construction bonds were twenty (20)

	year bonds, but they could be thirty (30) year bonds as necessary.		
Motion To Table Review Of Historic Data Regarding Previous Assessment Percentages	Motion: Sheaffer Second: Tassler To table review of historic data regarding previous Assessment percentages		
Passed Yea- 4 Nay- 0	Roll call vote on above motion: Yea- McColley, Sheaffer, Tassler, Maassel Nay-		
Review Updated Information From Staff On ED (<i>As Needed</i>)	Irelan reviewed a letter from A Renewed Mind Behavioral Health (ARM) regarding collaboration in an integrated facility. Irelan reported that ARM was founded in 2007 and is licensed by the Ohio Department of Mental Health and Addiction Services as well as Nationally accredited by Commission on Accreditation of Rehabilitation Facilities (CARF); ARM employs over one hundred ninety (190) staff and the facility will be overseen by an independently licensed Counselor with experience in both mental health and substance abuse treatment and this facility will have around the clock care from local healthcare workers, adding that this comprehensive center will create additional jobs in the community. Irelan reported there has been no property purchase or acceptance of any proposal; Irelan has heard one anonymous resident concern regarding this; McColley stated that anonymous complaints are not considered. Irelan stated that this memo will help to answer any resident concerns brought before Councilmen.		
Motion To Adjourn	Motion: Sheaffer Second: Tassler To adjourn the meeting at 8:35pm.		
Passed: Yea- 4 Nay- 0	Roll call vote on motion: Yea- McColley, Sheaffer, Tassler, Maassel Nay-		
Date	Patrick McColley, 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 <u>www.napoleonohio.com</u>

Memorandum

To: Municipal Properties, Buildings, Land Use & Economic Development Committee From: Monica Irelan, City Manager *RE: Review of Engineering Rules*

In January's Municipal Properties, Buildings, Land Use & Economic Development Committee meeting there were several items that required further investigation by staff. This memo will address the concerns and questions regarding Engineering Rules.

Comparable were sought for two items 1) street width and 2) driveways. Staff polled surrounding communities including Archbold, Bowling Green, Bryan, Wauseon, Defiance, and Findley. This is a mix of Villages, Statutory City and Charter Cities.

Street Width:

Back of curb to back of curb is a concept not everyone may understand, so let's look at that closer. In Exhibit A you will see a PDF of a typical section of road. You will see that each lane is 12 feet wide, and gutter pan and curb at 2.5 feet. In Exhibit B you will see a close of the curb specifications.

29 feet is pretty common in Northwest Ohio and very common nationwide. Below is a chart of the comparable communities that the Committee asked us to look into.

Community	Street Width	Notes
Archbold	29'	
Bowling Green	25'	Currently considering 11-12' lanes
Bryan	29'	
Wauseon	29'	
Defiance	28'	
Findlay	27'	

Driveways:

As for driveways, no other municipality polled allows for more than 1 driveway. In our current revisions we are stating that there is only 1 driveway, but more can be installed upon approval of Engineering Department. I believe this is the most effective way of managing this proposition. I also believe it is the safest way to manage this situation. I know Councilman McColley requested alternative language. After several attempts at writing language, I feel it would be too complicated. I strongly urge that the City allow the resident to come into the Engineering

Department to request a second drive. I know we would have a difficult time writing general guidelines to help decide on a second drive. Since every situation is different, allowing staff to investigate each scenario is the best use of staff and residents' time.

Community	Driveways	Notes
Archbold	n/a	Nothing in writing but generally only 1 drive per resident lot
Bowling Green	1	
Bryan	n/a	Doing further investigation but generally only 1 drive
Wauseon	1	
Defiance	1	
Findlay	1	

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
Amended		Ordinance No.

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RULE 1 DEFINITIONS

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.

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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.

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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

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

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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

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 3.2.3CONSTRUCTION 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)

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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).

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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-sixinch (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 <u>runoff_drainage</u> 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. <u>All drainage calculations shall be prepared and sealed by</u> <u>a licensed engineer.</u>

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*)

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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 copiesy 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 <u>the</u> 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)

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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 fifteenten 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*)

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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) copyies 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.

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One (1) copy of <u>runoff_drainage</u> 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

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 ≤ 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

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size ≤ 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 <u>minimum standard</u> width of pavement shall be twenty-five <u>nine</u> feet (295') 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-ofway 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 <u>four_six</u> inches (<u>64</u>") 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 (0DOT 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)

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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'). Mmaximum 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.

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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 deadend is permitted, a cul-de-sac shall be provided at the terminus of the street. Culde-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 (Tc) 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:

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

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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 <u>storm sewer main pavement under-</u> drains and a non-perforated and a six inch (6") <u>PVC</u> 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 <u>mainline</u> 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, $a\underline{A}$ 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. <u>Pre-development conditions assumes all developments to be grass lots.</u>

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:

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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:

1	0								
Storm Frequency Requirements									
Equal to or	Less Than	Storm							
Greater Than	(%)	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 CFS Q2B = (0.80)*(2.60)*(6.25) = 13.00 CFS

(Q2B-Q2A)/(Q2A) = (13.00-3.254.88)/(3.254.88) = 3.01.66, or 300166%

Therefore, the critical storm is the <u>fifty</u> 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 4.1.7Traffic 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*)

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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 4.2.2SEWER 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 developmentand 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 <u>mainline</u> 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.

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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. <u>All extensions shall be</u> 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. <u>Six inch (6")</u> <u>diameter water mains shall only be allowed if justified by the City of Napoleon's</u> 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.

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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

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.

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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

RULE 6 VIOLATIONS AND PENALTIES

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 Ffailure 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

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 unreasonabley, arbitrary or capricious in his/her decision, merely remand the subject of appeal to the City Manager for further consideration.

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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 www.napoleonohio.com

Memorandum

To: Municipal Properties, Buildings, Land Use & Economic Development Committee From: Monica Irelan, City Manager *RE: Assessments*

In January's Municipal Properties, Buildings, Land Use & Economic Development Committee meeting there were several items that required further investigation by staff. This memo will address the concerns and questions regarding Assessments.

Exhibit A is the assessment calculations used on Clairmont in 2007. Let's walk through the calculations first:

Moving right to left, you will see the address, parcel number and owner of the property. The frontage is the linear feet of property that abuts the projects. The property value is needed because the assessment cannot exceed one third (1/3) of the total property value. The next column shows you what that value is. The frontage cost is taking 100% of the allowable assessment divided into the frontage in order to get the frontage cost per parcel. That number cannot exceed the 1/3 value, so if the frontage cost is higher than the 1/3 value number, the 1/3 value number is used. A property owner can pay that lump sum number without any interest penalty until the project is debted. Once the project is debted, the property owner will have to pay the principal and interest on their lump sum number. Then the City amortizes the number over a set number of years. In this chart, staff gave two options, 20 and 30 years.

To clarify above I mentioned "100% of the allowable assessment." I phrased it that way on purpose. The City must pay at minimum 2% of every project. The City must also pay for intersections. Below the chart, you will see a section called "City of Napoleon's Cost (as per O.R.C.). That section shows you the 2% and the intersection calculations.

From here, the Council has plenty of options. The body can assess 100% of the allowable assessment, or it can cost share even more with the property owners affected. Any percentage is acceptable as long as the City pays its minimum 2% and intersections.

Estimated Cost of Assessments:

I was asked to bring back "about how much an assessment costs per parcel." The Committee knew this would be difficult, and it was. When doing assessment calculations, there are several factors that impact the numbers. These include project scope, feet of frontage, density of

neighborhood, how updated the auditor's data is, and economic times to name a few. In the end, the actual cost of the project will never be known until it is bid, constructed, and the last pay application is complete. With that being said, we attempted to do our best. We decided to focus on price per foot of frontage. That helps take some of the variability out of the calculation.

You will see that on the Clairmont example, there is a price per foot frontage of \$279.63. Clairmont had everything on the project sewer, water, and road. In Exhibit B you will find the calculations for Woodlawn. The Woodlawn calculations show a price per foot to be \$377.04. This project was middle of the road as far as utilities. We did not do all of the utilities on the west end of the project but did include sidewalks in the assessment calculations. The road on Woodlawn is thicker because it was a truck route. In Exhibit C, you will find Park Lane calculations. Park Lane is on the low end of the replacement of utilities. There are no sidewalks assessed in this project (yet) and the pavement is standard for its use. However the density is not that strong. The price per foot is \$449.77. Taking these three numbers and averaging them out will give an idea of cost per foot frontage. That average is \$368.81 per foot. It is not a good number, but it is the best I can do for your review.

Park Lane:

As stated above, Park Lane calculations are in Exhibit C. This is the project currently under discussion for assessments.

In Exhibit D you will find two alternative scenarios for Park Lane, a 50% assessment and a 25% assessment. This is for your review and discussion. As a side note, if we added sidewalks to the assessment, that would add approximately \$25,000 to the overall project. That would make the price per foot go up to \$469.53.

Exhibit A

CLAIRMONT AVENUE IMPROVEMENTS

PRELIMINARY ASSESSMENT CALCULATIONS

PREPARED BY: Chad E. Lulfs, P.E., P.S. PREPARED ON:

June 6, 2007

							Tax Assessments			
			Frontage	Property	Max. 1/3	Frontage	Lump Sum	20 Years	30 Years	
Address	Parcel Number	Owner	(ft.)	Value	Value	Cost	Cost	Interest	t = 5%	
1025 Clairmont Avenue	41-009661.1380	James Edward & Carolyn Elaine Lammy	195	\$167,630	\$55,876.67	\$54,527.46	\$54,527.46	\$4,375.42	\$3,547.09	
1039 Clairmont Avenue	41-009661.1420	Troy E. Richey	85	\$90,540	\$30,180.00	\$23,768.38	\$23,768.38	\$1,907.24	\$1,546.17	
1055 Clairmont Avenue	41-009661.1460	Ian D. & Patricia C. Reid	80	\$125,370	\$41,790.00	\$22,370.24	\$22,370.24	\$1,795.05	\$1,455.22	
1065 Clairmont Avenue			80	\$120,880	\$40,293.33	\$22,370.24		\$1,795.05		
1095 Clairmont Avenue	41-009554.0440	Eugenia Gerken, Trustee, Eugenia Gerken Trust Agreement	160	\$88,000	\$29,333.33	\$44,740.48	\$29,333.33	\$2,353.78	\$1,908.18	
1006 Clairmont Avenue	41-009661.1820	Mary A. Norden, Trustee	115	\$149,460	\$49,820.00	\$32,157.22	\$32,157.22	\$2,580.38	\$2,091.87	
		Terry L. & Nancy S. Gasche	120	\$168,310	\$56,103.33	\$33,555.36	\$33,555.36	\$2,692.57	\$2,182.82	
1050 Clairmont Avenue	41-009661.1720	Carl R & Rosalie J. Hall	90	\$116,430	\$38,810.00	\$25,166.52	\$25,166.52	\$2,019.43	\$1,637.12	
1076 Clairmont Avenue	41-009661.1680	Nicholas M Cotter & Melissa K. Wagner	85	\$115,200	\$38,400.00	\$23,768.38	\$23,768.38	\$1,907.24	\$1,546.17	
		James V. & Melissa H. Koehler	85	\$103,850	\$34,616.67	\$23,768.38		\$1,907.24		
		Gerald E. & Rita Richardson	85	\$141,030	\$47,010.00	\$23,768.38		\$1,907.24		
1098 Clairmont Avenue	41-009661.1560	Bradley S. & Christine A. Seemann	80	\$97,170	\$32,390.00	\$22,370.24	\$22,370.24	\$1,795.05	\$1,455.22	

Project Costs Estimated Construction Cost with 10% Contingency: O.E.P.A. Application Fees: Design Cost: Public Record Research Costs: Total Project Cost:	\$362,000.00 \$1,033.00 \$23,620.00 \$62.25 \$386,715.25
City of Napoleon's Cost (as per O.R.C.) 2% of Total Project Cost: Clairmont Avenue & Broadmoor Avenue Intersection Cost: City of Napoleon's Total Project Cost:	\$7,734.31 \$26,649.64 \$34,383.94
Adjusted Assessment Total Cost:	\$352,331.31
Total Frontage (ft.)	1260
Price per Foot of Frontage:	\$279.63

\$352,331.31 \$336,924.16

Exhibit B

WOODLAWN AVENUE IMPROVEMENTSPRELIMINARY ASSESSMENT CALCULATIONSPREPARED BY:TODD JENKINS, P.E.PREPARED ON:January 3, 2008

							Tax A	ts	
			Frontage	Property	Max. 1/3		Lump Sum	20 Years	30 Years
Address	Parcel Number	Owner	(ft.)	Value	Value	Frontage Cost	Cost	Interes	st = 5%
220 W. Clinton Street	41-130156.0000	First National Bank Northwest	241.25	\$256,110	\$85,370.00	\$90,960.66	\$85,370.00	\$6,850.31	\$5,553.44
Clinton Street	41-130112.0000	First National Bank Northwest	40.00	\$4,200	\$1,400.00	\$15,081.56	\$1,400.00	\$112.34	\$91.07
School-Woodlawn	41-130116.0000	Napoleon City School District	108.70	\$53,740	\$17,913.33	\$40,984.14	\$17,913.33		
849 Woodlawn Avenue	41-130118.0000	Gregory James Matthews	40.00	\$92,060	\$30,686.67	\$15,081.56	\$15,081.56	\$1,210.18	\$981.08
853 Woodlawn Avenue	41-130120.0000	Fredric B. Furney, ETUX	59.00	\$99,260	\$33,086.67	\$22,245.30	\$22,245.30	\$1,785.02	\$1,447.09
859 Woodlawn Avenue	41-130122.0000	Nathan L. Bickel, ETUX	66.00	\$78,570	\$26,190.00	\$24,884.57	\$24,884.57	\$1,996.80	\$1,618.78
867 Woodlawn Avenue	41-130126.0000	Jon C. Cordes	99.00	\$116,910	\$38,970.00	\$37,326.86	\$37,326.86	\$2,995.20	\$2,428.17
909 Woodlawn Avenue	41-009333.0240	Danuta Minnick	54.80	\$73,860	\$24,620.00	\$20,661.74	\$20,661.74	\$1,657.95	\$1,344.08
911 Woodlawn Avenue	41-009333.0160	Shawn D. Sherman	45.00	\$82,200	\$27,400.00	\$16,966.76	\$16,966.76	\$1,361.46	\$1,103.71
913 Woodlawn Avenue	41-009333.0180	Sherry Lynn Oberhaus	45.00	\$63,340	\$21,113.33	\$16,966.76	\$16,966.76	\$1,361.46	\$1,103.71
917 Woodlawn Avenue	41-009333.0260	Carol M. Lugibihl	45.00	\$55,750	\$18,583.33	\$16,966.76	\$16,966.76	\$1,361.46	\$1,103.71
923 Woodlawn Avenue	41-130158.0000	Kelli J. Burkhardt, ETAL	66.26	\$147,460	\$49,153.33	\$24,982.60	\$24,982.60	\$2,004.67	\$1,625.15
931 Woodlawn Avenue	41-130160.0000	Chad R. Cordes, ETUX	66.00	\$74,050	\$24,683.33	\$24,884.57	\$24,683.33	\$1,980.65	\$1,605.69
937 Woodlawn Avenue	41-130164.0000	Spencer R. McOscar, Sr., ETUX	55.50	\$44,520	\$14,840.00	\$20,925.66	\$14,840.00	\$1,190.80	\$965.36
943 Woodlawn Avenue	41-130168.0000	Kelli J. Burkhardt, ETAL	39.30	\$35,090	\$11,696.67	\$14,817.63	\$11,696.67	\$938.57	\$760.88
1005 Woodlawn Avenue	41-140134.0000	Craig B. Clayton, ETUX	66.80	\$93,910	\$31,303.33	\$25,186.21	\$25,186.21	\$2,021.01	\$1,638.40
1009 Woodlawn Avenue	41-140132.0000	James K. Oberhauser, ETAL	46.17	\$88,940	\$29,646.67	\$17,407.89	\$17,407.89	\$1,396.85	\$1,132.41
1015 Woodlawn Avenue	41-140130.0000	Seth M. Izor, ETUX	60.00	\$83,780	\$27,926.67	\$22,622.34	\$22,622.34	\$1,815.28	\$1,471.62
1021 Woodlawn Avenye	41-140128.0000	Clara J. Snyder	60.00	\$60,170	\$20,056.67	\$22,622.34	\$20,056.67	\$1,609.40	\$1,304.71
	41-140126.0000	Marvin L. Drummond	75.00	\$79,480	\$26,493.33	\$28,277.93	\$26,493.33	\$2,125.89	\$1,723.43
1033 Woodlawn Avenue	41-140124.0000	Randy S. Rivera, ETUX	80.00	\$146,110	\$48,703.33	\$30,163.12	\$30,163.12	\$2,420.37	\$1,962.15
	41-140146.0000	Napoleon Board of Education	177.90	\$10,770	\$3,590.00	\$67,075.24	\$3,590.00	\$288.07	\$233.53
School-Woodlawn	41-140248.0000	City of Napoleon	93.64	\$1,370	\$456.67	\$35,305.93	\$456.67	\$36.64	\$29.71
1111 Woodlawn Avenue	41-140120.0000	Estelle R. Eberle, ETAL	137.66	\$67,340	\$22,446.67	\$51,903.19	\$22,446.67	\$1,801.18	\$1,460.19
1125 Woodlawn Avenue	41-140116.0000	William Lytle	154.40	\$144,460	\$48,153.33	\$58,214.82	\$48,153.33	\$3,863.95	\$3,132.44
1139 Woodlawn Avenue	41-140114.0000	Evan J. Peckinpaugh, ETUX	121.56	\$129,370	\$43,123.33	\$45,832.86	\$43,123.33	\$3,460.33	\$2,805.23
1147 Woodlawn Avenue	41-140112.0000	Shane A. Reynolds, ETAL	68.95	\$98,050	\$32,683.33	\$25,996.84	\$25,996.84	\$2,086.05	\$1,691.13
1153 Woodlawn Avenue	41-140110.0000	Keith A. Fruchey, ETUX	68.95	\$64,910	\$21,636.67	\$25,996.84	\$21,636.67	\$1,736.18	\$1,407.50
	41-140108.0000	Mary Holden, Trustee	68.95	\$57,750	\$19,250.00	\$25,996.84	\$19,250.00		
	41-140106.0000	William F. Elling, ETUX	118.16	\$213,310	\$71,103.33	\$44,550.93	\$44,550.93		
	41-140104.0000	Craig T. Tipton, ETAL	132.57	\$118,830	\$39,610.00	\$49,984.06	\$39,610.00		
1225 Woodlawn Avenue	41-140102.0000	Eldon W. Meyer	112.50	\$89,120	\$29,706.67	\$42,416.89	\$29,706.67		
	41-140100.0000	Gerald W. Knepley, ETAL	112.50	\$112,080	\$37,360.00	\$42,416.89	\$37,360.00		
	41-140098.0000	Junior Harmon	122.00	\$126,200	\$42,066.67	\$45,998.76	\$42,066.67		

WOODLAWN AVENUE IMPROVEMENTSPRELIMINARY ASSESSMENT CALCULATIONSPREPARED BY:TODD JENKINS, P.E.PREPARED ON:January 3, 2008

							Tax Assessments		S
			Frontage	Property	Max. 1/3		Lump Sum	20 Years	30 Years
Address	Parcel Number	Owner	(ft.)	Value	Value	Frontage Cost	-	Interes	t = 5%
1313 Woodlawn Avenue	41-140094.0000	Junior Harmon, ETUX	90.81	\$79,950	\$26,650.00	\$34,238.91	\$26,650.00	\$2,138.46	\$1,733.62
	41-140092.0000	Matthew G. Meienburg	86.81	\$98,860	\$32,953.33	\$32,730.76	\$32,730.76		
1317 Woodlawn Avenue	41-140090.0000	Lois E. Huber	86.81	\$103,310	\$34,436.67	\$32,730.76	\$32,730.76		
1325 Woodlawn Avenue	41-140086.0000	Sandra L. Waggoner	195.15	\$76,340	\$25,446.67	\$73,579.16	\$25,446.67	\$2,041.91	\$1,655.34
1333 Woodlawn Avenue	41-140048.0000	Badenhop-Meyer Enterprises	263.07	\$285,120	\$95,040.00	\$99,187.65	\$95,040.00	\$7,626.26	\$6,182.49
	41-009037.0240	City of Napoleon	159.30	\$17,770	\$5,923.33	\$60,062.31	\$5,923.33	\$475.30	\$385.32
	41-140046.0000	John B. Kistner	0.00	\$0	\$0.00	\$0.00	\$0.00		\$0.00
	41-149691.0040	John B. Kistner	183.60	\$62,650	\$20,883.33	\$69,224.36	\$20,883.33		
1322 Woodlawn Avenue	41-140044.0000	Robert R. Bernicke	180.20	\$160,080	\$53,360.00	\$67,942.43	\$53,360.00		
	41-140042.0000	Melvin K. Pace, ETAL	78.20	\$137,170	\$45,723.33	\$29,484.45	\$29,484.45		
	41-140088.0000	Gerald Posner, Trustee	88.70	\$139,860	\$46,620.00	\$33,443.36	\$33,443.36		\$2,175.54
	41-009035.0300	Hilda Kruse	73.03	\$84,750	\$28,250.00	\$27,535.16	\$27,535.16		
	41-009035.0320	Hilda Kruse	73.03	\$16,690	\$5,563.33	\$27,535.16	\$5,563.33		\$361.90
	41-009035.0280	Robert L. Reimund, ETUX	73.03	\$77,660	\$25,886.67	\$27,535.16	\$25,886.67		
	41-009035.0260	Joseph M. Meyer, ETAL	52.32	\$95,510	\$31,836.67	\$19,726.68	\$19,726.68		
	41-140036.0000	Lewis E. Joseph, ETAL	66.00	\$36,320	\$12,106.67	\$24,884.57	\$12,106.67	\$971.47	\$787.56
1214 Woodlawn Avenue	41-140038.0000	Lewis E. Joseph, ETAL	75.00	\$74,710	\$24,903.33	\$28,277.93	\$24,903.33		
	41-140034.0000	Tami Crognale c/o Eldor H. Bindeman	89.00	\$67,230	\$22,410.00	\$33,556.47	\$22,410.00		
1158 Woodlawn Avenue	41-009217.0180	Julie Beech	57.50	\$86,570	\$28,856.67	\$21,679.74	\$21,679.74	\$1,739.64	\$1,410.30
1150 Woodlawn Avenue	41-009217.0160	Joseph P. Szozda, ETUX	82.00	\$102,750	\$34,250.00	\$30,917.20	\$30,917.20	\$2,480.88	\$2,011.21
	41-009217.0140	Thomas P. Lalonde	44.70	\$79,970	\$26,656.67	\$16,853.64	\$16,853.64		
1003 Highland Avenue	41-009217.0120	James A. Fouts, ETAL	68.10	\$96,690	\$32,230.00	\$25,676.36	\$25,676.36		
	41-009217.0100	Timothy A. Groll, ETUX	43.00	\$75,420	\$25,140.00	\$16,212.68	\$16,212.68	\$1,300.95	\$1,054.66
1120 Woodlawn Avenue		Ryan D. Meyers, ETUX	52.00	\$96,680	\$32,226.67	\$19,606.03	\$19,606.03		
		Michelle Hull, ETVIR	67.50	\$88,450	\$29,483.33	\$25,450.13	\$25,450.13		
1116 Woodlawn Avenue	41-009217.0040	Michelle Hull, ETVIR	0.00	\$3,030	\$1,010.00	\$0.00	\$0.00		\$0.00
	41-009217.0020	Fred Gerken, JR	121.00	\$135,710	\$45,236.67	\$45,621.72	\$45,236.67	. ,	\$2,942.71
1020 Willard Street	41-009097.0040	Donald G. Schuette, ETUX	34.99	\$265,650	\$88,550.00	\$13,192.59	\$13,192.59	\$1,058.61	\$858.20
	41-009097.0060	Gary E. Gessner, ETUX	102.98	\$12,140	\$4,046.67	\$38,827.48	\$4,046.67	\$324.72	\$263.24
	41-009095.1160	Gary E. Gessner, ETUX	68.97	\$77,430	\$25,810.00	\$26,004.38	\$25,810.00		
1013 Reynolds Street	41-009095.1180	Kyle L. Miller, ETUX	68.97	\$91,230	\$30,410.00	\$26,004.38	\$26,004.38		
1020 Woodlawn Avenue	41-009095.1860	Gary L. Badenhop, ETUX	60.00	\$77,830	\$25,943.33	\$22,622.34	\$22,622.34		
	41-009095.1880	Jason L. Westhoven	55.30	\$66,450	\$22,150.00	\$20,850.26	\$20,850.26		
	41-009095.1900	Carrie D. Brinkman	50.00	\$107,650	\$35,883.33	\$18,851.95	\$18,851.95		
1004 Woodlawn Avenue	41-009095.1920	Michael J. Traina, ETUX	50.00	\$92,370	\$30,790.00	\$18,851.95	\$18,851.95	\$1,512.73	\$1,226.35

WOODLAWN AVENUE IMPROVEMENTSPRELIMINARY ASSESSMENT CALCULATIONSPREPARED BY:TODD JENKINS, P.E.PREPARED ON:January 3, 2008

							Tax Assessments		
			Frontage	Property	Max. 1/3		Lump Sum	20 Years	30 Years
Address	Parcel Number	Owner	(ft.)	Value	Value	Frontage Cost	Cost	Interest	t = 5%
944 Woodlawn Avenue	41-009095.0020	Scott G. Gray	89.43	\$75,020	\$25,006.67	\$33,718.60	\$25,006.67	\$2,006.60	\$1,626.72
928 Woodlawn Avenue	41-009451.0380	Gary L. Daman	196.27	\$41,230	\$13,743.33	\$74,001.45	\$13,743.33	\$1,102.80	\$894.02
918 Woodlawn Avenue	41-009451.0340	Chad E. Roth, ETUX	75.66	\$118,490	\$39,496.67	\$28,526.77	\$28,526.77	\$2,289.06	\$1,855.71
868 Woodlawn Avenue	41-009451.0400	David Fields, ETUX	109.00	\$116,770	\$38,923.33	\$41,097.25	\$38,923.33	\$3,123.31	\$2,532.02
866 Woodlawn Avenue	41-009451.0420	David Fields, ETUX	112.00	\$111,030	\$37,010.00	\$42,228.37	\$37,010.00	\$2,969.78	\$2,407.55
850 Woodlawn Avenue	41-130110.0000	Todd D. St.John	98.00	\$60,630	\$20,210.00	\$36,949.82	\$20,210.00	\$1,621.70	\$1,314.69
844 Woodlawn Avenue	41-009451.0500	Marie H. Sauer, Trustee	50.00	\$710	\$236.67	\$18,851.95	\$236.67	\$18.99	\$15.40
838 Woodlawn Avenue	41-130106.0000	Benjamin H. Baden, ETAL	63.00	\$85,260	\$28,420.00	\$23,753.46	\$23,753.46	\$1,906.04	\$1,545.20
832 Woodlawn Avenue	41-130104.0000	Peter J. Schroeder, ETUX	45.33	\$88,430	\$29,476.67	\$17,091.18	\$17,091.18	\$1,371.44	\$1,111.81
830 Woodlawn Avenue	41-130102.0000	Terry L. Burdue, ETUX	69.13	\$116,000	\$38,666.67	\$26,064.71	\$26,064.71	\$2,091.50	\$1,695.55
822 Woodlawn Avenue	41-130100.0000	Scott A. Morris, ETUX	52.36	\$97,880	\$32,626.67	\$19,741.76	\$19,741.76	\$1,584.13	\$1,284.23
814 Woodlawn Avenue	41-130098.0000	Terry Lee McBroom	100.41	\$194,310	\$64,770.00	\$37,858.49	\$37,858.49	\$3,037.86	\$2,462.75
813&813 1/2 Scott Street	41-130096.0000	Lester C. Shelt, ETUX	66.19	\$113,830	\$37,943.33	\$24,956.21	\$24,956.21	\$2,002.55	\$1,623.44

Project Costs Estimated Construction Cost: O.E.P.A. Application Fees: Design Cost: Total Project Cost:	\$2,990,000.00 \$3,572.50 <u>\$212,525.00</u> \$3,206,097.50	\$2,645,445.16 \$2,030,673.22	
City of Napoleon's Cost (as per O.R.C.) 2% of Total Project Cost: Intersections Cost:	\$59,800.00 \$500,852.34	Assessments to City-Owned Property = Assessments to Napoleon City Schools' Property =	\$6,380.00 \$21,503.33
City of Napoleon's Total Project Cost: Adjusted Assessment Total Cost:	\$560,652.34 \$2,645,445.16		
Total Frontage (ft.)	7,016.37		
Price per Foot of Frontage:	\$377.04		

Exhibit C

								Та	x Assessment	
			Frontage				100% of	Lump Sum	20 Years	30 Years
Address	Parcel Number	Owner	(ft.)	Property Value	Max. 1/3 Value	Frontage Cost	_	Cost	i = 3%	i = 4%
1 Park Lane		Nick E. Leatherman	130.13	\$115,090	\$38,363.33	\$58,527.99	\$58,527.99	\$38,363.33	\$2,578.62	\$2,218.56
2 Park Lane	41-0095130040		100.73	\$145,740	\$48,580.00	\$45,304.88	\$45,304.88	\$45,304.88	\$3,045.20	\$2,619.99
3 Park Lane		Steven L. Siclair	99.84	\$197,940	\$65,980.00	\$44,904.59	\$44,904.59	\$44,904.59	\$3,018.29	\$2,596.84
4 Park Lane	41-0095130080	Mollyann Crawford	100.04	\$174,770	\$58,256.67	\$44,994.55	\$44,994.55	\$44,994.55	\$3,024.34	\$2,602.04
5 Park Lane	41-0095130100	Matthew F. Hardy	128.68	\$105,970	\$35,323.33	\$57,875.83	\$57,875.83	\$35,323.33	\$2,374.28	\$2,042.75
None	41-0095130143	Thomas A. Borstelman	89.77	\$460	\$153.33	\$40,375.45	\$40,375.45	\$153.33	\$10.31	\$8.87
6 Park Lane	41-0095130120	Thomas A. Borstelman	239.24	\$115,540	\$38,513.33	\$107,601.91	\$107,601.91	\$38,513.33	\$2,588.70	\$2,227.23
7 Park Lane		Edward A. Hoeffel	125.64	\$121,460	\$40,486.67	\$56,508.54	\$56,508.54	\$40,486.67	\$2,721.34	\$2,341.35
8 Park Lane	41-0095130180	Daniel George Dewalt	125.76	\$136,970	\$45,656.67	\$56,562.52	\$56,562.52	\$45,656.67	\$3,068.85	\$2,640.33
9 Park Lane	41-0095130200	Clayton L. Muntz	125.09	\$113,000	\$37,666.67	\$56,261.17	\$56,261.17	\$37,666.67	\$2,531.79	\$2,178.27
		Project Costs Estimated Construction Cost with 10% Contingency: O.E.P.A. Application Fees: Design Cost: Public Record Research Costs: Total Project Cost: City of Napoleon's Cost (as per O.R.C.) 2% of Total Project Cost: Park Lane & Park Street Intersection Cost: City of Napoleon's Total Project Cost:	\$0.00 \$580,528.00 \$11,610.56 \$0.00 \$11,610.56	(Total Cost for 3 Ph	ases = \$184,300. As	ssume Park Lane	Costs as Follows	\$371,367.36 s: Design = \$40	,000, Geotech	nical = \$2,000
		Adjusted Assessment Total Cost: Total Frontage (ft.)	\$568,917.44 1,264.92							
		Price per Foot of Frontage:	\$449.77							

Per O.R.C., assessments are limited to 1/3 value of property.

al = \$2,000; Record Drawings = \$950; Monuments = \$1,000)

Exhibit D

Address								Tax Assessments		
			Frontage				50% of	Lump Sum	20 Years	30 Years
1 Doult Long	Parcel Number	Owner	(ft.)	Property Value	Max. 1/3 Value	Frontage Cost	_	Cost	i = 3%	i = 4%
		Nick E. Leatherman	130.13	\$115,090	\$38,363.33	\$76,112.96	\$38,056.48	\$38,056.48	\$2,557.99	\$2,200.81
	41-0095130040		100.73	\$145,740	\$48,580.00	\$58,916.92	\$29,458.46	\$29,458.46	\$1,980.07	\$1,703.59
	41-0095130060		99.84	\$197,940	\$65,980.00	\$58,396.36	\$29,198.18	\$29,198.18	\$1,962.58	\$1,688.53
		Mollyann Crawford	100.04	\$174,770	\$58,256.67	\$58,513.34	\$29,256.67	\$29,256.67	\$1,966.51	\$1,691.92
		Matthew F. Hardy	128.68	\$105,970	\$35,323.33	\$75,264.86	\$37,632.43	\$35,323.33	\$2,374.28	\$2,042.75
None	41-0095130143	Thomas A. Borstelman	89.77	\$460	\$153.33	\$52,506.42	\$26,253.21	\$153.33	\$10.31	\$8.87
6 Park Lane	41-0095130120	Thomas A. Borstelman	239.24	\$115,540	\$38,513.33	\$139,931.34	\$69,965.67	\$38,513.33	\$2,588.70	\$2,227.23
		Edward A. Hoeffel	125.64	\$121,460	\$40,486.67	\$73,486.77	\$36,743.38	\$36,743.38	\$2,469.73	\$2,124.87
		Daniel George Dewalt	125.76	\$136,970	\$45,656.67	\$73,556.95	\$36,778.48	\$36,778.48	\$2,472.09	\$2,126.90
9 Park Lane	41-0095130200	Clayton L. Muntz	125.09	\$113,000	\$37,666.67	\$73,165.07	\$36,582.54	\$36,582.54	\$2,458.92	\$2,115.57
		Estimated Construction Cost with 10% Contingency:\$710,000.00O.E.P.A. Application Fees:\$1,000.00Design Cost:\$43,950.00 (Total Cost for 3 Phases = \$184,300. Assume Park Lane Costs as FollowPublic Record Research Costs:\$0.00Total Project Cost:\$754,950.00					Costs as Follows	s: Design = \$40	0,000, Geotech	nical = \$2,00
		City of Napoleon's Cost (as per O.R.C.)								
		2% of Total Project Cost:	\$15,099.00							
		Park Lane & Park Street Intersection Cost:	\$0.00							
		City of Napoleon's Total Project Cost:	\$15,099.00							
		Adjusted Assessment Total Cost:	\$739,851.00							
		Total Frontage (ft.)	1,264.92							
		Price per Foot of Frontage:	\$584.90							

Per O.R.C., assessments are limited to 1/3 value of property.

al = \$2,000; Record Drawings = \$950; Monuments = \$1,000)

								Ta	ax Assessment	
			Frontage				25% of	Lump Sum	20 Years	30 Years
Address	Parcel Number	Owner	(ft.)	Property Value	Max. 1/3 Value	Frontage Cost	Frontage Cost	Cost	i = 3%	i = 4%
1 Park Lane		Nick E. Leatherman	130.13	\$115,090	\$38,363.33	\$76,112.96	\$19,028.24	\$19,028.24	\$1,279.00	\$1,100.41
2 Park Lane	41-0095130040	Robert W. Bost	100.73	\$145,740	\$48,580.00	\$58,916.92	\$14,729.23	\$14,729.23	\$990.04	\$851.79
3 Park Lane		Steven L. Siclair	99.84	\$197,940	\$65,980.00	\$58,396.36	\$14,599.09	\$14,599.09	\$981.29	\$844.27
4 Park Lane	41-0095130080	Mollyann Crawford	100.04	\$174,770	\$58,256.67	\$58,513.34	\$14,628.34	\$14,628.34	\$983.25	\$845.96
5 Park Lane		Matthew F. Hardy	128.68	\$105,970	\$35,323.33	\$75,264.86	\$18,816.21	\$18,816.21	\$1,264.75	\$1,088.14
None	41-0095130143	Thomas A. Borstelman	89.77	\$460	\$153.33	\$52,506.42	\$13,126.61	\$153.33	\$10.31	\$8.87
6 Park Lane		Thomas A. Borstelman	239.24	\$115,540	\$38,513.33	\$139,931.34	\$34,982.84	\$34,982.84	\$2,351.40	\$2,023.06
7 Park Lane		Edward A. Hoeffel	125.64	\$121,460	\$40,486.67	\$73,486.77	\$18,371.69	\$18,371.69	\$1,234.87	\$1,062.44
8 Park Lane	41-0095130180	Daniel George Dewalt	125.76	\$136,970	\$45,656.67	\$73,556.95	\$18,389.24	\$18,389.24	\$1,236.05	\$1,063.45
9 Park Lane	41-0095130200	Clayton L. Muntz	125.09	\$113,000	\$37,666.67	\$73,165.07	\$18,291.27	\$18,291.27	\$1,229.46	\$1,057.79
		Project Costs Estimated Construction Cost with 10% Contingency: O.E.P.A. Application Fees: Design Cost: Public Record Research Costs: Total Project Cost: City of Napoleon's Cost (as per O.R.C.) 2% of Total Project Cost: Park Lane & Park Street Intersection Cost: City of Napoleon's Total Project Cost:	\$710,000.00 \$1,000.00 \$43,950.00 \$0.00 \$754,950.00 \$15,099.00 \$0.00 \$15,099.00	(Total Cost for 3 Ph	ases = \$184,300. As	ssume Park Lane	Costs as Follow	\$171,989.48 s: Design = \$40),000, Geotech	nical = \$2,000
		Adjusted Assessment Total Cost:	\$739,851.00							
		Total Frontage (ft.)	1,264.92							
		Price per Foot of Frontage:	\$584.90							

Per O.R.C., assessments are limited to 1/3 value of property.

al = \$2,000; Record Drawings = \$950; Monuments = \$1,000)



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 www.napoleonohio.com

Memorandum

To: Municipal Properties, Buildings, Land Use & Economic Development Committee From: Monica Irelan, City Manager *RE: Review of Lease with St. Paul's Methodist Church*

History:

The discussion regarding St. Paul Methodist parking lot lease was referred to Committee by Council President Travis Sheaffer after members of the congregation came to the Council meeting on February 1, 2016.

Since 1960, the City of Napoleon has had a lease with St. Paul's Methodist Church (Church). The city pays the church \$1 in order to lease the Church's private property for a public parking lot. In the original lease, the City constructed, at its own expense, a public parking lot. The church still had rights to use the lot on Sundays and any other day they deemed necessary without having to pay the City. As far as I can tell, that lease expired in October of 1970, but the City continued to maintain the lot for public purposes.

In 1995, a new lease was written between the Church and City. Again, the City paid the Church \$1 for the use of their lot. There were more explicit duties tied to the new lease. The City has already constructed the lot at its own expense. Now the City must:

- 1) Sweep the parking lot within its regular schedule for sweeping and cleaning other City parking lots.
- 2) Remove snow from the lot in accordance with and in the same time frame as removal of snow from City parking lots except as follows. If a snow even occurs late in the regular work week that would ordinarily require the removal of snow from City lots before the opening of offices on Monday morning, the City will keep snow removal crews working on Friday/Saturday to clear the lot for Sunday services. If snow event occurs after the close of business hours on Friday that requires City crews to be called out to work, the City will clear the snow from the lot in accordance with the City's overall schedule of priorities for snow removal. The City does not specifically warrant that it will remove snow in time for church services, particularly if other priority snow removal tasks remain to be accomplished first.
- 3) Striping of parking stalls on the same schedule and frequency as other City lots in accordance with City standards and dimensions.
- 4) Patching the lot in the same priority and to the same standard as other City lots.

The new lease continues to allow the Church exclusive rights to the lot on Sundays and for any other Church function. The new lease also states that the City is responsible for any payment of taxes or assessments levied to the property. It is mutually agreed that all personal property, except lighting, becomes the property of the Church at expiration of the contract. The new contract was a five (5) year contract with a five (5) year renewal clause.

Subsequent leases were renewed with little changes to the 1995 contract. The City added a right to add handicap parking. The 2010 lease clarifies that the City will pay all monies for taxes and assessments, so long as invoiced by the Church within twelve (12) months ending the initial lease five (5) year lease.

In order to renew the 2010 lease for an additional five (5) year period, the City had to put that extension in writing to the Church by August 2015. The City did not do that therefore the lease expired. The City, under the direction of the City Manager, chose not to renew the lease.

City Manager's Rationale:

Between 2010 and 2015, the City constructed and currently maintains its own lot at the corner of Main and Perry. This lot added approximately 20 spaces to the City owned downtown parking. It is hard to justify the continued use of tax payers' dollars to maintain private property especially when budgets are getting tighter and staffing has been reduced. I could not find a need great enough to spend the money or resources.

Since I took over in May of 2014, I have been directed to cut expenses wherever possible and to get out of the way of private companies. I firmly believe that I am doing both in this scenario. I am cutting the cost associated with sweeping, removing snow, striping, and patching a lot constructed on private property. I am also removing the City's crews from doing work meant for private snow removal companies.

Downtown Parking:

In 1989, the City underwent a parking study for the downtown. Between 1989 and 1996, the City along with private businesses made a concerted effort to make numerous parking improvements in the downtown. According to a 1996 memo written from previous Building & Zoning Administrator Brent Damman to then City Manager Marc Gerken, the parking deficit at the time of the 1989 study was 218%. The changes that were made between 1989 and 1996 took that deficient to 161%. The 1989 study stated that a parking problem exists when the number of spaces available is 200% less than what is needed. "Therefore it would appear overall that we do not have a parking problem statistically speaking," stated Damman in his 1996 memo.

This was back in 1996. The utilization of the downtown has changed drastically in the last twenty (20) years. These changes include the County employees moving to another location. This freed up spaces in both on street parking and in city owned lots. This just reiterates that statistically speaking, there is not a parking problem.

If and when the economic conditions of the downtown have an upswing, and parking becomes a problem, I would be happy to renegotiate contracts for public use of private lots. Until that day comes, I have a hard time justifying spending tax payers' resources on maintaining private lots.



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 www.napoleonohio.com

Memorandum

To: Municipal Properties, Buildings, Land Use & Economic Development Committee From: Monica Irelan, City Manager *RE: Dodd Street Project*

Per the direction of Municipal Properties Committee, and support by Council, staff is to bring projects to Committee for review throughout the process. We are prepared to present information on Dodd Street.

History:

This project has been in the preliminary budget 4 times, the first of which was 2007. However, this is the first time grant money has been awarded to the City for this project.

The Municipal Properties Committee has reviewed assessments for this project and suggested to Council that assessments not be done for this project. Council supported that recommendation, so final design moved forward.

The project is ready to go to Council for approval of documentation and specification. This will move the project into the bidding phase.

Project Summary:

Utilities:

380 l.f. of sanitary sewer will be replaced with 10" main and 6" sanitary services from the sewer main to the right-of-way line. The remaining sanitary sewer was replaced on a prior project. 330 l.f. of new storm sewer will be installed. Existing storm sewers will remain where they were previously replaced. Existing storm structures will be adjusted to grade along with 4 additional curb inlets. 35 storm taps will be provided from the existing and proposed storm sewers to the right-of-way line.

975 l.f. of waterline will be replaced with 41 water services being replaced. 3 new fire hydrants will be installed and proper valving installed to meet the City of Napoleon's Engineering Rules' requirements in residential areas.

Street, drives, and sidewalks:

Approximately 900 l.f. of street will be reconstructed between Scott Street & Lagrange Street & 365 l.f. of street will be reconstructed from Lagrange Street to the north.

Approximately 400 l.f. of the street will be resurfaced from the north end of the reconstruction through the cul-de-sac. The Dodd Street & Lagrange Street intersection will also be resurfaced. Approximately 10,000 s.f. of concrete walk will be replaced. This area currently has concrete walks on both sides.

Approximately 900 s.y. of concrete drive approaches will be installed per the City of Napoleon's Engineering Rules.

Approximately 2,600 l.f. of concrete curb will be installed.

Financial Impact:

This project was reviewed and approved through the Finance and Budget Committee and via the budget process. The total project budget is \$773,500. This includes the following breakdown:

Design	\$8,500	Update previous design
Street	\$400,000	
Waterline	\$110,000	
Sanitary Sewer	\$80,000	
Storm Sewer	\$175,000	

The City was awarded a CDBG grant in the amount of \$285,000.

Documents and Specifications:

In 2015, Municipal Properties did review the documents that are used for all City projects. There were very few revisions made.

The project summary outlines the work that will be completed. Specifications on piping, pavement thickness, drive approaches, and sidewalk specifications can all be found in the Engineering Rules.

Recommendation:

I would ask that the Committee recommend to Council the approval of Documents and Specifications for the Dodd Street project. This will allow staff to put the project out to bid.

Memorandum

То:	Water, Sewer, Refuse, Recycling & Litter Committee, Council, Mayor, City			
	Manager, City Law Director, City Finance Director, Department Supervisors			
From:	Gregory J. Heath, Finance Director/Clerk of Council			
Date:	2/4/2016			
Re:	Water, Sewer, Refuse, Recycling & Litter Committee Meeting Cancellation			

The Water, Sewer, Refuse, Recycling & Litter Committee, which is regularly scheduled to meet on Monday, February 8, 2016 at 7:00pm, has been CANCELED due to lack of agenda items.

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:** 2/4/2016
- **Re:** Board of Zoning Appeals Meeting Cancellation

The Board of Zoning Appeals meeting regularly scheduled for Tuesday, February 9, 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: 2/4/2016
Re: Planning Commission Meeting Cancellation

The Planning Commission meeting regularly scheduled for Tuesday, February 9, 2016 at 5:00pm has been CANCELED due to lack of agenda items.

City of Napoleon, Ohio

City Council

in Joint Session with County Commissioners

LOCATION: Commissioners Office Meeting Room, 1853 Oakwood Ave., Napoleon, Ohio 43545

Special Meeting Agenda Saturday, February 13, 2016 at 9:00am

- I. Discussion regarding the current Senior Center building
- II. Good of the County/City
- III. Adjournment

Gregory J. Heath, Finance Director/Clerk



January 29, 2016

Units at Meldahl, Cannelton hydro facilities begin commercial operation

By Scott Kiesewetter - senior vice president of generation operations

AMP is pleased to announce that both Meldahl and Cannelton hydroelectric facilities had units begin commercial operation this week.

Meldahl Unit 2 achieved commercial operation on Jan. 20, and AMP received final paperwork confirming Cannelton Unit 3 began commercial operation on Jan. 28.

"Hamilton is excited for our customers and those of the other participating AMP members that the Meldahl project has achieved this important milestone," said Mike Perry, Hamilton's director of project implementation.

AMP is developing the project with Hamilton, which originally procured the development license from the Federal Energy Regulatory Commission (FERC). Hamilton retains the rights for a 51.4 percent





share of the energy output from the facility, with AMP taking the remaining output for the 48 other AMP members participating in the project.

"AMP and our members are taking the next step in helping secure an energy future for generations to come with these hydro facilities," said Marc Gerken, AMP president/CEO. "These projects are long-term assets with an estimated life of 80 to 100 years. They play a key role in creating balanced and diversified resource portfolios for participating members."

The Meldahl and Cannelton units join Willow Island's Unit 1, which began commercial operation on Jan. 4, in supplying participating AMP members with power.

The Smithland project has also been making good headway and is expected online before the end of the year.

"I want to re-iterate the hard work and long hours that project teams are engaged in to accomplish these critical start-up functions," Gerken said.

Combined, the four projects under various stages of construction and commissioning will add more than 300 MW of new hydropower. This represents that largest deployment of new run-of-the-river hydro in the nation.

AMP, OMEA file comments on USEPA Clean Power Plan FIP draft rules

By Jolene Thompson – executive vice president/OMEA executive director

On Jan. 22, AMP and OMEA filed comments on the U.S. Environmental Protection Agency's (USEPA's) draft rules for the Clean Power Plan federal implementation plan (FIP), model rules and Clean Energy Incentive Plan (CEIP). The American Public Power Association, Prairie State Generating Company, National Hydropower Association and AFFORD Coalition filed extensive comments that we supported.

The FIP comes in to play if states do not file state implementation plans or file plans that aren't federally approved. Additionally, the FIP and model trading rules may be used by states as templates in part to help draft their plans.

The key issues we raised in our comments were: a request that the USEPA finalize FIPs for both rate and mass-based approaches to provide states as much flexibility as possible, a request that the eligible resources for the CEIP be expanded past solar and wind to include other renewables, and our thoughts on the workability of evaluation, measurement and verification requirements for energy efficiency programs.

Our comments, as well as those of our partners listed above, are available on the AMP <u>Member</u> <u>Extranet</u>.

Energy markets update

By Jerry Willman – assistant vice president of energy marketing

The March 2016 natural gas contract rose \$0.025/MMBtu to close at \$2.182 on its first day as the new prompt month contract yesterday. The EIA reported yesterday that U.S. gas inventories fell by 211 Bcf for the week ending Jan. 22,

A show of support for municipal bonds is being sought by local officials

By Michael Beirne - vice president of external affairs

The American Public Power Association (APPA) is working with the National Association of State Treasurers (NAST) and other public sector associations in an effort to gather signatures by state and local officials for a letter to Congress in support of municipal bonds. A copy of the letter was sent to AMP and OMEA principal contacts earlier this week and is available on the <u>Member Extranet</u>.

We strongly encourage local officials from our members to add their names and communities to this letter – there is no need to write your own letter.

We believe that such a letter will generate additional media attention to the issue and serve as a reminder to policymakers of the level of opposition they will face if they seek to change the tax treatment of municipal bonds.

"The cost savings state and local governments realize through tax-exempt municipal bonds occur because investors are willing to accept a lower rate of interest in exchange for that interest being exempt from taxation. If the tax-exemption is capped or eliminated investors will demand a higher interest rate on municipal bonds thereby increasing the cost to municipal issuers," the letter states. "As a result, municipalities will have to either curtail infrastructure projects or raise taxes on sales, property or income. Additionally, if changes to the tax treatment of these bonds are enacted, a tax risk premium will be built into interest rates demanded by future investors."

The goal is to finalize and send the letter on March 2 to House Ways and Means Committee Chair Kevin Brady (R-TX) and Committee Ranking Democrat Sander Levin (D-MI), and Senate Finance Committee Chair Orrin Hatch (R-UT) and Committee Ranking Democrat Ron Wyden (D-OR).

Please let Jodi Allalen know by Feb. 10, 2016 (via email confirmation to jallalen@amppartners.org) if you plan to sign on. We will coordinate with APPA on our members' participation.

Thank you in advance for your help. If you have questions, please contact me at <u>mbeirne@amppartners.org</u> or 614.540.0835.

AFEC weekly update

By Jerry Willman

Fremont operated 1x1 configuration last Friday and Saturday while repairs were being completed on CT2 exhaust. The exhaust repairs were completed late Saturday evening. The plant was available full dispatch on Sunday and remained in 2x1 operation for the remainder of the week.

Duct firing operated for only five hours this week. The plant generated at a 69 percent capacity factor (based on 675 MW rating).

On Peak (16 hour) prices into AEP/Dayton Hub Week ending Jan. 29 MON THE WED THU FRI \$27.55 \$31.53 \$24.48 \$26.92 \$28.93 Week ending Jan. 22 TUE MON WED THU FRI \$30.90 \$37.28 \$24.09 \$31.66 \$25.07 AEP/Dayton 2017 5x16 price as of Jan. 28 - \$37.10

AEP/Dayton 2017 5x16 price as of Jan. 21 — \$36.85

Energy markets update

continued from Page 1

marking this winter's largest gas storage withdrawal. Market consensus for this week was a withdrawal of -207 Bcf.

Although the weather is looking fairly mild early next week in the east, the models are forecasting a variable pattern with cooler temperatures expected during the back half of the 6-15 day period.

Supreme Court resolves demand response issues in FERC v. EPSA

By Lisa McAlister – deputy general counsel

On Jan. 25, 2016, the U.S. Supreme Court issued a decision in *Federal Energy Regulatory Commission v. Electric Power Supply Association*, No. 14-840, and *EnerNOC, Inc. v. Electric Power Supply Association*, No. 14-841, to address two questions regarding FERC's Order 745, which established rules for demand response (DR) compensation in wholesale energy markets run by Regional Transmission Organizations (RTOs), like PJM.

In Order No. 745, FERC required RTOs that permit DR resources to bid in its energy and ancillary services markets (by reducing their energy consumption) to pay those DR resources the same market price for energy that the RTOs pay to generators for supplying energy – so long as the DR resource is capable of balancing supply and demand and payment to the DR resource is cost effective as determined by a "net benefits test" accepted by FERC.

The D.C. Circuit set aside Order No. 745 on two grounds: 1) the order was beyond FERC's jurisdiction because prescribing DR compensation to end-use customers was really regulation of retail markets that Congress left to state regulation; and, 2) FERC failed to adequately explain why paying the full wholesale market price for energy was reasonable when DR resources also avoided paying for energy in their retail rates when reducing consumption. The Supreme Court reviewed two questions: 1) whether FERC has authority to regulate DR, and, 2) if so, whether FERC's decision to pay the locational marginal price (LMP) for DR was just and reasonable.

In an opinion drafted by Justice Kagan, joined by Justices Roberts, Kennedy, Ginsburg, Breyer and Sotomayer, the court held that FERC does have authority to regulate

Demand response issues

continued from Page 2

DR because it directly affects wholesale rates, even though it also impacts retail rates. The court's jurisdiction analysis contained three parts: First, the court found that DR compensation in RTO markets directly affects wholesale electric energy rates within FERC's jurisdiction because, in addition to authority to regulate wholesale rates, FERC has the authority to regulate any practice "affecting" such rates, as DR does. Second, the court found that FERC was not regulating retail sales in violation of the limits on its jurisdiction set by the Federal Power Act. Third, the court found that if FERC could not regulate wholesale DR compensation, there would be a regulatory gap as the states cannot regulate compensation in wholesale markets. As to the appropriate DR compensation question, the court held that FERC's reasonable explanation for the compensation rule it adopted entitled FERC to deference under the standard of review applied to technical judgments. The court remanded any further proceedings, however, there is little, if anything, left for remand.

It is worth noting that FirstEnergy had filed a complaint against PJM on the assumption that the U.S. Supreme Court would uphold the D.C. Circuit Court, requesting that FERC require PJM to remove all DR from PJM's capacity market and rerun the May 2014 capacity auction without any DR included on the basis that FERC did not have authority to regulate DR. Given the Supreme Court's contrary finding, several environmental groups filed a motion to dismiss FirstEnergy's claim, which will likely have to be granted.

While this decision allows DR to continue to be a wholesale capacity resource, recall that PJM's changes to its capacity product (referred to as "Capacity Performance") has created risks for DR that likely make it impractical to continue to participate in PJM's capacity market in spite of the court's decision.

Scholarship essays are due Feb. 3

By Karen Ritchey - director of member events & programs

Public power essays for AMP scholarships are due Feb. 3. There were 49 high school seniors nominated by member communities for AMP scholarships: 17 for the Richard H. Gorsuch Scholarship and 32 for the Lyle B. Wright Scholarship.

The students with the top essay scores will be named finalists, and will be invited to visit their local municipal electric utility to tour the facility and take a test on public power. Winners will be chosen based on their test score, personal achievements and scholastic records. Up to four Gorsuch and four Wright scholarship recipients will be determined in April. Each recipient will be awarded a one time \$2,000 scholarship.

Since the program began in 1988, AMP has awarded \$272,000 in scholarships. Please contact me with questions at kritchey@amppartners.org or 614.540.0933.

Course to cover underground distribution systems

By Jennifer Flockerzie – technical services program coordinator

There are still spots available for an upcoming underground distribution training course at AMP headquarters. The class, APPA Constructing, Operating & Maintaining Underground Distribution Systems, will be held from 8 a.m. to 4 p.m. Feb. 9-11.

Provided by the American Public Power Association, the course will cover the effective design, construction, operation and maintenance of underground distribution systems. Public power professionals and skilled personnel engaged in underground systems operations are encouraged to attend. This course is designed for engineers as well as for all those involved in the management, construction and operations aspects of underground systems. Electric utility operations experience is helpful, but not necessary.

For more information or to register, please contact me at 614.540.0853 or <u>jflockerzie@amppartners.org</u>. AMP's 2016 training catalog, with a comprehensive list of training courses and events, is available on the <u>Member Extranet</u>.

AMP/OMEA mails group registration packets for rally

Registration information to participate in the AMP/OMEA group at the American Public Power Association's (APPA) Legislative Rally was mailed earlier this week. The APPA Legislative Rally will be held March 7-9 at the Grand Hyatt Washington in Washington, D.C. For more information, please contact Jodi Allalen at <u>jallalen@amppartners.org</u> or Michael Beirne at <u>mbeirne@amppartners.org</u>.

Calendar

Feb. 9-11—APPA Constructing, Operating & Maintaining Underground Distribution Systems AMP Headquarters, Columbus

March 7-9—APPA Legislative Rally Grand Hyatt Washington, Washington, D.C.

March 10—AMP Finance & Accounting Meeting New Martinsville, West Virginia

March 15-17—AMP Metering Course *Piqua, Ohio*

April 1-2—APPA Lineworkers Rodeo Minneapolis, Minnesota

April 3-6—APPA E&O Conference Minneapolis, Minnesota

April 7—AMP Finance & Accounting Meeting *Philadelphia, Pennsylvania*

www.amppartners.org

Public power and the strength of the pack

By Sue Kelly, APPA president & CEO - courtesy of the American Public Power Association

The yearly round of American Public Power Association (APPA) meetings and conferences always starts with the Joint Action Workshop, held early in January. This meeting is tailored for public power Joint Action Agencies and it always reminds me how important our JAAs are to



Sue Kelly

public power. The JAAs aggregate the loads of their respective member distribution utilities, which provide retail electric service in their own cities and towns. JAAs provide a great variety of services to their member distribution utilities – from "bread and butter" power supply and wholesale transmission services to value-added services like energy efficiency programs and rate studies.

One purpose of the workshop is for JAAs to hear from each other about the services they provide to their members – which ones do the distribution utility members like most, which ones are cost effective and what needs are not

being filled that need to be? One of the presenters was Mrg Simon, legal director at Missouri River Energy Services (MRES). MRES is a joint action agency headquartered in Sioux Falls, South Dako-

ta, that serves 60 towns and cities in the Upper Midwest.

Mrg included in her presentation a quote from Rudyard Kipling's poem, The Law of the Jungle: "For the strength of the pack is the wolf, and the strength of the wolf is the pack." I did not know much about Rudyard Kipling or his poem, so on the plane home, I checked it out. The poem comes from the second Jungle Book. And it turns out that the poem influenced the formation of the Cub Scouts, according to the Boy Scouts' website, the terms "Law of the Pack," "Akela," "Wolf Cub," "grand howl," "den" and "pack" all come from the Jungle Book, and a strong influence from Kipling's Jungle Book remains in cub scouting today. This makes some sense, given that wolves raised Mowgli, the jungle boy. The Jungle Book itself has stayed part of popular culture, with the Walt Disney animated movie released in 1967 and a new live-action version coming out this spring.

The more I thought about it, the more I agreed with Mrg that the analogy of the pack is very applicable to the joint action model, and indeed, to public power as a whole. The typical public power utility is a small, community-focused entity (the median utility serves around 2,000 meters). This certainly has benefits – the utility is community-owned and not-for-profit, so its only mission is to provide reliable, reasonably priced and environmentally responsible electricity to the community. As the employees of the utility live and work there, they know their neighbors and can contribute substantially to the

community through value-added services and economic development.

However, a utility of 2,000 meters can be at a disadvantage in today's very complex wholesale power and transmission markets. And retail customers are increasingly interested in an array of new products and services, including distributed generation, green power options and demand response opportunities.

That is where joint action – the strength of the pack – comes in. JAAs can and do aggregate their members' needs to provide them with power supply and transmission services. But they increasingly are providing their members other services as well. At the workshop, we heard from three JAAs (American Municipal Power, WPPI Energy and the Indiana Municipal Power Agency) that are working with their distribution utilities to install "behind the meter" solar generation in member communities. And we heard how JAAs in the same region (like the Northern

American Public Power Association

California Power Agency and the Southern California Public Power Authority) are working together to improve the array and efficiency of the services they offer their respective distribution utility mem-

bers. This is truly the strength of the pack at work.

But it does not stop with JAAs. APPA itself is another example of the strength of the pack. APPA aggregates the grassroots of its membership to advance public power's priorities on Capitol Hill, and to advocate for public power before federal agencies and departments. APPA's R&D program, DEED (Demonstration of Energy & Efficiency Developments) aggregates members' research dollars to fund cutting edge member research and scholarships. And Hometown Connections aggregates the buying power of APPA member utilities, working with vendors to provide a suite of energy-related products and services members can use to improve their own service offerings.

Individually, public power systems serve communities large and small across the country. But together, we provide electric service to 1 in 7 Americans. That is an impressive statistic – and it comes from the strength of the public power pack. Let's not forget that we are stronger when we work together. Because it is a jungle out there.

This article is part of Sue Kelly's regular APPA blog series. For other recent posts, please visit <u>publicpower.org</u>.



News or Ads?

Call Krista Selvage at 614.540.6407 or email to kbselvage@amppartners.org if you would like to pass along news or ads.

www.amppartners.org

Classifieds

Hamilton accepts applications for engineering positions

The City of Hamilton is seeking candidates for the following positions. Current detailed resumes must be submitted in Word or PDF by 5 p.m. Feb. 18, 2016 to: Civil Service Dept., One Renaissance Ctr., 345 High St.-1st Fl., Hamilton, OH 45011 by email: <u>cspersonnel@ci.hamilton.</u> <u>oh.us</u> or fax: 513.785.7037. If necessary, application may be made in person or via USPS. Specify interest in SUPERVG MECH or ENG.ELEC ENG. The City of Hamilton is an EEO & AAE. Minorities and women are encouraged to apply.

Supervising Mechanical Engineer – This position is responsible for professional work in the design, construction, inspection and maintenance in a variety of public utilities facilities, which may include the power plant, water plants, water reclamation plant, and other city facilities. Candidates should possess any combination of education and experience equivalent to graduation from a college or university of recognized standing with a bachelor's degree in mechanical engineering and considerable experience in mechanical system design and engineering or any equivalent combination of experience and training which provides the knowledge, skills and abilities to perform the work. Current, valid driver's license also required and will be verified for finalist. Salary: \$73,382-\$94,099.

Electrical Engineer - This position is responsible for professional work in the design, construction, inspection and maintenance of a variety of electric utility facilities. Desire graduation from a college or university of recognized standing with a bachelor's degree in electrical engineering and considerable experience in electric system design and engineering; knowledge of and experience working with the National Electric Safety Code is preferred. Desire experience sizing, specifying, and reviewing manufacturer submittals for, electric transmission and distribution switchgear, transformers and other related electric utility equipment. Registration as a PE the State of Ohio or similar professional engineering certification from another state or an equivalent combination of experience and training which provides the knowledge, skills and abilities to perform the work. Salary: \$63,253-\$81,120.

Montpelier seeks village manager

The Village of Montpelier is looking for qualified candidates to fill the position of Village Manager. Qualified candidates must have excellent communications and leadership skills and a minimum of an associate degree in public administration, business management, civil or electrical engineering or an equivalent combination of education and experience in a related field. At least five years progressive work experience in public utilities, parks, street, police and fire departments. Experience with municipal owned electric preferred.

Job requires travelling and being an active member of different boards and associations. Qualified candidates must also possess a valid Ohio Driver's license. Wage established in Resolution 1118 and may be found on the village website.

A full job description is available <u>here</u>. The Village Manager is a position appointed by council. The powers and duties may be found in the Montpelier Village Charter Section 6.05, and can be found at <u>www.montpelieroh.net</u>. Cover letter and resume with references should be received by the Village of Montpelier, Clerk of Council by Feb. 12, 2016, at 211 N. Jonesville St., P.O. Box 148, Montpelier, OH 43543. Please do not submit electronically. EEOE.

DEMEC member Newark seeks director of finance candidates

The City of Newark is seeking a dynamic and collaborative leader to serve as its Director of Finance. This is a management level position responsible for all financial operations, including accounting, budgeting, asset management, risk management and utility rate administration (water, sewer and electric). Director oversees 14 employees and reports directly to the City Manager.

The ideal candidate must have at minimum five years management experience supervising employees and shall possess excellent written and oral communication skills, strong work record and a focus on internal and external customer service. Candidate shall also possess a master's degree in public or business administration (MPA/MBA), CPA designation, or equivalent experience. Understanding and experience with Governmental Accounting Standards Board (GASB) a plus. It is expected that candidates will possess broad financial knowledge and practices, and be a team-oriented self-starter with a passion for a career in government finance.

Starting salary range \$92,703-\$117,299 with an excellent benefit package. A full job description is available on the <u>city website</u>. Interested individuals need to complete an application online <u>here</u> by 4 p.m. Friday, Feb. 12.

Princeton seeks general manager candidates

The Electric Plant Board of the City of Princeton, Kentucky (PEPB) is seeking qualified applicants for its General Manager position. PEPB provides electric service to 4,000 customers via a transmission and distribution system consisting of over 13 miles of 161kv transmission line, over 130 miles of overhead and underground distribution lines, and two substations. The qualifications for this position are any combination of education and/or experience that *see CLASSIFIEDS Page 6*

CLASSIFIEDS continued from Page 5

provides the knowledge, skills and abilities necessary to perform the job as determined by PEPB. Qualified candidates must possess exemplary interpersonal and communication skills. The candidate must be a proven leader and demonstrate the ability and willingness to participate in community-wide endeavors and projects.

The General Manager reports to the Board of Directors and is responsible for the daily operations of the utility and its business affairs pursuant to the budgets, policies and programs approved by the Board. The General Manager directs a professional staff of employees with substantial experience in all aspects of the public power industry.

PEPB will be accepting resumes until March 1, 2016. Candidates desiring to be considered for the General Manager position must submit a cover letter, resume, salary history and a minimum of four professional references to: Princeton Lumber Company, Attention: Rumsey B. Taylor III, RE: Princeton Electric Plant Board General Manager, Post Office Box 590, Princeton, KY 42445. For the complete listing of this classified, visit the <u>AMP website</u>.

AMP posts available opportunities

American Municipal Power, Inc. (AMP) is seeking applicants for the following positions. For complete job descriptions, please visit the "careers" section of the <u>AMP website</u> or email to Teri Tucker at <u>ttucker@amppartners.org</u>.

Assistant Vice President Business Operations – Position develops and evaluates new business and program opportunities, and seeks methods to optimize current services and assets. Oversees all AMP-owned properties, vehicles and equipment. Oversees the Forestry Program and AMPO, Inc. Responsible for the budgets for all phases of these business operations. A four-year business-related degree is required, as is five years of high-level management experience. Previous work experience with public power related activity is strongly preferred.

Director of Government Affairs – This position serves as a primary Ohio Statehouse contact for AMP/OMEA, lobbies state lawmakers, and attends hearings and stakeholder meetings as appropriate. Manages advocacy efforts on behalf of AMP/OMEA, and builds and maintains coalitions. A four-year degree in political science, public relations, communications or a related field is required. At least three years of Ohio Statehouse experience as a legislative or agency staff member or lobbyist is highly desired. A background in utility issues is preferred.

Manager of Publications – With a strong emphasis on writing and editing, this position will assist with all phases of AMP publications. A four-year degree in journalism, communications, public relations or a related field is required. Must have demonstrated experience in project management and meeting specified deadlines in a publications field. Experience in desktop publishing is preferred.

APPA Academy Webinar Series

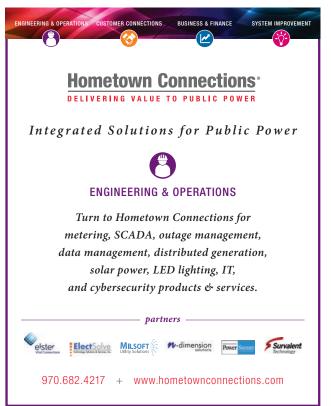


An internet connection and a computer are all you need to educate your entire staff for just \$89. Register today at APPAAcademy.org. Non-APPA members enter coupon code **AMP** to receive the member rate.

- Governance Series: Public Power's Unique Business Model and Governance Structure **Feb. 11**
- Electric Utility 101 Series: Generation Feb. 16
- Governance Series: Legal Obligations, Duties and Responsibilities of Public Power Governing Boards
 March 10
- Electric Utility 101 Series: Substations March 15
- Rating Agency Outlook for Public Power March 16







American Municipal Power, Inc. 1111 Schrock Road • Suite 100 Columbus, Ohio 43229 614.540.1111 • FAX 614.540.1113 www.amppartners.org





February 5, 2016

Willow Island Unit 2 comes online; Facility is in full commercial operation

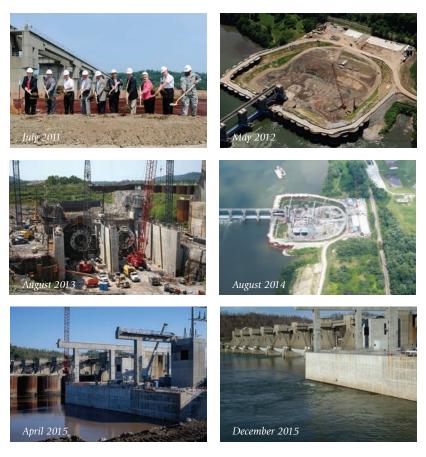
By Scott Kiesewetter - senior vice president generation operations

The Willow Island hydroelectric plant is the first of four AMP hydro projects under development to reach full commercial operation. The facility's Unit 2 was declared in commercial operation on Feb. 4, 2016, and is now under the care, custody and control of AMP operations. Willow Island Unit 1 began commercial operation on Jan. 4, and with Unit 2 online, the Willow Island facility is now in full commercial operation.

The construction and commissioning teams will be mobilizing offsite after some remaining punch list items are completed.

Progress continues at the Cannelton, Meldahl and Smithland sites with all units anticipated to be commercial in 2016.

Thank you to all those involved in the planning, construction and commissioning of this project – we are excited about this long-term hydropower investment for AMP and our members.



AMP/OMEA file CSAPR comments to USEPA

By Jolene Thompson – executive vice president of member services & external affairs/OMEA executive director

AMP and OMEA filed comments earlier this week with the U.S. Environmental Protection Agency (USEPA) regarding the Cross-State Air Pollution Rule (CSAPR) update. The CSAPR targets nitrogen oxide (NOx) emissions from electric generating units for regulation.

Starting in 2017, this proposal would reduce emissions of NOx from 913 power plants in 23 states in the eastern half of the U.S. The proposed rule would update CSAPR to address interstate emissions transport of NOx that contribute to nonattainment or interfere with maintenance of the 2008 ozone NAAQS in downwind states.

As stated in the AMP/OMEA comments: "The proposed rule will require an approximately 56 percent reduction in Ohio ozone season NOx budgets beginning in 2017. Under the current rule, Ohio's NOx budget is 37,792 tons which would be decreased under the proposal to 16,660. This is a substantial reduction from electricity generating sources that are facing multiple compliance obligations under other federal regulations."

In the comments, we also state our strong opposition of the establishment of "peak day" or sub-seasonal controls. Adding additional operating restrictions during these times is establishing another barrier.

The American Public Power Association and Prairie State Generating Company have also separately submitted comments. Their comments and ours are available on the <u>Member</u> <u>Extranet</u> section of the AMP website.

Energy markets update

By Jerry Willman – assistant vice president of energy marketing

NYMEX natural gas for March 2016 declined \$0.066 cents Thursday to settle at \$1.972. The EIA reported a withdrawal of 152 Bcf yesterday from U.S. gas inventories for the week ending Jan. 29, 2016. The EIA's inventory withdrawals figure yesterday corresponded with analysts' expectations. Gas storage inventory is now 18 percent over the five-year average of 2,489 Bcf. On-peak power prices for 2017 at AD Hub closed yesterday at \$37.07/MWh, which was \$0.03/MWh lower for the week.

AFEC weekly update

By Jerry Willman

Fremont operated in a 1x1 configuration last Sunday due to lower PJM day-ahead market prices and low system loads due to unseasonably mild temperatures. The plant remained in 2x1 operation for the remainder of the week.

Duct firing operated for seven hours this week. The plant generated at a 72 percent capacity factor (based on 675 MW rating).

Berlin makes commitment to renewable energy

The Town Council in AMP member Berlin, Maryland, approved an energy plan in January that aims to reduce electricity consumption in town-owned buildings by 15 percent within five years, and to meet 20 percent of the buildings' energy needs using renewable resources by the year 2022.

As reported in a recent edition of the American Public Power Association's *Public Power Daily*, the Town Council approved the plan unanimously by a vote of 5-0.

Berlin joined AMP in early 2015 as the organization's first member in Maryland. The Berlin Electric Department serves more than 2,400 meters.

According to *Public Power Daily*, Berlin plans to upgrade its lighting, replace outdated appliances at town facilities and take other steps to conserve electricity. The town also plans to, within the next four years, install a community solar garden that will allow its customers to buy a photovoltaic panel, or shares in a panel, and receive a credit on their electric bill.

Berlin is also pursuing the installation of smart meters at town-owned and -operated facilities, and for its customers. The town recently received a \$25,000 grant from the Maryland Energy Administration and Berlin is using the funds to install energy-efficient lightbulbs at its visitor's center, economic development office and some street lighting.

For more information, the recent *Public Power Daily* article on this topic is available <u>here</u>.

On Peak (16 hour) prices into AEP/Dayton Hub

Week end	ling Feb. 5				
MON \$25.23	TUE \$24.30	WED \$22.29	THU \$26.42	FRI \$29.94	
Week end	ling Jan. 29				
MON \$31.53	TUE \$24.48	WED \$27.55	THU \$26.92	FRI \$28.93	
AEP/Dayton 2017 5x16 price as of Feb. 4 — \$37.07					

AEP/Dayton 2017 5x16 price as of Jan. 28 — \$37.10

AMP orientation kits provide industry information for officials

By Krista Selvage - director of media relations & communications

The updated AMP Board/Council Orientation Kit was mailed earlier this week to AMP principal contacts. Municipal officials in a public power community have additional responsibilities, including becoming knowledgeable about the electric utility in order to make sound decisions affecting rates and services. The AMP



Board/Council Orientation Kit is provided as a member service by AMP. It includes basic, useful information about the industry and the organization to complement officials' knowledge of local operations.

An electronic version of the material in this handbook is available on the <u>Member Extranet</u> portion of the AMP website. If you would like additional copies of the handbook, please contact me at <u>kbselvage@amppartners.org</u>.

Updates from Efficiency Smart

By Steven Nyeste – communications project manager, Efficiency Smart

Efficiency Smart's energy engineers provide expert technical assistance to help participating communities meet their energy saving goals. These energy engineers, also referred to as energy consultants, work with large commercial and industrial organizations to identify costeffective and measurable ways for these companies to save energy and money. They also serve as trusted advisers who provide unbiased information for businesses that are considering energy efficiency projects.

Efficiency Smart takes great pride in the value of its technical services and, as a result, it completes an extensive search before selecting the energy engineers that work with businesses and organizations in its participating communities.

Recently, Efficiency Smart has announced two new updates regarding its engineering staff: Efficiency Smart has promoted Ryan Calkins to managing senior energy consultant, and has hired an additional energy engineer, Daniel Petit.

In Calkins' new role, he will continue to actively work with customers, but will also supervise and mentor new

EFFICIENCY SMART continued from Page 2

energy engineers. Calkins joined Efficiency Smart in 2012, and has been dedicated to furthering his education, earning his Leadership in Energy and Environmental Design (LEED) Green Associate certificate, LEED AP Building Design and Construction (LEED AP BD+C) certification, and is currently working on getting his professional engineer certification. Calkins holds a bachelor's degree in mechanical engineering from Cedarville University and is a certified energy manager from the Association of Energy Engineers.

Petit is an experienced mechanical engineer and product manager, who most recently worked as an industry leader in force measurement technology for biomechanics. He is an avid follower of the evolving energy sector, specifically energy-efficient applications. Petit holds bachelor's and master's degrees in mechanical engineering from the University of Dayton.

These recent staffing changes will help increase Efficiency Smart's technical capabilities and ensure that it can continue to provide the expert level of technical advice that has come to be expected in its participating communities.

Efficiency Smart provides many energy efficiency service options to subscribing AMP member communities. For more information about Efficiency Smart, visit <u>www.</u> efficiencysmart.org or call 877.889.3777.

Calendar

Feb. 9-11—APPA Constructing, Operating & Maintaining Underground Distribution Systems AMP Headquarters, Columbus

March 7-9—APPA Legislative Rally Grand Hyatt Washington, Washington, D.C.

March 10—AMP Finance & Accounting Meeting New Martinsville, West Virginia

March 15-17—AMP Metering Course *Piqua, Ohio*

April 2-6—APPA Rodeo and E&O Conference *Minneapolis, Minnesota*

April 7—AMP Finance & Accounting Meeting *Philadelphia, Pennsylvania*

April 26-27—AMP Technical Services Conference AMP Headquarters, Columbus

May 5—AMP Finance & Accounting Meeting *Hillsdale, Michigan*

May 18-19—AMP Underground Distribution Workshop AMP Headquarters, Columbus

Classifieds

Painesville has meters available

The City of Painesville has a surplus of 52 new Class 100, 120V GE meters. If interested, please contact Jeffrey McHugh, City

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	Cellulog Number 727X100001 Units 100 Wite 2 727X100001 Units 100 Kit 40 Fum 10 Ta 10
5 1200- E 14 794 644 20 120- W. R. 19 194 194	UN Rage the way of the case of
	Pattet: 0002 Carton: 0011 Bross Casts Cartons P0 S1002064 Cartons P1003064 B01 - 0015 B01 - 0015

of Painesville Electric Department superintendent, at 325 Richmond St., Painesville, Ohio 44077; 440.392.5939; or jmchugh@painesville.com.

Piqua seeks associate engineer

The City of Piqua is accepting applications for the position of Associate Engineer for the Municipal Power Department. The position performs engineering and planning for the Power System. Responsibilities include, but are not limited to, working with engineering staff to complete a variety of projects, primary responsibility is the day-to-day operation of the Power System's metering department. Qualifications include experience in the power utility industry or related business and an associate degree in engineering/engineering technology. Individuals with demonstrated related work experience may be considered with bachelor degrees in other disciplines.

Please send letter of interest, three business references, salary requirements and application to: 201 W. Water St., Human Resources Department 2nd floor, Piqua, Ohio 45356. Visit <u>www.piquaoh.org</u> to download an application. Deadline for applications is Feb. 26, 2016. EOE.

Tipp City arborist needed

The Tipp City Electric Department will be accepting applications for the position of Tree Trimmer/Arborist. Duties of the Tree Trimmer/Arborist will include, but will not be limited to: Line clearance near energized electric circuits up to 69,000 volts; tree trimming/removal of city owned trees, in the curb lawn, and parks, etc.; landscaping, tree planting; assisting Electric crews when required; assisting other City departments when needed.

A preference of three years of experience in aerial lift operation, tree climbing, rigging and chipper operation is required. Class A CDL with trailer certification will be required within six months of employment. ISA Arborist certification will be required within a one year period from date of hire. This position will require periodic drug and alcohol testing, work in inclement weather and nontraditional hours. Pay Range is \$19.15 to \$24.40/hour. Resume and application to City Manager's Office, Tipp City Government Center 260 S. Garber Dr. Tipp City, Ohio 45371 by 4 p.m. Feb. 26, 2016. Tipp City is an equal opportunity employer.

Hamilton accepts applications for engineering positions

The City of Hamilton is seeking candidates for the following positions. Current detailed resumes must be submitted in Word or PDF by 5 p.m. Feb. 18, 2016 to: Civil

CLASSIFIEDS continued from Page 3

Service Dept., One Renaissance Ctr., 345 High St.-1st Fl., Hamilton, Ohio 45011, by email: <u>cspersonnel@ci.hamilton.</u> <u>oh.us</u> or fax: 513.785.7037. If necessary, application may be made in person or via USPS. Specify interest in SUPERVG MECH or ENG.ELEC ENG. The City of Hamilton is an EEO & AAE. Minorities and women are encouraged to apply.

Supervising Mechanical Engineer – This position is responsible for professional work in the design, construction, inspection and maintenance in a variety of public utilities facilities, which may include the power plant, water plants, water reclamation plant, and other city facilities. Candidates should possess any combination of education and experience equivalent to graduation from a college or university of recognized standing with a bachelor's degree in mechanical engineering and considerable experience in mechanical system design and engineering or any equivalent combination of experience and training which provides the knowledge, skills and abilities to perform the work. Current, valid driver's license also required and will be verified for finalist. Salary: \$73,382-\$94,099.

Electrical Engineer - This position is responsible for professional work in the design, construction, inspection and maintenance of a variety of electric utility facilities. Desire graduation from a college or university of recognized standing with a bachelor's degree in electrical engineering and considerable experience in electric system design and engineering; knowledge of and experience working with the National Electric Safety Code is preferred. Desire experience sizing, specifying, and reviewing manufacturer submittals for, electric transmission and distribution switchgear, transformers and other related electric utility equipment. Registration as a PE the State of Ohio or similar professional engineering certification from another state or an equivalent combination of experience and training which provides the knowledge, skills and abilities to perform the work. Salary: \$63,253-\$81,120.

Montpelier seeks village manager

The Village of Montpelier is looking for qualified candidates to fill the position of Village Manager. Qualified candidates must have excellent communications and leadership skills and a minimum of an associate degree in public administration, business management, civil or electrical engineering or an equivalent combination of education and experience in a related field. At least five years progressive work experience in public utilities, parks, street, police and fire departments. Experience with municipal owned electric preferred.

Job requires travelling and being an active member of different boards and associations. Qualified candidates must also possess a valid Ohio Driver's license. Wage established in Resolution 1118 and may be found on the village website.

A full job description is available <u>here</u>. The Village Manager is a position appointed by council. The powers and duties may be found in the Montpelier Village Charter Section 6.05, and can be found at <u>www.montpelieroh.net</u>. Cover letter and resume with references should be received by the Village of Montpelier, Clerk of Council by Feb. 12, 2016, at 211 N. Jonesville St., P.O. Box 148, Montpelier, OH 43543. Please do not submit electronically. EEOE.

DEMEC member Newark seeks director of finance candidates

The City of Newark is seeking a dynamic and collaborative leader to serve as its Director of Finance. This is a management level position responsible for all financial operations, including accounting, budgeting, asset management, risk management and utility rate administration (water, sewer and electric). Director oversees 14 employees and reports directly to the City Manager.

The ideal candidate must have at minimum five years management experience supervising employees and shall possess excellent written and oral communication skills, strong work record and a focus on internal and external customer service. Candidate shall also possess a master's degree in public or business administration (MPA/MBA), CPA designation, or equivalent experience. Understanding and experience with Governmental Accounting Standards Board (GASB) a plus. It is expected that candidates will possess broad financial knowledge and practices, and be a team-oriented self-starter with a passion for a career in government finance.

Starting salary range \$92,703-\$117,299 with an excellent benefit package. A full job description is available on the <u>city website</u>. Interested individuals need to complete an application online <u>here</u> by 4 p.m. Friday, Feb. 12.

Princeton seeks general manager candidates

The Electric Plant Board of the City of Princeton, Kentucky (PEPB) is seeking qualified applicants for its General Manager position. The qualifications for this position are any combination of education and/or experience that provides the knowledge, skills and abilities necessary to perform the job as determined by PEPB. Qualified candidates must possess exemplary interpersonal and communication skills. The candidate must be a proven leader and demonstrate the ability and willingness to participate in community-wide endeavors and projects.

The General Manager reports to the Board of Directors and is responsible for the daily operations of the utility and its business affairs pursuant to the budgets, policies and programs approved by the Board. The General Manager directs a professional staff of employees with substantial experience in all aspects of the public power industry.

PEPB will be accepting resumes until March 1, 2016. Candidates desiring to be considered for the General Manager position must submit a cover letter, resume, salary history and a minimum of four professional references to: Princeton Lumber Company, Attention: Rumsey B. Taylor III, RE: Princeton Electric Plant Board General Manager, Post Office Box 590, Princeton, KY 42445. For the complete listing of this classified, visit the <u>AMP website</u>.



Legislative Bulletin

Ohio Municipal League Legislative Bulletin

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Committee Schedule

January 29, 2016

OHIO DEVELOPMENT SERVICES AGENCY ANNOUNCES APPLICATION DEADLINE FOR LOCAL GOVERNMENT SAFETY CAPITAL GRANT PROGRAM

The Ohio General Assembly had a light schedule again this week with only a handful of committees meeting. The schedule for next week is shaping up to look much the same, as most legislators are back in their districts or locations outside of the state, campaigning towards the March primaries.

Although there is not much new to report on legislatively, there is news that came out of the Ohio Development Services Agency, as they announced this week that the guidelines and criteria have been established for the newly created Local Government Safety Capital Grant Program.

Applications to qualify for funding will be accepted by DSA beginning Tuesday, February 16 th.

The Local Government Safety Capital Grant Program was created to provide communities with financial assistance for the purchasing or upgrading of vehicles, equipment, facilities or systems for police, fire or emergency medical services need to enhance public safety . Through the most recent state budget, the program was established and received an appropriation of \$10,000,000 for FY16 and \$10,000,000 for FY17. The fund will be administered by the Local Government Innovation Council, which oversees programs to promote shared services and local government efficiency .

The Council will award not more than \$100,000 in total grants to an individual political subdivision.

Municipal corporations, in addition to counties, townships, joint emergency medical services district, fire district, joint fire district, fire and ambulance district, joint police district, or joint ambulance district are all eligible to apply for the grant program. Other specifications of the program include:

- A political subdivision is not restricted to the number of grant applications it may file, either individually or jointly with one or more political subdivisions, however, a political subdivision shall not be awarded more than \$100,000 in total grants attributed to them.
- Applications submitted by a group of political subdivisions which, if awarded, will serve to consolidate

emergency services or enhance cooperation between or among the applying jurisdictions to more efficiently deliver emergency services are encouraged.

• An application submitted by multiple political subdivisions may seek a level of funding which does not exceed the total amount of funding which may be collectively awarded to those political subdivisions individually, up to \$500,000.

For more information about this program, visit <u>www.development.ohio.gov/bs/bs_lgscgp.htm</u>.

COMMITTEE SCHEDULE FOR THE WEEK OF FEBRUARY 8 TH

Below is the list of committee hearings for next week. The final schedule for the week will be on the league's website <u>www.omlohio.org</u> Monday, which will include any additions or changes that may be announced over the weekend.

Have a safe and enjoyable weekend~

Committee Schedule

Past Bulletins:	
<u>2016</u>	
<u>2015</u>	
2014	



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FEATURE TMACOG Leadership

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ENVIRONMENT Urban Waters Plan

Water & Wastewater Operators

Member News Welcome New Members

EVENTLINE February & March 2016 Web pdf version

TMACOG

2016 General Assembly - Report

Leadership

At the 2016 General Assembly held January 25, TMACOG members voted on new leadership. Craig Stough, mayor of the City of Sylvania, was elected chair. Richard Edwards, mayor of the City of Bowling Green, was elected vice chair. They will serve a 12month term. They replace outgoing Chair James Sass, Ottawa County commissioner, and outgoing Vice Chair Angela Kuhn, past mayor of the Village of Whitehouse. ...read more

Message from the Chair Craig Stough, Mayor, City of Sylvania

Upcoming Events

Water & Wastewater Operator Training

Wednesday, March 10, 8 a.m - 4:30 p.m. Northwestern Water & Sewer District, 12560 Middleton Pike (S.R. 582). Bowling Green *Contact*: <u>Kurt Erichsen</u> ext. 126

The Toledo Region Transportation Summit

Friday, March 18, 8 a.m. - 2 p.m. Parkway Place, 2592 Parkway Plaza, Maumee *Contact*: <u>Christine Connell</u> ext. 119

Ohio Sunshine Law Training

Friday, April 8, 8:45 a.m. -12:15 p.m. Grand Lobby of the Dr. Martin Luther King Jr. Plaza *Contact*: Jennifer Allen ext. 119

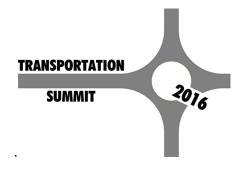


I am honored and pleased to step into TMACOG leadership at this time of transition. Change is inevitable, and welcome, but we will work to ensure that TMACOG continues to do the excellent work that it has done, and we will grow services in the directions that the region needs. ...<u>read more</u>

TRANSPORTATION

Toledo Region Transportation Summit

Connecting Partners, Sharing Information, and Coordinating Efforts in Northwest Ohio and Southeast Michigan.



The 2016 Toledo Region Transportation Summit will look at local impact of the new federal transportation bill and take a wide view of ongoing and planned transportation investments.....<u>read more</u>

Local Policy presented at National Conference



TMACOG's regional level Complete Streets Policy will be the topic of a presentation at the national Safe Routes to School Conference which will be held in Columbus April 5-7, 2016. Christine Connell, TMACOG Transportation Public Administration Specialist, will be the presenter. She developed the regional policy intended to incentivize and support the implementation of complete streets techniques in jurisdictions in the region...<u>read more</u>

TMACOG Transportation Planning Under Review



At a public meeting held January 20, transportation stakeholders and members of the public were invited to meet with representatives of the Federal Highway Administration and the Federal Transit Administration. The meeting was part of the process to re-certify TMACOG as the region's transportation planning authority and to ensure that the planning process is in compliance with federal regulations related to transportation planning.

Initial feedback from the federal agencies was positive indicating that TMACOG should expect to be fully certified with few if any recommendations for change in procedure. A letter with any recommendations or commendations is expected in March..

ENVIRONMENT

Urban Waters Plan



In the Junction Avenue neighborhood of central Toledo, demolition of blighted property has created an opportunity for innovative redevelopment. For more than a year, neighbors have been meeting to plan how to beautify and eventually redevelop the area. Part of their discussion has involved converting vacant property to beautiful, useful, green space. Green spaces act as stormwater management infrastructure and also provide gardens and other attractive features...<u>read more</u>

Water & Wastewater Operator Training

People who operate or make decisions about water supply and wastewater treatment are invited to a full-day seminar addressing critical issues.

Water & Wastewater Operator Training

March 10, 8 a.m. – 4:30 p.m. Northwestern Water & Sewer District 12560 Middleton Pike (S.R. 582), Bowling Green

The agenda includes crisis management, funding, GIS and other technology, source water protection, workforce recruitment, and impacts of climate change. Organizers anticipate that attendees will be eligible for 6.5 Ohio EPA contact hours. Continuing professional education credits are available for professional engineers.

To register contact <u>Joy Minarcin</u> (419.241.9155 ext. 128) by March 4. The cost is \$40 for TMACOG members and \$65 for nonmembers. Registration fee includes breakfast, lunch, and takehome training materials.

Registration is due by Friday, March 4. There will be no late registrations. No refunds will be made for cancellations after March 2. For more information regarding the program, contact <u>Kurt</u> <u>Erichsen</u> at 419.241.9155 ext. 126.

Thank you to Jones & Henry Engineering for their sponsorship of this training session.

MEMBER NEWS

Welcome New Member



We are pleased to announce that the <u>Toledo-Lucas County Public</u> <u>Library</u> has re-joined TMACOG after a lapse of several years. TLCPL is a governmental member of TMACOG and will caucus with Special Districts and Authorities. The library's interests also overlap with those of schools and universities: TLCPL's stated mission is to provide information, education, and technology to help the community live, learn, and grow. The library has 18 branches in Lucas County in addition to the main library in downtown Toledo.

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Napoleon Fire & Rescue Association Invites You to Join Us at Our Free Will Donation

Breakfast

Including:

-Pancakes -Scrambled eggs -Sausage patties -Toast -Beverages

Sunday, February 14th, 2016 ^{7:00am} to 1:00pm Carryout Available!